Університет економіки та права «КРОК»

І.А. Сорока

Англійська мова для студентів-психологів

Навчальний посібник з англійської мови
за професійним спрямуванням
для студентів спеціальності «Психологія»

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Метою навчального посібника є забезпечення формування необхідних комунікативних мовленнєвих компетенцій у сферах професійного та ситуативного спілкування в усній і письмовій формах; формування вмінь та навичок самоосвітньої діяльності; розвиток критичного та креативного мислення; удосконалення навичок практичного володіння іноземною мовою в різних видах мовленнєвої діяльності в обсязі тематики, зумовленої професійними потребами; розвиток навичок одержування новітньої фахової інформації через іноземні джерела та опанування засобами її опрацювання; мотивація та розвиток позитивного ставлення до вивчення іноземної мови.

Навчальний посібник «Англійська мова для студентів-психологів» (“English for Psychology students”) призначено для аудиторної та самостійної підготовки з англійської мови для професійного спілкування студентів освітнього рівня «Бакалавр», слухачів магістерських навчальних програм, аспірантів вищих навчальних закладів спеціальності «Психологія», викладачів, науковців, та всіх, хто прагне поглибити свої знання з англійської мови.

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Передмова

Навчальний посібник «Англійська мова для студентів-психологів» (“English for Psychology students”) призначено для аудиторної та самостійної підготовки з англійської мови для професійного спілкування студентів освітнього рівня «Бакалавр», слухачів магістерських навчальних програм, аспірантів вищих навчальних закладів спеціальності «Психологія», викладачів, науковців, та всіх, хто прагне поглибити свої знання з англійської мови. Зміст посібника орієнтовано на слухачів з рівнем володіння мовою B2(+) (Незалежний користувач) згідно з Загальноєвропейськими Рекомендаціями з мовної освіти.

Навчальний посібник складено відповідно до сучасних методик викладання ESP (англійська мова за професійним спрямуванням) у вищих навчальних закладах. У навчальному посібнику розміщено сучасні автентичні фахові тексти для читання, відео матеріали для тренування навичок сприйняття на слух з професійних англомовних (друкованих та електронних) джерел.

Метою навчального посібника є забезпечення формування необхідних комунікативних мовленнєвих компетенцій (лінгвістичної, соціолінгвістичної і прагматичної) у сферах професійного та ситуативного спілкування в усній і письмовій формах; формування вмінь та навичок самоосвітньої діяльності; розвиток критичного та креативного мислення; удосконалення навичок практичного володіння іноземною мовою в різних видах мовленнєвої діяльності в обсязі тематики, зумовленої професійними потребами; розвиток навичок одержування новітньої фахової інформації через іноземні джерела та опанування засобами її опрацювання; мотивація та розвиток позитивного ставлення до вивчення іноземної мови.

У навчальному посібнику «Англійська мова для студентів-психологів» представлено різноманітні вправи, які допомагають розширити активний та пасивний словниковий запас. Наприклад, такі завдання, як знайти синоніми, пояснити значення слів з контексту чи знайти слово до запропонованих дефініцій. Значна увага приділяється роботі з ідіомами, фразовими дієсловами. Слова, які опрацьовуються та на які потрібно звернути увагу та вивчити, подаються після кожного уроку. Опрацювання граматичного матеріалу подано з контексту. Багато вправ посібника спрямовано на розвиток навичок говоріння: рольові ігри, дискусії, висловлення особистої думки щодо проблеми чи певної ситуації.

Велика увага у посібнику приділяється розвитку навичок слухання. Студентам пропонується перегляд відео фільмів з Інтернет ресурсів (www.youtube.com; https://www.ted.com). Ці сайти надають можливість вільного до-

ступу до викладених матеріалів. Автор розробила завдання до фільмів за тематикою посібника. Відео можуть використовуватися під час аудиторної роботи чи бути запропоновані викладачем як домашнє завдання.

Навчальний посібник складається з 10 уроків. До кожного уроку посібника та в додаткові матеріали включено ілюстрації, таблиці, схеми, діаграми, що супроводжують та роз'яснюють викладений матеріал. Наприкінці посібника надано завдання на перевірку вивченого матеріалу ("Check yourself"), додаткові тексти, психологічні ігри та тести, граматичний довідник, ключі до завдань, список неправильних дієслів, словник термінів.

Самостійна робота відіграє важливу роль в процесі навчання. Тому у посібнику автором передбачено дослідницьку роботу, пошук інформації в Інтернеті та презентацію опрацьованих матеріалів як завдання для самостійної роботи студентів. Посібник пропонує завдання для розвитку навичок письма: написання нотатків, рецензії на статтю.

Така побудова посібника робить його зручним у користуванні. Все це дозволяє значно підвищити рівень підготовки фахівців, що є актуальним завданням навчального процесу сьогодення. Таким чином навчальний посібник допоможе студентам здійснити перехід від вивчення англійської мови як навчальної дисципліни до її практичного використання. Навчальний посібник «Англійська мова для студентів-психологів» є винятковим прикладом міждисциплінарних зв'язків та має на меті розширити та оновити вітчизняну літературу з англійської мови за професійним спрямуванням.

Автор глибоко вдячна рецензентам: Пироженко Тамарі Олександрівні, доктору психологічних наук, професору, завідувачу лабораторії психології дошкільника Інституту психології імені Г.С. Костюка НАПН України; Павленко Людмилі Володимирівні, кандидату філологічних наук, доценту кафедри української та іноземних мов Дніпропетровського регіонального інституту державного управління Національної академії державного управління при Президентові України; **колегам:** Сингаївській Ірині Валентинівні, кандидату психологічних наук, доценту, директору Навчально-наукового інституту психології ВНЗ «Університет економіки та права «КРОК», завідувачу Пирлік Н.В. та викладачам кафедри іноземних мов та спеціальної мовної підготовки ВНЗ «Університет економіки та права «КРОК» за допомогу у створенні даного навчального посібника.

Lesson 1
Introducing Psychology

Lead-in

Work in pairs to share what you know about origin and history of Psychology. Mention some names, dates, terminology.

1. Rearrange the words to make a definition of Psychology.

Psychology	study	and mental	processes.
of behaviours	scientific	is the systematic,	

2. Discuss in groups what the following numbers and words refer to.

Socrates; 1879; Wilhelm Wundt; functionalism; Freud; behaviourism; Gestalt psychology

Watch the video: “History of psychology” and check your answers.

https://www.youtube.com/watch?v=P3ZCUhUHBHc

Reading

3. Psychology disciplines

Psychology encompasses a vast domain, and includes many different approaches to the study of mental processes and behaviour.

Read the description of sub-fields of psychology on the right, underline key words and then match with the names on the left.

1. Political psychology	a) includes the study and application of psychology for the purpose of understanding, preventing, and relieving psychologically-based distress or dysfunction and to promote subjective well-being and personal development.
2. The psychology of art	b) studies cognition, the mental processes underlying mental activity. Perception, learning, problem solving, reasoning, thinking, memory, attention, language and emotion are areas of research.
3. Parapsychology	c) Mainly focusing on the development of the human mind through the life span, developmental psychology seeks to understand how people come to perceive, understand, and act within the world and how these processes change as they age.
4. Psycholinguistics or **psychology of language**	d) is the branch of psychology concerned with the scientific study of human learning. It studies how humans learn in educational settings, the effectiveness of educational interventions, the psychology of teaching, and the social psychology of schools as organizations.

5. Positive psychology	e) is an interdisciplinary field focused on the interplay between humans and their surroundings.
6. Educational psychology	f) applies psychological concepts and methods to optimize human potential in the workplace.
7. Social psychology	g) The term has only recently come into use, and typically refers to any non-clinical law-related research. It explores such topics as jury decision-making, eyewitness memory, scientific evidence, and legal policy.
8. Personality psychology	h) seeks an understanding of the relationships between mediated communication and the thoughts, feelings, and behaviours of the senders and recipients of the communication.
9. Legal psychology	i) studies patterns of behaviour, thought, and emotion in individuals, commonly referred to as personality.
10. Media psychology	j) is the study of social behaviour and mental processes, with an emphasis on how humans think about each other and how they relate to each other.
11. Organizational psychology	k) is the branch of psychology that uses scientific understanding and effective intervention to aid in the achievement of a satisfactory life, rather than treating mental illness.
12. Industrial and organizational psychology (I-O)	l) is a subfield of I-O psychology which examines the effects of work environments and management styles on worker motivation, job satisfaction, and productivity.
13. Environmental psychology	m) is the study of the psychological and neurobiological factors that enable humans to acquire, use, comprehend and produce language.
14. Developmental psychology	n) is an interdisciplinary field that studies the perception, cognition and characteristics of art and its production.
15. Cognitive psychology	o) is a field of study concerned with the investigation of paranormal and psychic phenomena which include telepathy, precognition, reincarnation, clairvoyance, psychokinesis, near-death experiences, and other paranormal claims. It is often identified as pseudoscience.

16. Clinical psychology	p) is an interdisciplinary academic field dedicated to understanding politics, politicians and political behavior from a psychological perspective.

Speaking

Work in pairs. Discuss which field of psychology you are most interested in. Give reasons for your choice.

Vocabulary

4. Find English equivalents in the task above for the following words:
включати, охоплювати; область, сфера; підхід; (практичне) застосування; запобігати, попереджати; сприяти, пропагувати; тривалість життя; втручання; взаємодія, взаємний вплив; одержувач (реципієнт); модель поведінки; галузь, розділ; розуміти; передбачення; ясновидіння.

5. Complete the table with the missing forms.

Noun	Verb
comprehension	
achievement	
	perceive
	intervene
	investigate
approach	
application	
	prevent
promotion	

Fill in the gaps in the sentences below, using the correct form of the words from the table.

a) It was hard work, but the sense of ---------- is huge.
b) Early ---------- may help children with autism to speak.
c) A common ---------- that is taken up at the drug treatment center to treat addiction is cognitive behaviour therapy.

d) Teens need to reduce their daily intake of sugar to ---------- problems like hyperactivity.
e) Languages demand involvement by the whole personality, both for passive ---------- and active expression.
f) The campaign is concerned with the ---------- of health.
g) A similar technique can be ---------- to the treatment of cancer.

6. Word search. Find the names of 9 theories in psychology in the puzzle below.
Search across → and down ↓

A	B	C	A	S	B	C	A	B	C	L	G	H	N	M	N	N	H
Z	C	P	Q	Z	J	V	I	H	F	O	V	U	X	X	X	X	I
Z	C	E	Q	Z	K	V	T	J	F	G	Z	M	Z	Z	Z	Z	E
Z	C	R	P	S	Y	C	H	O	S	O	M	A	T	I	C	S	R
X	C	S	Q	X	J	V	B	Z	F	T	Q	N	Q	Q	O	Q	A
X	C	O	Q	X	J	V	B	Z	F	H	Q	I	J	J	G	J	R
X	B	N	Q	X	J	W	C	S	F	E	Q	S	W	W	N	W	C
M	E	C	Q	X	J	W	C	S	F	R	Q	T	R	R	I	R	H
M	H	E	Q	X	J	W	T	Q	F	A	X	I	H	H	T	H	Y
S	A	N	Q	X	J	W	T	Q	F	P	K	C	N	N	I	P	O
S	V	T	G	X	J	H	R	Y	D	Y	L	P	C	C	V	C	F
S	I	E	W	X	L	H	R	Y	G	Q	L	L	S	S	E	S	N
S	O	R	W	X	L	H	L	W	E	H	L	K	Y	Y	M	Z	E
S	U	E	W	X	L	H	P	V	S	H	M	D	J	J	J	J	E
S	R	D	W	X	L	H	U	H	T	H	M	D	A	A	A	A	D
X	I	Z	W	U	L	H	E	E	A	H	M	D	Q	Q	Q	Q	S
P	S	Y	C	H	O	A	N	A	L	Y	S	I	S	L	B	C	Z
Z	M	Z	Q	Q	P	H	Y	C	T	X	A	X	X	X	Q	Q	Z

Reading

7. Read about the goals of Psychology.

Although the definition of psychology is broad, psychologists have four specific goals when they study some behaviour or mental processes.

Goals of Psychology

1. ***Describe***

The first goal of psychology is to describe the different ways that organisms behave.

2. ***Explain***

After describing behaviour, psychologists try to explain behaviour and its causes.

3. ***Predict***

After describing and explaining behaviour, psychologists try to predict how organisms will behave in certain situations.

4. ***Control***

If psychologists can predict behaviour, then they can often control it. The idea of control has both positive and negative sides. The positive side is that psychologists can help people. **The negative side is the concern that psychologists might control people's behaviours without their knowledge or consent.**

Think critically

- How can you assess the value or importance of the four goals mentioned above?
- What is your opinion of the idea expressed in the last sentence (**in bold**) of the text? Discuss in groups.

Use the phrases for giving opinion, agreeing/disagreeing.

1. I (really) think that …
2. I believe (that) …
3. I'm sure that …
4. In my opinion…

I agree with you.	I don't think so.
That's true.	I'm afraid I disagree.
You're absolutely right.	I totally disagree.
Absolutely.	That's not always true.
That's exactly how I feel.	That's not always the case.
Exactly.	No, I'm not so sure about that.

Reading

8. Read the text about the modern approaches to understanding behaviour.

The following words will fill the gaps (the numbers in brackets show the quantities of gaps):

approach (11)	**approaches**	**cultural**	**cultures**	**environments (3)**	**focus**
functioning	**individual**	**method**	**perceive**	**potential**	**process**
research (2)	**selection (2)**	**similarities**	**focuses**	**processes (3)**	**cultural**

An _____ refers to a _____ or perspective, which may use a particular _____ _____ or technique. The _____ to understanding behaviour include the biological, cognitive, behavioural, psychoanalytic, humanistic, cross - _____, and, most recently, evolutionary. The **biological** _____ _____ on how our genes, hormones, and nervous system interact with our _____ to influence learning, personality, memory, motivation, emotions, and coping techniques. The **cognitive** _____ examines how we _____, store, and use information and how this information influences what we _____, learn, remember, believe, and feel. The **behavioural** _____ studies how organisms learn

new behaviours or modify existing ones, depending on whether events in their [ ] reward or punish these behaviours. The **psychoanalytic** [ ] stresses the influence of unconscious fears, desires, and motivations on thoughts, behaviours, and the development of personality traits and psychological problems later in life. The psychoanalytic [ ] is based on the belief that childhood experiences greatly influence the development of later personality traits and psychological problems. It also stresses the influence of unconscious fears, desires, and motivations on thoughts and behaviours. The **humanistic** [ ] emphasizes that each [ ] has great freedom in directing his or her future, a large capacity for personal growth, a considerable amount of intrinsic worth, and enormous [ ] for self-fulfillment. The **cross-cultural** (socio-cultural) [ ] examines the influence of [ ] and ethnic [ ] and differences on the psychological and social [ ] of a [ ]'s members. The **evolutionary** [ ] studies how evolutionary ideas, such as adaptation and natural [ ], explain behaviours and mental [ ]. This [ ] asserts that today's behaviours and mental [ ] can be linked to the challenges our human ancestors encountered in adapting to their [ ]. Although the evolutionary [ ] is relatively new, [ ] has already examined how evolution influences a variety of behaviours and mental [ ], such as aggression, mate [ ], fears, depression, and decision making.

9. Decide if the following sentences are TRUE or FALSE. Correct the false sentences.

a) The evolutionary approach is relatively new**.**

b) The cognitive approach examines how our genes, hormones, and nervous system interact with our environments to influence learning, personality, memory, motivation, emotions, and coping techniques.

c) The behavioural approach studies how organisms learn new behaviours or modify existing ones.

d) The psychoanalytic approach is based on the belief that childhood experiences influence the development of later personality traits and psychological problems.

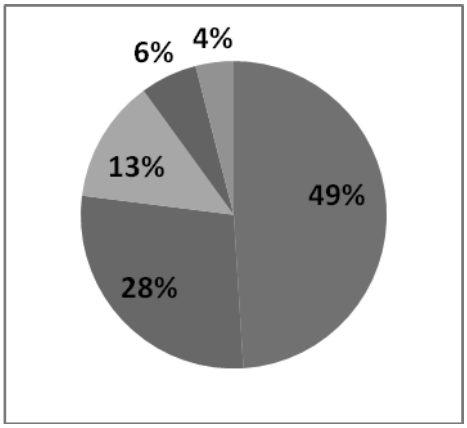
e) The humanistic approach underestimates individual's potential for self-fulfillment.

f) The cross-cultural approach examines the challenges our human ancestors encountered in adapting to their environments.

Speaking

10. Work in pairs. Discuss which approach appeals to you. Speak about its advantages over the other ones to reason your choice.

11. Study the chart and read the information below.



As you can see in the pie chart, the majority (49%) of psychologists are therapists working in private practice or a therapy setting, while the rest work in other settings. Here's a breakdown of where psychologists in the United States currently work. The largest percentage (49%) of psychologists work as clinical or counseling psychologists in either a private practice or therapy setting, such as a psychological or psychiatric clinic; a mental health center; a psychiatric, drug, or rehabilitation ward of a hospital; or a private office. The duties of clinical or counseling psychologists might involve doing therapy; helping patients with problems involving drugs, stress, weight, family, or career; or testing patients for psychological problems that developed from some neurological problem.

The second largest percentage (28%) of psychologists work in the academic settings of universities and colleges. Academic psychologists often engage in some combination of teaching in a classroom, mentoring or helping students, and doing research. The third largest percentage (13%) of psychologists work in a variety of other kinds of jobs and career settings.

6% of psychologists work in industrial settings, such as businesses, corporations, and consulting firms. These psychologists may work at selecting personnel, increasing production, or improving job satisfaction.

The smallest percentage (4%) work in secondary schools and other settings. For example, school psychologists conduct academic and career testing and provide counseling for a variety of psychological problems. If you are thinking of entering the field of psychology today, you have a wide and exciting range of career choices.

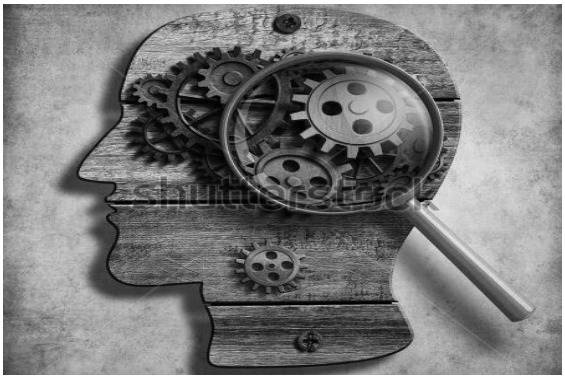
Speaking

How do you think the situation in Ukraine differs from that in the USA? Share with the partners in small groups in which sector you would like to work in future. Justify your answer.

Key vocabulary of the lesson

application; approach; behavioural; branch; clairvoyance; cognitive; comprehend; cross-cultural; domain; encompass; environment; functionalism; Gestalt psychology; humanistic; intervention; interplay; life span; parapsychology; patterns of behaviour; precognition; prevent; promote; psychiatric; psychoanalytic; psycholinguistics; recipient; rehabilitation; therapist; unconscious

Lesson 2
Human brain



Lead-in

Work in pairs to share what you know about a human brain: facts, functions & anatomy.

Reading

1. Read the text to check your ideas.

Human Brain: Facts, Functions & Anatomy

The human brain, which can easily be held in one hand, weighs about 1,350 grams. The brain is protected by a thick skull and covered with thin, tough, plastic like membranes. The human brain is the command center for the human nervous system. It receives input from the sensory organs and sends output to the muscles. The human brain has the same basic structure as other mammal brains, but is larger in relation to body size than any other brains.

1. Facts about the human brain

The human brain is the largest brain of all vertebrates relative to body size.
The brain makes up about 2 percent of a human's body weight.
It contains about 86 billion nerve cells (neurons) – the "grey matter".
It contains billions of nerve fibers (axons and dendrites) – the "white matter".
These neurons are connected by trillions of connections, or synapses.

Which piece of information surprises you?

2. Grammar Revision

Look at the sentences from the text and analyze the verb forms.

The brain <u>is protected</u> by a thick skull and <u>covered</u> with thin, tough, plastic like membranes.
The human brain <u>weighs</u> about 1,350 grams.

Complete the gaps:

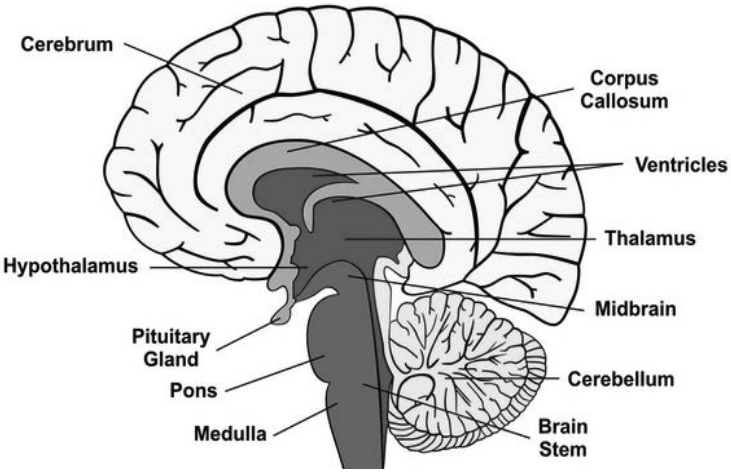
Both sentences are in the ……. ……. tense.
We use the ……..... voice to describe what someone/something does.
We use the ……..... voice to describe what happens to someone/something (often when the person or thing that does the action is not known or not important).

The Passive Voice form: the verb to be + past participle

Reading

3. Read the second part of the text and underline all examples of the Passive Voice in it.

2. Anatomy of the human brain



The largest part of the human brain is the cerebrum, which is divided into two hemispheres. Underneath lies the brainstem, and behind that sits the cerebellum. The outermost layer of the cerebrum is the cerebral cortex, which consists of four lobes: the frontal lobe, the parietal lobe, the temporal lobe and the occipital lobe.

Like all vertebrate brains, the human brain develops from three sections known as the forebrain, midbrain and hindbrain. Each of these contains fluid-filled cavities called ventricles. The forebrain develops into the cerebrum and underlying structures; the midbrain becomes part of the brainstem; and the hindbrain gives rise to regions of the brainstem and the cerebellum.

The cerebral cortex is greatly enlarged in human brains, and is considered the seat of complex thought. Visual processing takes place in the occipital lobe, near the back of the skull. The temporal lobe processes sound and language, and includes the hippocampus and amygdala, which play roles in memory and emotion, respectively. The parietal lobe integrates input from different senses and is important for spatial orientation and navigation.

The brainstem connects to the spinal cord and consists of the medulla oblongata, pons and midbrain. The primary functions of the brainstem include: relaying information between the brain and the body; supplying some of the cranial nerves

to the face and head; and performing critical functions in controlling the heart, breathing and consciousness.

Between the cerebrum and brainstem lie the thalamus and hypothalamus. The thalamus relays sensory and motor signals to the cortex and is involved in regulating consciousness, sleep and alertness. The hypothalamus connects the nervous system to the endocrine system – where hormones are produced – via the pituitary gland. The cerebellum lies beneath the cerebrum and has important functions in motor control. It plays a role in coordination and balance, and may also have some cognitive functions.

Vocabulary

4. Find the words in the second part of the text for the following definitions.

a) An animal having a backbone.

b) The main bone of the head.

c) Producing internal secretions that are transported around the body by the bloodstream.

d) Relating to the size, shape, and position of things, and the relation of objects to each other in space.

e) Natural substances produced by our body that control important physical processes such as growth and sexual development.

f) The fact of awareness by the mind of itself and the world.

5. Find the synonyms in the box for the words from the text.

Underneath, layer, cognitive, cavity, fluid, memory, spinal, sensory, consciousness, coordination.

vertebral, cover, sensual, below, hole, liquid, recollection, location, mental, awareness

Reading

6. Read the third part of the text. Open the brackets, using the correct form of the verbs in the Active or Passive Voice.

3. Left brain vs. right brain

The human brain **1) (divide)** into two hemispheres, the left and right, connected by

a bundle of nerve fibers called the corpus callosum. The hemispheres are strongly, though not entirely, symmetrical. The left brain **2) (control)** all the muscles on the right-hand side of the body; and the right brain controls the left side. One hemisphere may be slightly dominant, as with left- or right-handedness. The popular notions about "left brain" and "right brain" qualities are generalizations that **3) (not well support)** by evidence. Still, there are some important differences between these areas. The left brain **4) (contain)** regions involved in speech and language, and **5) (also associate)** with mathematical calculation and fact retrieval. The right brain **6) (play)** a role in visual and auditory processing, spatial skills and artistic ability – more instinctive or creative things, though these functions **7) (involve)** both hemispheres.

(adapted from Live Science http://www.livescience.com/29365-human-brain.html)

7. Comprehension check. Answer the questions based on the whole text.

a) How does the human brain differ from animals brains?

b) What lobes does the cerebral cortex consist of?

c) Which part of the brain processes sound and language?

d) Which part of the brain plays an important role for spatial orientation and navigation?

e) What are some important differences between the right and left hemispheres of the brain?

8. Watch one of the documentaries from the list at home.

- "TOP Secrets about the Human Brain – Full Documentary":
https://www.youtube.com/watch?v=XvYtixMcYYU
- "Human Brain: How smart can we get – Documentary":
https://www.youtube.com/watch?v=GxPWAw9nemU
- "How Does The Brain Work: Science documentary":
https://www.youtube.com/watch?v=UTcOc80Z2n0

Prepare a short oral film review for the next class. Present it to the group. Use the plan to help you.

Introduction: What is the title of the film? What genre is it? When and where is the film set?

Summarise the film: What do we learn from this film?

Describe a memorable scene.

Conclusion: What is your overall opinion of the film? Do you recommend it?

Reading

9. Derivatives. Read the text, open the brackets, using the correct form of the word. Make all necessary changes.

Weird fact about how our brains change size over a single day

Brain size changes with time of day, finds 10,000 Brain Scans

The human brain is biggest in the morning and gets smaller as the day progresses. By tomorrow morning, though, it will be back to its 'full' size. The **1) (conclude)** come from a study of thousands of brain scans carried out to **2) (investigation)** Alzheimer's disease and multiple **3) (scleros)**. Scientists found that people **4) (general)** had the biggest brains in the morning and they shrank **5) (progress)** into the afternoon and evening. The total amount of **6) (shrink)** is not that great: **7) (certain)** less than 1% and probably closer to 0.3%. Why? The study's authors write: "A possible **8) (mechanic)** may be that lying down during the night is associated with a **9) (redistribute)** of body fluids that had accumulated in the lower extremities during the day. It is also possible that the effect of time-of-day is associated with hydration status."

(The study was published in the journal Neuroimage (Nakamura et al., 2015). (http://www.spring.org.uk/2016/06/brain-size-changes-time-day-finds-10000-brain-scans.php**)**

Which piece of information surprises you?

10. Idioms. Read the definition below.

Idiom – expression in the usage of a language that is peculiar to itself either grammatically or in having a meaning that cannot be derived from the conjoined meanings of its elements (www.merriam-webster.com).

Read the meaning of the idioms below.

If you ***have smth. on the brain*** (informal) you can't stop thinking or talking about a particular thing.

The phrase ***brain drain*** is used to refer to the movement of highly skilled and educated people from their own country to another, where they are paid more.

Make up your mind means to decide.

Put/set someone's mind at rest means to help someone to stop worrying.

Complete the sentences below with one of the idioms.

a) There was a large _____ from the UK to the US in the second half of the 20th century.

b) I've _____ to apply for a new job in the international company.

c) If it'll _____, I'll phone home every day.

d) I've had that piece of news _____ since hearing it on the radio this morning.

Speaking

11. Work in small groups. Express your opinion on the questions below.

Does our intelligence depend on the size of the brain?

What measures can be taken to prevent aging of the brain?

How is the brain of a genius different from the brain of an average person?

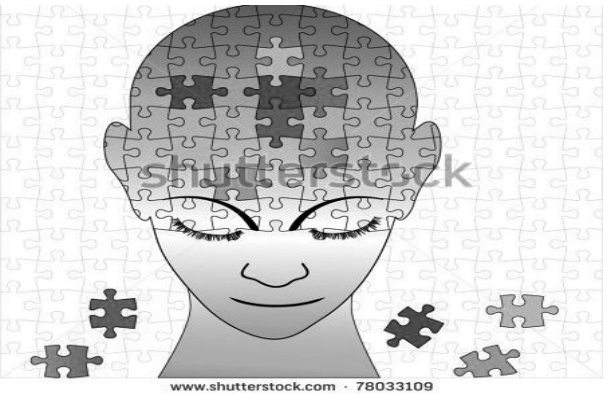
Web research task

Surf the Internet to find information on one of the topics mentioned above. Present your findings in the class.

Key vocabulary of the lesson

accumulate; amygdala; brainstem; cerebellum; cerebral cortex; cerebrum; consciousness; cranial nerves; forebrain; frontal lobe; grey matter; hemispheres; hindbrain; hippocampus; hypothalamus; mammal; medulla oblongata; midbrain; muscles; occipital lobe; parietal lobe; pituitary gland; pons; sensory; spatial orientation; temporal lobe; thalamus; ventricles; vertebrate; weird

Lesson 3
Memory



Lead-in

Work in pairs, give a definition:
Memory is …

1. Look through the definitions from different sources. Which definition is the closest to yours?

“Memory is the process of retaining information over time” (Margret W. Matlin).

“Memory is the means by which we draw on our past experiences in order to use this information in the present” (Robert Sternberg).

“Memory is the ability to remember things” (Macmillan English dictionary).

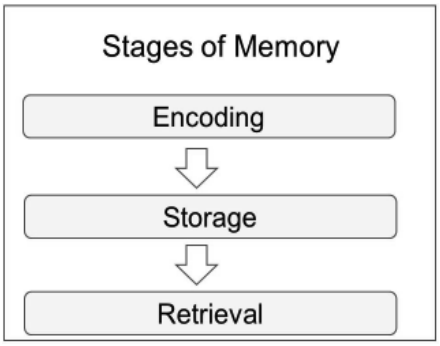
“Memory is the ability to retain information over time through three processes encoding, storing, and retrieving” (Rod Plotnik).

Reading

2. Read the text below and complete the gaps with the words from the box. There are more words than you need.

remember, forget, analyse, operate, permanent, temporary, processing, storage, memory

Memory is essential to all our lives. Without a memory of the past we cannot **1)……..** in the present or think about the future. We would not be able to **2)……** what we did yesterday, what we have done today or what we plan to do tomorrow. Without memory we could not learn anything. Memory is involved in **3)…….** vast amounts of information. This information takes many different forms, e.g. images, sounds or meaning. For psychologists the term memory covers three important aspects of information processing: encoding, storing (storage), and retrieving (retrieval).



Encoding refers to making mental representations of information so that it can be placed into our memories. ***Storing*** is the process of placing encoded information into relatively **4)……** mental storage for later recall. ***Retrieving*** is the process of getting or recalling information that has been placed into short-term or long-term **5)…….** .

https://www.youtube.com/watch?v=TausqSK9p9k

3. Watch the video: "Psychology: short and long term memory" and complete the text below with the missing information.

First input must be **a)** _____ and it must be **b)** _____ and retained for some period of time ranging from a moment to a **c)** _____. It must be retrieved on demand when it is needed. There are two kinds of memory: **d)** _____ memory is a store house of everything you know about the world and yourself. It is essentially unlimited. In theory anything you have experienced which is stored in long-term memory is available for later recall.

e)_____ memory (**f)** _____ memory) holds all the **g)**_____ currently in use. All new **h)** _____, things we are paying attention to right now must first pass through this narrow channel. The information we **i)** _____ from our long-term memory must also pass through here for inspection. Short-term memory has two major **j)** _____: only a small amount of information can be held there; the information can be held for a short period of time. Short-term memory is an essential part of our **k)** _____ present. It can only store in average **l)** _____ items.

How can we get around of these limitations of short-term memory? **m)** _____ the new information carefully without distractions. More information can be held if we group items according to some **n)** _____or something we are already familiar with. This process is called **o)** _____ (a word, a meaningful phrase or number segments).

Vocabulary

4. Match the words in box A with their synonyms in B.

A	B
essential	intellectual
amount	necessary
mental	quantity
storage	typical
input	aware
unlimited	section
available	keeping
narrow	contribution
major	unrestricted
average	accessible
familiar	thin
segment	main

5. Match the opposites in the table below.

retain	decode
involve	remove
store	loose
encode	release
place	exclude
hold	spend

6. Study the table below with the idioms relating to the topic of memory.

IDIOM	MEANING	EXAMPLE
commit smth. to memory	make yourself remember smth.	He never writes phone numbers down – he just commits them to memory.
take a stroll/ trip down memory lane	remember some of the happy things you did in the past	They went back to the place where they'd spent their honeymoon and took a stroll down memory lane.
come/spring to mind	immediately think of smth.	I'd like to get him a special birthday present, but nothing springs to mind.
slip your mind	forget about smth.	I was going to ring her to wish a happy birthday, but it slipped my mind.
bear/ keep smth. in mind	remember information when making a decision or thinking about a matter	Bearing in mind that it was your first attempt, I think you did very well.
your mind goes blank	you can't think of anything to say	When I looked at the exam questions, my mind went blank.
cross your mind	think about smth. for a short time	Of course, I don't think you broke the window. The thought never even crossed my mind.
out of sight, out of mind	if you do not see someone, you forget about them	Mary hasn't thought of her boyfriend since he went abroad. Out of sight, out of mind!
smth. is on the tip of your tongue	you know it, but can't remember it	Her name is on the tip of my tongue – what is it?
ring a bell	think you've heard smth. before	Paul's face rings a bell, but I don't think we've ever met.
rack your brains	think very hard	I racked my brains, but couldn't think where I'd left the book.

Complete the idioms.

1) Out of …….. , out of ……. .
2) The class reunion gave us a great opportunity for a trip down ……lane.
3) I'm sorry I forgot to post your letters. It just slipped my ……. .
4) Please bear me in …… if you need someone to work on this project.
5) I don't think I know him, but his name rings ……. .
6) I was so embarrassed that my ……. just went blank.

Speaking

7. Work in pairs. Choose the idiom from the table above, but don't say which one. Describe a situation to your partner to illustrate this idiom. Your partner will guess.

Reading

8. Read the text fast and match the headings to the paragraphs. There is one heading you don't need to use.

1. Repressed memories
2. Two kinds of encoding
3. Flashbulb memory
4. Brains and hormones
5. Photographic memory
6. Location of memories in the brain

A.

Encoding refers to acquiring information or storing it in memory by changing this information into memory codes. There are two kinds of encoding: automatic and effortful. Automatic encoding is the transfer of information from short-term into long-term memory without any effort and usually without any awareness. One reason many of our personal experiences are automatically encoded is that they hold our interest and attention. Learning how to perform various motor skills, such as playing tennis or riding a bike, and developing habits, such as brushing our teeth are also encoded automatically.

On the other hand, factual or technical information from textbooks requires deliberate or effortful encoding. Effortful encoding involves the transfer of information from short-term into long-term memory either by working hard to repeat or rehearse the information. Semantic information, such as learning new or difficult terms, facts or equations usually requires effortful encoding because we need to form hundreds of new associations.

B.

The idea of repressed memories is based on Sigmund Freud's theory of repression, which underlies much of his psychoanalytic theory of personality. Repression is the process by which the mind pushes a memory of some threatening or traumatic event deep into the unconscious. Once in the unconscious, the repressed memory cannot be retrieved at will and may remain there until something releases it and the person remembers it.

A client may enter therapy with sexual problems or a mood disorder and later in therapy uncover repressed memories, such as being sexually abused as a child. Clients often have total amnesia (loss of memory) for the traumatic experience, their recovery of repressed memories usually occurs in the first 12 months of therapy.

C.

One kind of unusual memory is the ability to remember everything with little or no difficulty. Such an amazing memory is commonly called a photographic memory. Photographic memory, which occurs in adults, is the ability to form sharp, detailed visual images after examining a picture or page for a short period of time and to recall the entire image at a later date. There are no reports of someone developing a photographic memory and only one or two reports of adults who had a truly photographic memory.

D.

Flashbulb memories are vivid recollections, usually in great detail, of dramatic or emotionally charged incidents that are of interest to the person. Flashbulb memories usually involve events that are extremely surprising, are emotionally arousing, have very important meaning or consequences for the person. Studies show that flashbulb memories can last 60 years or even longer.

Researchers think the reason these memories are so detailed and long-lasting is that their emotionally arousing content activates a special brain area (amygdala, which plays a key role in processing and encoding strong emotional experiences) and several hormones.

E.

Researchers have identified the several different areas of the brain that are involved in processing and storing different kinds of thoughts and memories. Our ability to hold words, facts and events in short-term memory depends on activity in the cortex, which is a thin layer of brain cells that covers the surface of the forebrain. Our ability to remember or recall songs, words, facts and events for months or years depends on cerebral cortex.

The romantic feeling associated with emotional memory is provided by the amygdala, which is located in the tip of the temporal lobe and receives input from all the senses. Research using brain scans found that the amygdala plays a critical role in the long-term processing of emotionally intense experiences.

The hippocampus transfers words, facts, and personal events from short-term memory into permanent long-term memory. The hippocampus is a curved, finger sized structure that lies beneath the cortex in the temporal lobe.

9. Read the text again and decide if the sentences are True or False. Correct the false ones.

1) Learning how to perform motor skills is encoded effortfully.

2) Repression is a conscious process.

3) Flashbulb memories are emotionally arousing and have a very important meaning for the person.

4) Amygdala plays a very important role in processing of emotionally intense experiences.

5) The hypothalamus transfers words, facts, and personal events from short-term memory into permanent long-term memory.

Writing

10. Work in groups of three. Brainstorm and write a list of ideas how to improve memory. Report to the class.

Reading

11. Read the text and tick (V) those ideas which are in your list.

10 ways to improve your memory

A healthy lifestyle can support our brain health and even encourage the brain to grow new neurons, a process known as neurogenesis. Our brain's hippocampus, i.e. the memory center, is especially able to grow new cells and it's now known that hippocampus regenerates throughout our entire lifetime (even into our 90s), provided we give it the tools to do so. We don't need an expensive prescription medication to boost our brain and memory. We simply must try out the following tricks to improve memory.

1. Eat Right

The food we eat – and don't eat – plays a crucial role in our memory. Fresh vegetables are essential, as are healthy fats and avoiding sugar and grain carbohydrates. For instance, curry, celery, broccoli, cauliflower, and walnuts contain antioxidants and other compounds that protect our brain health and may even stimulate the production of new brain cells.

2. Exercise

Exercise encourages our brain to work at optimum capacity by stimulating nerve cells to multiply, strengthening their interconnections and protecting them from damage.

3. Stop Multitasking

Multitasking may slow us down, make us prone to errors as well as make us forgetful. If you find yourself trying to complete five tasks at once, stop yourself and focus your attention back to the task at hand. If distracting thoughts enter your head, remind yourself that these are only "projections," not reality, and allow them to pass by without stressing you out. You can then end your day with a 10-15-minute meditation session to help stop your mind from wandering and relax into a restful sleep.

4. Get a Good Night's Sleep

Sleep is also known to enhance our memories and help us "practice" and improve our performance of challenging skills. In fact, a single night of sleeping only four to six hours can impact our ability to think clearly the next day.

5. Play Brain Games

If we don't sufficiently challenge our brain with new, surprising information, it eventually begins to deteriorate. The research into brain plasticity shows us that by providing our brain with appropriate stimulus, we can counteract this degeneration. One way to challenge our brain is via "brain games", which we can play online via Web sites like Lumosity.com.

6. Master a New Skill

Engaging in "purposeful and meaningful activities" stimulates our neurological system, reduces the risk of dementia and enhances health and well-being. The task must be important to us, or somehow meaningful or interesting – it must hold our attention.

7. Try Mnemonic Devices

Mnemonic devices are memory tools to help us remember words, information or concepts. They help us to organize information into an easier-to-remember format. Try:

- Acronyms (such as PUG for "pick up grapes")
- Visualizations (such as imagining a tooth to remember your dentist's appointment)
- Rhymes (if you need to remember a name, for instance, think «Molly's hair is curly)
- Chunking, which is breaking up information into smaller «chunks» (such as organizing numbers into the format of a phone number).

8. Draw

Drawing pictures of words helps build stronger and more reliable memories. The quality of the drawings themselves does not matter, the study also found. This suggests everyone can benefit from the technique, whatever their artistic talent.

9. Imagine

Imagining how things relate to you helps to boost recall. The study tested people with and without memory problems and found it could help both. The results showed that whether people had memory problems or not, self-imagining was the most effective strategy.

10. Handwrite

Writing by hand strengthens memory in comparison to writing on a real or virtual keyboard. The motor feedback from the process of writing along with the sense of touching paper and pen helps people learn. Areas of the brain vital to language are more strongly activated by the physical activity.

(adapted from http://articles.mercola.com/sites/articles/archive/2014/04/24/memory-improvement-tricks.aspx; http://www.spring.org.uk/2016/05/10-memory-tricks-backed-by-science.php)

Do you use any of the methods mentioned above?
Which ones would you like to try?

Role play

12. Work in pairs. Choose your roles. Make a conversation.

Student A	Student B
You are a psychologist specializing in brain aging and memory. You have done a lot of research and published hundreds of articles. A patient comes to you with his/her problem. Listen to the complaints and give advice.	You have recently started noticing problems with your memory. You are concerned about this as you are only 40 years old. You go to a specialist to get consultation how to improve your memory.

Use the following structures to give advice:
I think you should/shouldn't…
You'd better….
If I were you, I'd…

Key vocabulary of the lesson

acronyms; amnesia; antioxidants; boost; capacity; chunking; deteriorate; effortful encoding; enhance; flashbulb memories; long-term (memory); mnemonic; motor skills; multitasking; permanent; processing; repressed memories; retain; retrieving; short-term (memory); storage; traumatic event

Lesson 4
Emotions

Lead-in

Your teacher will give you a card with one of the emotions from the list:

Angry, annoyed, disgusted, bored, despaired, satisfied, disappointed, embarrassed, worried, shocked, happy, sad, surprised, excited, frustrated, guilty, proud

Using gestures and facial expression demonstrate an emotion you have, but don't name it. The class will try to guess your emotion.

Speaking

1. **Work in pairs. Discuss the questions below.**
   a) Are you an emotional person?
   b) How often and in which situations do you hide your emotions?
   c) Which emotions are not easy to interpret? Why?
   d) How aware are we of our facial expressions?
   e) Is it possible to manage our nonverbal communication? How?

Reading

2. Read the text about emotions.

The following words will fill the gaps (the numbers in brackets show the quantities of gaps):

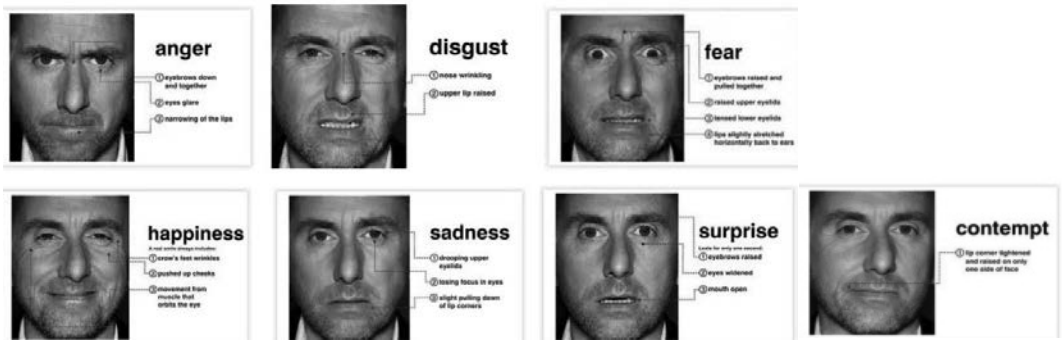
consist (2)	**processes**	**consistent**	**identify**	**involve**	**involves**
response	**responses (2)**	**research**	**significance**	**theories**	**theorists**

«An emotion is a complex psychological state that _____ three distinct components: a subjective experience, a physiological _____ , and a behavioural or expressive response» (Hockenbury & Hockenbury, 2007).

According to some _____ , emotions are a state of feeling that results in physical and psychological changes that influence our behaviour. Emotion is also linked to behavioural tendency. Extroverted people are more likely to be social and express their emotions, while introverted people are more likely to be more socially withdrawn and conceal their emotions. Emotions _____ different components, such as subjective experience, cognitive _____ , expressive behaviour, psychophysiological changes, and instrumental behaviour. At one time, academics attempted to _____ the emotion with one of the components: William James with a subjective experience, behaviourists with instrumental

behaviour, psychophysiologists with physiological changes. More recently, emotion is said to [ ] of all the components. Emotions have been described by some [ ] as discrete and [ ] [ ] to internal or external events which have a particular [ ] for the organism. Emotions are brief in duration and [ ] of a coordinated set of [ ] , which may include verbal, physiological, behavioural, and neural mechanisms. For more than 40 years, Paul Ekman has supported the view that emotions are discrete, measurable, and physiologically distinct. Ekman's most influential work revolved around the finding that certain emotions appeared to be universally recognized, even in cultures that were preliterate and could not have learned associations for facial expressions through media. His [ ] findings led him to classify seven emotions as basic: anger, disgust, fear, happiness, sadness, surprise and contempt. Robert Plutchik agreed with Ekman's biologically driven perspective but developed the «wheel of emotions», suggesting eight primary emotions grouped on a positive or negative basis: joy versus sadness; anger versus fear; trust versus disgust; and surprise versus anticipation.

In a film "Lie to me" an actor Tim Rot played the role whose prototype is a famous scientist Paul Ekman.



3. Answer the questions about the text.

a) What types of people tend to express and hide their emotions?
b) What components do emotions involve?
c) Are emotions longstanding?
d) What is the main finding of Paul Ekman's research?

e) What are the seven basic emotions according to Ekman?

f) How does the "wheel of emotions" developed by R. Plutchik differ from the idea of seven basic emotions proposed by P. Ekman?

https://www.youtube.com/watch?v=J9i-9_QuetA

4. Watch the video: "Dr. Paul Ekman on Expression and Gesture and Their Role in Emotion and Deception" and find the answers for the questions below.

a) Why does P.Ekman mention Charles Darwin at the beginning of the lecture?

b) What research did Ekman do to test Darwin's idea?

c) Why does P. Ekman call seven emotions universal (or basic)?

d) What did the experiment in Japan show?

e) What is the Facial action coding system?

f) What happened when the lady from the experiment and P. Ekman himself try to show each of the expressions on their faces?

g) What is special about gestures?

Vocabulary

5. Find all the hidden emotions in this word search.

Words can go in the following directions: → ← ↑ ↓

G	R	I	E	F	R	D	R	E	W	C	P	C
C	U	A	B	C	I	K	M	E	X	R	R	A
P	E	N	T	H	U	S	I	A	S	M	I	S
J	N	T	F	F	I	I	Z	Z	P	A	D	H
G	E	I	E	U	P	H	O	R	I	A	E	D
Z	L	C	A	S	A	D	N	E	S	S	B	I
N	D	I	V	H	A	P	P	I	N	E	S	S
P	G	P	E	Z	T	R	E	G	N	A	J	G
F	E	A	R	W	K	J	L	C	S	Z	I	U
Y	H	T	A	P	A	X	I	R	X	I	J	S
G	X	I	P	N	C	O	Y	C	P	M	O	T
G	H	O	S	T	I	L	I	T	Y	L	Y	B
M	P	N	A	J	E	A	L	O	U	S	Y	F

6. Complete the table below with the words from the puzzle:

Positive emotions	
Negative emotions	

7. Complete the column with the missing adjectives for the given nouns. Use a dictionary to help you.

NOUN	ADJECTIVE
joy	
enthusiasm	
pride	
grief	
fear	
anger	
hostility	
sadness	
jealousy	
disgust	

Speaking

8. Work in pairs. Choose five adjectives from the table in Ex.7. Ask your partner about the last time he/she felt sad, proud etc. Ask follow-up questions if possible.

Reading

9. Pre-reading. Have you ever heard about emotional intelligence? What is it? Read the first paragraph of the text and check your answers.

What is Emotional Intelligence?

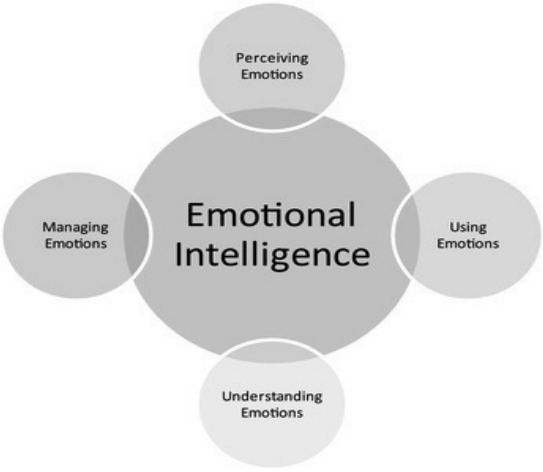
Emotional intelligence is the ability to perceive emotions accurately, to take feelings into account when reasoning, to understand emotions, and to regulate or manage emotions in oneself and others (Salovey et al., 2008). Emotional Intelligence (EQ or EI) is a term created by two researchers – Peter Salovey and John Mayer. It gained popularity in the 1995 book "Emotional Intelligence – Why it can matter more than IQ", written by the psychologist and science journalist Daniel Goleman.

10. Read the rest of the text.

Student A read about ability-based model, student B read about Daniel Goleman's model below. Underline the key points in the text.

A. Salovey and Mayer's ability-based model claims that EI includes **four types** of abilities:

1. ***Perceiving emotions*** – the ability to detect emotions in faces, pictures, voices, and cultural artifacts – including the ability to identify one's own emotions. Perceiving emotions represents a basic aspect of emotional intelligence, as it makes all other processing of emotional information possible.
2. ***Using emotions*** to facilitate various cognitive activities, such as thinking and problem solving.
3. ***Understanding emotions*** – the ability to comprehend emotion language and to appreciate complicated relationships among emotions.
4. ***Managing emotions*** – the ability to regulate emotions in both ourselves and in others. The emotionally intelligent person can harness emotions, even negative ones, and manage them to achieve intended goals.



B. The model introduced by Daniel Goleman focuses on five main EI competencies and skills:

1. ***Self-awareness*** – the ability to know one's emotions, strengths, weaknesses, values and goals and recognize their impact on others.
2. ***Self-regulation*** (*Self-Management*) – involves controlling or redirecting one's disruptive emotions and impulses and adapting to changing circumstances.
3. ***Social skills*** – managing relationships to move people in the desired direction.
4. ***Empathy*** – considering other people's feelings especially when making decision.
5. ***Motivation*** – being driven to achieve.

Speaking

11. Student A and B work in pairs to share the information about the main issues of the model you've read about. Ask follow-up questions if possible.

Reading

12. Derivatives. Read the text, open the brackets, using the correct form of the word. Make all necessary changes.

Emotional Intelligence, IQ and Personality

Emotional intelligence is distinct from intellect. There is no known connection between IQ and emotional intelligence. **1)** (**Intelligent)** is our ability to learn, and it's the same at age 15 as it is at age 50. Emotional intelligence, on the other hand, is

a flexible set of skills that can be acquired and **2)** (**improve)** with practice. Although some people are naturally more **3)** (**emotion)** intelligent than others, we can develop high emotional intelligence even if we aren't born with it.

4) (**Person)** is the stable "style" that defines each of us. Personality is the result of hard-wired preferences, such as the inclination toward **5)** (**introverted)** or extroversion. Like IQ personality can't be used to predict emotional intelligence. Also like IQ, personality is stable over a lifetime and doesn't change. IQ, emotional intelligence, and personality each cover unique ground.

The **6)** (**communicate)** between our emotional and rational "brains" is the physical source of emotional intelligence. The pathway for emotional intelligence starts in the brain, at the spinal cord. Our primary senses enter here and must travel to the front of our brain before we can think **7)** (**rationality)** about our experience. However, first they travel through the limbic system, the place where emotions are generated. So, we have an emotional reaction to events before our rational mind is able to engage. Emotional intelligence requires effective communication between the rational and emotional centers of the brain. "Plasticity" is the term **8)** (**neurolog)** use to describe the brain's ability to change. Our brain grows new connections as we learn new skills. The change is gradual, as our brain cells develop new connections to speed the efficiency of new skills acquired.

Using strategies to increase our emotional intelligence allows the billions of microscopic neurons to line the road between the rational and emotional centers of our brain. A single cell can grow 15,000 **9)** (**connect)** with its neighbours. Once we train our brain by repeatedly using new emotional intelligence strategies, emotionally intelligent **10)** (**behave)** become habits.

A review published in the journal of *Annual Psychology* [Mayer, John D (2008). *"Human Abilities: Emotional Intelligence"*. Annual Review of Psychology] found that higher emotional intelligence is positively correlated with:

1. Better social relations for children and adults.
2. Highly emotionally intelligent individuals are perceived more positively by others. Other individuals perceive those with high EI to be more **11)** (**pleasure)**, socially skilled and empathic.
3. Better family and intimate relationships.
4. Better academic **12)** (**achieve)**.
5. Better social relations during work performance and in negotiations.
6. Better psychological **13)** (**well-be)**. Emotional intelligence is positively correlated with higher life **14)** (**satisfy)**, self-esteem and lower levels of insecurity or depression. It is also negatively correlated with poor health and behaviour.

(adapted from http://www.talentsmart.com/about/emotional-intelligence.php)

13. Comprehension check. Work in two teams (groups). Each team should prepare 6 statements (3 True and 3 False) based on the text in Ex.12. Read your sentences to the other team. They should guess if the statements are True or False and correct the False ones. The team which gives more correct answers is the winner.

14. Idioms. Read the meaning of the idioms below.

Informal idioms, meaning ***extremely happy***:

- I am/feel **on top of the world**.
- I am **on cloud nine**.
- I'm **over the moon**.
- I'm **in seventh heaven**.

If someone's **blood is up**, they are very angry and may react in a violent way.

If something **drives someone up the wall**, it makes someone very angry.

Recollect the situations, when you or people you know felt very happy or angry. Describe the situations, using at least 3 idioms above.

15. Widen your vocabulary on the topic, learning the words from "Vocabulary wheel for describing emotions" in Additional material for this lesson.

Key vocabulary of the lesson

angry; annoyed; anticipation; bored; comprehend; conceal; contempt; despaired; disappointed; discrete; disgust; embarrassed; emotional intelligence; empathy; excited; extroverted; frustrated; grief; guilty; hostility; introverted; jealousy; limbic system; perceive; preliterate; pride; proud; sadness; satisfied; self-awareness; surprised; withdrawn; worried

Lesson 5
Sleeping and dreaming

Lead-in

Look at the word cloud. Which words do you associate with the topic "Sleeping and dreaming"? Compare in groups and comment on your choice.

Reading

1. Read the text below and complete the gaps with the prepositions from the table.

on, of, by, about, for, from, against

Why Do We Sleep?

Why we sleep remains one of the greatest mysteries **1)** ---- nature. One reason we know sleep is important comes from studies of animals who are deprived **2)** ---- sleep. Rats can live **3)** ---- 16 days without food (water provided) and **4)** ---- 17 days without sleep. So far, the longest a human has voluntarily gone without sleep is 11 days. Two currently popular theories – the repair and adaptive theories – explain why we spend about one-third of each day asleep. The repair theory is supported **5)** ---- three findings. First, during sleep there is a marked secretion of physical growth, development (Pandi-Perumal et al., 2008). Second, during sleep there is increased production of immune cells to fight infection (Barth, 2009; M. R. Irwin et al., 2008). Third, during wakefulness there is a decline in the brain's energy stores (glycogen), which are restored during sleep and needed **6)** ---- normal functioning (Geiger, 2002). The brain needs sleep to grow, repair its immune system, and restore its energy and chemicals.

Support for the adaptive theory comes **7)** ---- observations that large predatory animals, such as lions, sleep a lot and wherever they wish, while prey animals, such as antelope, sleep far less and in protected areas. Many birds sleep with one hemisphere at a time, to guard **8)** ---- predators. Animals (humans) that rely primarily **9)** ---- visual cues and have little night vision have evolved a circadian clock for sleeping at night and thus avoid becoming prey. The adaptive and repair theories are not really at odds. Both have support but just focus **10)** ---- different reasons **11)** ---- sleep.

2. Find the words in the text for the following definitions.

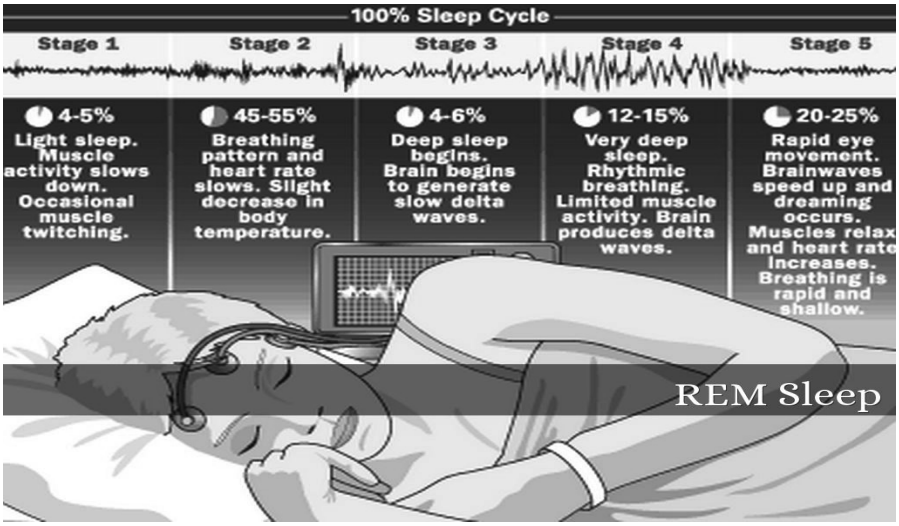
a) a daily rhythmic activity cycle, based on 24-hour intervals, that is exhibited by many organisms;
b) something that is a secret;
c) an animal that hunts other animals for food;

d) the process of separating and releasing a substance that fulfills some function within the organism;
e) an animal hunted or caught by another for food.

Speaking

3. Work in pairs. Study the diagram below and speak about the stages of sleep.

During sleep, we usually pass through five phases of sleep: stages 1, 2, 3, 4, and REM (rapid eye movement) sleep. These stages progress in a cycle from stage 1 to REM sleep, then the cycle starts over again with stage 1.



(https://www.google.com.ua/search?q=stages+of+sleep+pictures)

4. Watch the videos. Gather more information making notes about the stages of sleep (kinds, length, and description).

- **Micro-Lecture: Stages of Sleep**
https://www.youtube.com/watch?v=ffKcep4jnlM

- **Stages of Sleep, REM Sleep & Dreaming**
https://www.youtube.com/watch?v=kaoMD1XI5u8&t=9s

Make groups of 3-4, take turns to speak about the topic.

Reading

5. Read the text and decide if the statements below are True or False. Correct the false ones.

1) Freud was the first scientist who said that the dreams could be interpreted.
2) A lot of therapists believe that dreams can represent past, present, or future fears or worries of waking life.
3) Some typical characteristics of dreams: they are static and more likely to take place indoors.
4) All people see dreams in colour.
5) The ability to remember dreams is positively correlated to verbal ability.

What do people dream about?

Before 1900, psychologists believed that dreams were meaningless and bizarre images. However, Freud's theory changed all that when he said dreams were a way ("the royal road") to reach our unconscious thoughts and desires.

Freud made two main points no one had made before: Dreams contained symbols that had meaning, and dreams could be interpreted. For example, Freud (The Interpretation of Dreams, 1900) said male sex symbols are long objects, such as sticks, umbrellas, and pencils; female sex symbols are hollow things, such as caves, jars, and keyholes. Freud believed a psychoanalyst's task was to interpret dream symbols.

Current psychoanalysts agree with Freud that dreams have meaning and can represent past, present, or future concerns, fears, or worries (R. Grecnberg & Perlman, 1999). However, many non-Freudian therapists disagree with Freud's idea that a dream's contents are necessarily symbols or disguised thoughts for threatening, unconscious wishes and desires (Domhoff, 2003).

Many therapists believe that dreams are extensions of waking life (Kramer, 2006, Pesant & Zadra, 2006). Other researchers believe that dreams have a variety of uses, ranging from dealing with threatening situations, resolving personal and emotional problems, sparking artistic creativity, to even solving scientific, mathematical, or other kinds of puzzles (B. Bower, 2001). Unlike Freud, Hobson believes that dream interpretation is questionable, since there is no way to know whether dreams are just bizarre events or contain useful or valid information about a person's problems.

Van de Castle has catalogued descriptions and found that typical dreams have the following characteristics:
- dreams have several characters;
- they involve motion such as running or walking;
- they are more likely to take place indoors than outside;
- they are filled with visual sensations but rarely include sensations of taste, smell, or pain;
- they seem bizarre because we disregard physical laws by flying or falling without injury;
- they more frequently involve emotions of anxiety or fear than joy or happiness;
- they rarely involve sexual encounters and are almost never about sexual intercourse;
- dreams usually have visual imagery and are in colour in sighted people, but in people blind from birth, dreams are never visual but only tactile, olfactory (smell), or gustatory (taste).

Researchers conclude that although individual dreams represent unique experiences, the format in which we dream, such as flying, falling, running, or hiding, is shared by others (Domhoff, 2003). One common question is: Why do some better remember their dreams? One researcher found that the ability to remember dreams was positively related or correlated with how well one can create mental images during waking and was not related to verbal ability, which might influence dream recall (Foulkes, 2003).

6. Match the words from the text in column A to their synonyms in column B.

A	**B**
bizarre	chance meeting
disguised	correspond
motion	harm
injury	hidden
encounter	movement
correlate	oral
verbal	strange

Speaking

7. Work in groups of 3-4. Discuss the following questions.

a) What do you usually dream about?

b) Have you ever had a nightmare?
c) Have you ever seen a prophetic dream?
d) What symbols in dreams do you know? How can you interpret them (falling teeth etc.)?
e) What sleep disorders do you know or have ever experienced? Have you or people you know ever suffered from insomnia, nightmares or other problems?

Reading

8a. Read the introduction to the text. Are you surprised by the information? Have you heard about mentioned problems before?

Sleep problems and treatment

Sleep researchers estimate that as many as 70 million Americans experience some kind of sleep problem (Gupta, 2006). For example, some adults stop breathing in their sleep (sleep apnea); some have trouble going to or staying asleep (insomnia); a small percentage go from being wide awake to a very deep sleep quickly and without warning (narcolepsy); and 69% of all children experience some type of sleep disturbance at least a few nights a week.

8b. Work in groups of 5 (students A, B, C, D, E). Read your part only. Describe the rest of the group the problem you read about. Decide which one is the most serious.

Student A

Insomnia

In the United States, about 33% of adults report some type of insomnia (Ohayon & Guillemmault, 2006). Common *psychological causes* of insomnia include experiencing an overload of stressful events, worrying about personal or job-related difficulties, grieving over a loss or death, and coping with mental health problems. For many middle-aged working people, job stress is a major cause of insomnia and other sleep problems. For students, common causes of insomnia are worrying about exams, personal problems, and changes in sleep schedule, such as staying up late Saturday night and sleeping late on Sunday morning. Then Sunday night students are not tired at the usual time and may experience insomnia. Common

physiological causes of insomnia include changing to night-shift work, which upsets circadian rhythms, having medical problems or chronic pain, and abusing alcohol or other substances sedatives). There are effective nondrug (psychological) and drug treatments for bouts of insomnia.

Nondrug treatments for insomnia may differ in method, but all have the same goal: to stop the person from excessive worrying and reduce tension,' which are major psychological causes of insomnia. One proven cognitive-behavioural method of reducing insomnia is to establish an optimal sleep pattern. Follow these eight steps so that sleeping becomes more regular and efficient.

- Go to bed only when you are sleepy, not by convention or habit.
- Put the light out immediately when you get into bed.
- Do not read or watch television in bed, since these are activities that you do when awake.
- If you are not asleep within 20 minutes, get out of bed and sit and relax in another room until you are tired again. Relaxation can include tensing and relaxing your muscles or using visual imagery, which involves closing your eyes and concentrating on some calm scene or image for several minutes.
- Set the alarm to the same time each morning, so that your time of waking is always the same. This step is very important because oversleeping or sleeping in is one of the primary causes of insomnia the next night.
- Do not nap during the day because it will break your sleep schedule that night.

In one study, participants who had chronic insomnia reduced their time awake (after going to sleep) by 54% using cognitive-behavioural therapy, compared to 16% using relaxation exercises and 12% using a placebo treatment (Edinger et al., 2001). Serious problems with chronic insomnia may be treated, in the short term, with drugs.

Student B

Sleep apnea

In the United States, about 20 million adults have insomnia because they stop breathing, a problem called sleep apnea. Sleep apnea refers to repeated periods during sleep when a person stops breathing for 10 seconds or longer. The chances of developing sleep apnea increase if a person is an intense and frequent snorer, is overweight, uses alcohol, or takes sedatives (benzodiazepines). Some people with sleep apnea may wake up 200-400 times a night, which also results in insomnia. The simplest treatment for sleep apnea is to sew tennis balls into the back of a pajama top so the person cannot lie on his or her back. For more severe cases, the most effective therapy is a device that blows air into a mask worn over the nose that helps keep air passages open. In severe cases, people may undergo surgery to remove tonsils or alter the position of the jaw.

Student C

Narcolepsy

Narcolepsy is a chronic disorder that is marked by excessive sleepiness, usually in the form of sleep attacks or short periods of sleep during the day. The sleep attacks are accompanied by short periods of REM sleep and loss of muscle control (cataplexy). Narcoleptics describe their sleep attacks as irresistible. They report falling asleep in very inappropriate places, such as while carrying on a conversation or driving a car. In many cases, these sleep attacks make it difficult for narcoleptics to lead normal lives. Like humans, some dogs get narcolepsy. Researchers have recently discovered that narcolepsy occurred in dogs and mice when certain brain cells, called hypocretin neurons, either were absent or did not respond normally (Mignot, 2000). Researchers also found very little hypocretin in the spinal fluid of narcoleptics. When "narcoleptic" dogs were given the missing hypocretin, their narcoleptic symptoms were reversed. Researchers believe that a hypocretin-based medicine could soon be on the market and provide a new and effective way to treat narcolepsy, which affects about 150,000 Americans (Marschall, 2007).

Student D

Nightmares

Besides night terrors, about 25-70% of all children aged 3-6 have nightmares, and about 47% of college students report having them once a month. Nightmares, which occur during REM sleep, are very frightening images and usually involve great danger – being attacked or injured. The person can usually describe the nightmare in great detail. Nightmares usually stop when the person wakes up. One effective treatment for nightmares involves regular use of anxiety-reduction techniques.

Student E

Sleepwalking

One of the most unusual sleep disturbances is sleepwalking. Occasional sleepwalking is considered normal in children; frequent sleepwalking in adults may be caused by increased stress, sleep deprivation, or mental problems (Cartwright, 2006). Sleepwalking can be a serious problem because of the potential for injury and harm to oneself and others (imagine sleepwalking out of the house onto the highway). For children, sleepwalking tends to go away on its own as they enter the teen years. Treatment may be needed if there are negative consequences for the sleepwalking, such as risk of injury. Treatment may include: treating the underlying condition, if the sleepwalking is associated with sleep deprivation, medical condition or a mental health disorder; a change of medication, if it's thought that the sleepwalking results from a drug; anticipatory awakenings – waking the sleepwalker about 15 minutes before the person usually sleepwalks, then staying awake for five minutes before

falling asleep again; medication, such as benzodiazepines or certain antidepressants, if the sleepwalking leads to the potential for injury.

Role play

9. Work in pairs: student A and student B.

Student A You are a physician. A patient comes to you to get consultation about his/her sleep problems. Listen to their complaints and give advice using the information from the text above, your own ideas and suitable structures for ***giving advice:***
I think you should/shouldn't…
You'd better….
If I were you, I'd…

Student B You are a patient who comes to a physician to get consultation about your sleep problems. Invent all necessary details. Explain your problem and ask for advice using structures:
What do you suggest / recommend I do?
What should I do …?
Do you know the quickest way to …?
Could you advise me on the best way to …?
What would you do if you were me?

Key vocabulary of the lesson

antidepressants; apnea; benzodiazepines; bizarre; bouts; cataplexy; circadian rhythms; correlate; disguised; encounter; gustatory (taste); hypocretin; insomnia; motion; nap; narcolepsy; olfactory (smell); REM sleep; sedatives; sleepwalking; treatment

Lesson 6
Social Psychology Experiments

Lead-in

Work in groups. Discuss the questions below.
What does social psychology deal with?
Describe an/some experiment(s) conducted by social psychologists.
If you had such opportunity, would you take part in any psychological experiments? Why/ why not?

Reading

1. Look through the description of ten social psychology experiments. Which experiment is the most interesting for you? Why? Find more details about these experiments in Additional reading for Lesson 6.

Ten of the most influential social psychology experiments

1. The Halo Effect: When Your Own Mind is a Mystery

The "halo effect" is a classic social psychology experiment. It is the idea that global evaluations about a person (e.g. she is likeable) bleed over into judgements about their specific traits (e.g. she is intelligent). Hollywood stars demonstrate the halo effect perfectly. Because they are often attractive and likeable we naturally assume they are also intelligent, friendly, display good judgement and so on.

2. How and Why We Lie to Ourselves: Cognitive Dissonance

The ground-breaking social psychological experiment of Festinger and Carlsmith (1959) provides a central insight into the stories we tell ourselves about why we think and behave the way we do. The experiment is filled with ingenious deception so the best way to understand it is to imagine you are taking part. So sit back, relax and travel back. The time is 1959 and you are an undergraduate student at Stanford University…

3. War, Peace and the Role of Power in Sherif's Robbers Cave Experiment

The Robbers Cave experiment, a classic social psychology experiment, has at least one hidden story. The well-known story emerged in the decades following the experiment as textbook writers adopted a particular retelling. With repetition people soon accepted this story as reality, forgetting it is just one version of events, one interpretation of a complex series of studies.

4. Our Dark Hearts: The Stanford Prison Experiment

The famous "Stanford Prison Experiment" argues a strong case for the power of the situation in determining human behaviour. Not only that but this experiment has also inspired a novel, two films, countless TV programs, re-enactments and even a band.

5. Just Following Orders? Stanley Milgram's Obedience Experiment

What social psychology experiment could be so powerful that simply taking

part might change your view of yourself and human nature? What experimental procedure could provoke some people to profuse sweating and trembling, leaving 10% extremely upset, while others broke into unexplained hysterical laughter?

6. Why We All Stink as Intuitive Psychologists: The False Consensus Bias

Many people quite naturally believe they are good 'intuitive psychologists', thinking it is relatively easy to predict other people's attitudes and behaviours. We each have information built up from countless previous experiences involving both ourselves and others so surely we should have solid insights?

7. Why Groups and Prejudices Form So Easily: Social Identity Theory

People's behaviour in groups is fascinating and frequently disturbing. As soon as humans are bunched together in groups we start to do odd things: copy other members of our group, favour members of own group over others, look for a leader to worship and fight other groups.

8. How to Avoid a Bad Bargain: Don't Threaten

Bargaining is one of those activities we often engage in without quite realising it. It doesn't just happen in the boardroom, or when we ask our boss for a raise or down at the market, it happens every time we want to reach an agreement with someone. This agreement could be as simple as choosing a restaurant with a friend, or deciding which TV channel to watch. At the other end of the scale, bargaining can affect the fate of nations.

9. Why We Don't Help Others: Bystander Apathy

In social psychology the "bystander effect" is the surprising finding that the mere presence of other people inhibits our own helping behaviours in an emergency. John Darley and Bibb Latane were inspired to investigate emergency helping behaviours after the murder of Kitty Genovese in 1964.

10. I Can't Believe My Eyes: Conforming to the Norm

We all know that humans are natural born conformers – we copy each other's dress sense, ways of talking and attitudes, often without a second thought. But exactly how far does this conformity go? Do you think it is possible you would deny unambiguous information from your own senses just to conform with other people?

(adapted from http://www.spring.org.uk/2007/11/10-piercing-insights-into-human-nature.php)

Vocabulary

2. Complete the columns in the table with the missing forms.

noun	verb	adjective
ambiguousness ambiguity	ambiguate	
conformer conformity conformist		conformist
inhibition		inhibited
bargain		
	prejudice	prejudiced
bias		
emergence		emerged
	obey	obedient
assumption		assumed

3. Complete the gaps with the correct words from the table in Ex.2.

a) He demanded complete ---------- from his soldiers.
b) The news channel has been accused of ---------- in favour of the government.
c) At $8.95, it's a ----------.
d) These calculations are based on the ---------- that prices will continue to rise.
e) Many refused, including a number of the ---------- ministers.
f) Their threats ---------- witnesses from giving evidence.
g) A figure ---------- from the shadows.

4. Watch the video: "Asch conformity experiment".
https://www.youtube.com/watch?v=NyDDyT1lDhA&t=207s

While watching, complete the sentences below:

- One after another they say the line, that you see is shorter, is the same as the ……...
- This study is one of the first classic studies on the …….
- The ……. is not the way you see it.
- Only one of the people in the group is a real ……..
- In this case the subject knows he is ……., but goes along to avoid the discomfort of …….. with the group.
- Sometimes we go along with the group, because what they say ……. us they are right. This is called informational ……...

- Asch's experiment is classic. It reveales that people will ……. what they see and submit the group ……..

Speaking

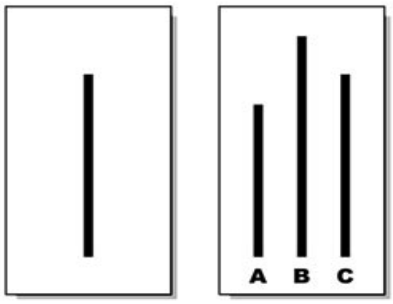
5. Work in pairs. Give your opinion on the information in the video.

Reading

6. Read the text about Asch's experiment. Open the brackets, using the verbs in the correct tenses of the Active or Passive Voice. Check the information in Grammar Reference if necessary.

Conforming to the norm

This study **1) (show)** that many of us will deny our own senses just to conform to others. Have a look at the figure below. Compare the line on the left with the three lines on the right: A, B & C. Which of these three lines is the same length as the lonesome line on the left?



It's obviously C. And yet in a classic psychology experiment conducted in the 1950s, 76% of people **2) (deny)** their own senses at least once, choosing either A or B. What kind of strong-arm psychological pressure tactics made them do this? The fascinating thing about this experiment was that its creator, renowned psychologist Solomon Asch, set out to prove the exact opposite. A previous experiment by Muzafer Sherif had found that when people **3) (face)** with making a judgement on an ambiguous

test, they used other people's judgements as a reference point. This makes perfect sense. If I **4) (be)** not sure about something, I'll check with someone else. But this is only when I'm not sure. The situation is quite different when I have unambiguous information, such as when I can clearly **5) (see)** the answer myself. Other people's judgement should then have no effect – or at least that's what Asch thought.

The experiment

To test his theory he **6) (bring)** male undergraduates, one at a time, into a room with eight other people who were passed off as fellow participants (Asch, 1951). They **7) (show)** three lines with another for comparison, similar to the figure above. Participants **8) (ask)** to call out which line – A, B or C – was the same length as the reference line. This procedure **9) (repeat)** 12 times with participants viewing variations of the above figure. What the participants didn't realise was that all the other people sat around the table were in the game. They were all confederates who **10) (tell)** by the experimenter to give the wrong answer. On half of the trials they called out the line that was too short, and on the other half the line that was too long. The real experimental participant, who knew nothing of this, was actually the sixth to call out their answer after five other confederates of the experimenter **11) (give)** the wrong answer.

Surprising findings

The results were fascinating, and not at all what Asch **12) (expect)**: 50% of people gave the same wrong answer as the others on more than half of the trials. Only 25% of participants refused to be swayed by the majority's blatantly false judgement on all of the 12 trials. 5% always conformed with the majority incorrect opinion. Over all the trials the average conformity rate was 33%. Intrigued as to why participants had gone along with the majority, Asch interviewed them after the experiment. Their answers are probably very familiar to all of us: All felt anxious, feared disapproval from others and became self-conscious.

Most explained they saw the lines differently to the group but then felt the group was correct. Some said they went along with the group to avoid standing out, although they knew the group was wrong. A small number of people actually said they saw the lines in the same way as the group. The findings of this study were so startling they **13) (inspire)** many psychologists to investigate further. Here **14) (be)** a few of their findings:

Asch himself found that if the participant only had to write down their answer (while others called theirs out) conformity **15) (reduce)** to 12.5%. Deutsch and Gerard (1955) still found conformity rates of 23% even in conditions of high anonymity and high certainty about the answer.

Those who are "conformers" typically **16) (have)** high levels of anxiety, low status, high need for approval and often authoritarian personalities. Cultural differences

are important in conformity. People from cultures which view conformity more favourably – typically Eastern societies – are more likely to conform.

The variations on the original theme go on and on, examining many possible experimental permutations, but the basic finding still remains solid. While there's no surprise that we **17) (copy)** each other, it's amazing that some people will conform despite the evidence from their own eyes. Imagine how much easier it is to encourage conformity when ambiguity levels are much higher, as they often are in everyday life. Conformity itself is something of a mixed blessing. In many situations we **18) (need)** conformity. In fact, many aspects of our social lives would be much harder if we didn't conform to a certain extent – whether it's to legal rules or just to queuing in the post office.

The dangers of conformity are well-known; just take a look at the implications of Milgram's obedience experiments for a glimpse at what humans will do in the name of conformity. Sometimes it really is better if we **19) (think)** for ourselves rather than relying on what others say and do.

Think critically

- How can you assess the importance of the Asch's experiment?
- Recollect the examples of conformity from history. What impact did they have on the course of history?

Discuss in groups.

Speaking

7. Try to remember the situation when you conformed to others. Tell the group about this experience. The group members should comment on the stories.

Key vocabulary of the lesson

ambiguity; anonymity; assumption; bargain; bias; bystander apathy; cognitive dissonance; conformity; deny; disapproval; emergence; go along; halo effect; implications; inhibition; obedience; permutations; prejudice

Lesson 7
Industrial and Organizational Psychology

Lead-in

Work in groups. Share what the basic concepts of I-O psychology are.

Reading

1. Read the first part of the text. Check if your ideas were right. Don't pay attention to the numbered gaps at this stage.

PART 1

The specialty of industrial-organizational psychology (also called I/O psychology) is characterized by the scientific study of human behaviour in organizations and the

work place. The specialty focuses on deriving principles of individual, group and organizational behaviour and applying this knowledge to the solution of problems at work.

Specialized knowledge and training in the science of behaviour in the workplace requires **1)……** knowledge of organizational development, attitudes, career development, human performance, consumer behaviour, job and task analysis and individual assessment. Industrial Organizational Psychology addresses issues of recruitment, selection and placement, training and development, performance measurement, workplace motivation and reward systems, quality of work life, structure of work and human factors, organizational development and consumer behaviour.

I/O psychologists:

- Identify training and development needs;
- Design and optimize job and quality of work life;
- Formulate and implement training programs and evaluate their effectiveness;
- Coach employees;
- Develop criteria to evaluate performance of individuals and organizations;
- Assess consumer preferences, customer satisfaction and market strategies.

The *industrial* side of I/O psychology generally focuses on the individuals and their relationship to the workplace. This might cover such things as job analysis, employee safety, employee training, job performance measurement, and employee hiring systems.

The *organizational* side of I/O psychology, on the other hand, focuses on the organization and workplace as a whole. Increasing productivity and maximizing the performance of the organization. For example, professionals concerned with this aspect of I/O psychology will often look at how an organization might affect a worker's individual behaviour. This might include studies on **2)…….** relationships in the workplace, as well as workplace environments and organizational policies.

2. Read the second part of the text. Open the brackets, using the Past Simple in the Passive Voice.

PART 2

Both sides of industrial and organizational psychology became prominent during two different points in history. Industrial psychology, for example, came about during the First World War. Theories and techniques of this type of psychology **a) (apply)** in order to assign soldiers to jobs and duty stations that suited them best. The foundations of organizational psychology **b) (largely influence)** by what **c) (know)** as the Hawthorne studies, which **d) (perform)** in a Western Electric plant in Hawthorne, Illinois, during the 1920's and 1930's. Western Electric officials

performed a number of experiments in which they raised and lowered the levels of light to see if the workers in the plant would become more or less productive. Researchers concluded that during the experiments, workers' productivity increased whether the light levels **e) (raise)** or lowered. After World War II, psychologist Harry Landsberger studied these findings and concluded that the levels of light had nothing to do with increased productivity. They became more productive because the presence of the researchers at the time of the experiments made the workers feel as though someone was interested in their work.

3. Read the first and the third parts of the text. Complete the numbered gaps, using the adjectives from the list below.

unhappy; original; white; independent; blue; interpersonal; in-depth

PART 3

Some of the main responsibilities of an industrial and organizational psychologist are to study the results of existing research or conduct **3)……..** research. In order to conduct original research, an I/O psychologist might use a number of different methods. He might observe employees in action or conduct surveys, for instance. An I/O psychologist might also study workplace policies and other similar documents. By looking closely at the results of research done on workplaces and organizations, an industrial and organizational psychologist might be able to solve any number of problems. For instance, he might be able to:

- increase productivity in the workplace;
- increase the quality of a workplace;
- counsel **4)…….** employees on personal and work related matters;
- help rewrite company policies so that they benefit everyone involved.

While working, industrial and organizational psychologists will typically work closely with a number of different people. This might include business owners, CEOs, supervisors, and employees.

An industrial and organizational psychologist might work in several different areas and all different types of organizations. They might work in **5)……** collar organizations, like factories, plants, and construction sites. They might also work in **6)…….** collar organizations, such as office buildings. Many industrial and organizational psychologists work directly for companies in human resources departments. Others, however, might work as **7)……..** consultants, coming onto the scene only when they are needed.

4. Comprehension check. Answer the questions.

a) What are I/O psychologists' responsibilities?

b) What do *industrial* and *organizational* sides of I/O psychology focus on?
c) Which historical events led to the development of I/O psychology?

5. Vocabulary

Make collocations, matching the verbs from column A to the nouns from B.

A	**B**
Counsel	knowledge
Conduct	needs
Apply	training programs
Implement	customer satisfaction
Identify	research
Assess	employees

Compare with the text.

Make at least three sentences with verb+noun collocations from Ex.5.

6. Watch the video: Organisational Psychology.
https://www.youtube.com/watch?v=DJx1By-a7-4

While-watching take notes on the following points:

- **what the work typically involves;**
- **what psychologists enjoy about their work;**
- **what they find the most challenging.**

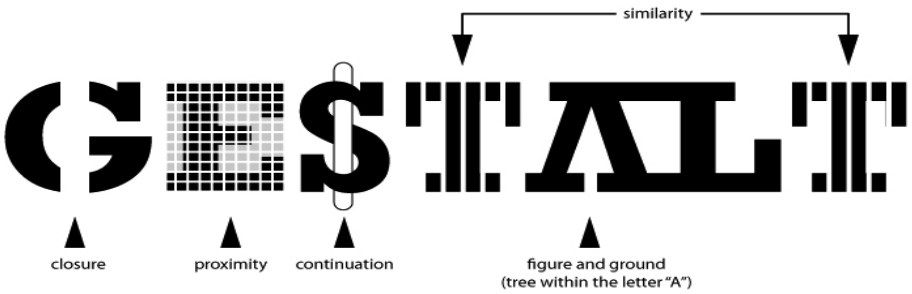
Speaking

7. Work in groups. Comment on your notes from the video. Discuss which qualities you possess can help you in the work of I/O psychologist. Use the phrases for giving opinion, agreeing/disagreeing (see Lesson 1).

Key vocabulary of the lesson

coach; company policies; construction sites; consumer behaviour; counsel; customer satisfaction; hiring systems; human performance; organizational behaviour; performance measurement; productivity; recruitment; responsibilities

Lesson 8
Principles of Gestalt psychology



Lead-in

Work in groups. Look at the pictures below. Discuss what you see.

1. Watch the video: Gestalt psychology.
https://www.youtube.com/watch?v=FpIbM8NdRvQ&t=15s

Complete the sentences:

Gestalt psychology is the belief that…….

"The whole is greater than…….".

Fill in the columns in the table below with key points:

Names	Dates	Principles
Wolfgang Köhler		Pragnanz

Compare in groups.

Reading

2. Read the text. Fill in the gaps with the words below.

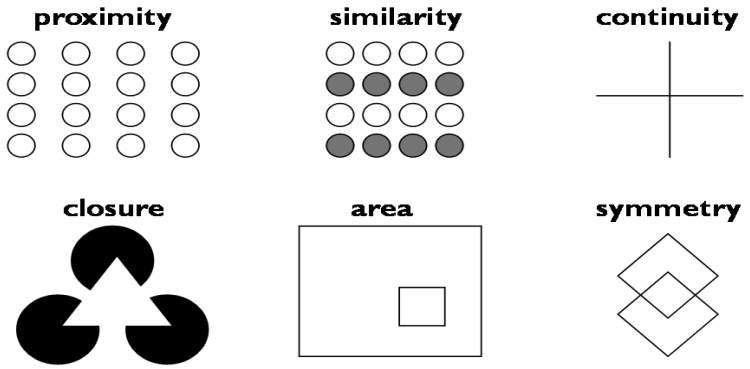
construct; elements; environment; formulated; major aspect; perceived; perception(2); principle; theorists; theory

The fundamental 1) _____ of gestalt 2) _____ is the law of pragnanz, which says that we tend to order our experience in a manner that is regular, orderly, symmetrical, and simple. A 3) _____ _____ of Gestalt psychology is that it implies that the mind understands external stimuli as whole rather than the sum of their parts. The original famous phrase of Gestalt psychologist Kurt Koffka, «The whole is other than the sum of the parts» is often incorrectly translated as «The whole is greater than the sum of its parts», and thus used when explaining gestalt 4) _____. Early 20th century 5) _____, such as Kurt Koffka, Max Wertheimer, and Wolfgang Köhler saw objects as 6) _____ within an 7) _____ according to all of their 8) _____ taken together as a global 9) _____. Through the 1930s and '40s Wertheimer, Kohler and Koffka 10) _____ many of the laws of grouping through the study of visual 11) _____.

3. Look at the pictures and read the explanation of the Gestalt principles. Use the synonyms in the box below the text to replace the underlined words.

The Gestalt Principles of Grouping

- Gestalt principles explain how eye creates a whole (*gestalt*) from parts



Law of Proximity. The law of proximity states that when an individual perceives *a variety* of objects they perceive objects that are close to each other as forming a group.

Law of Similarity. The law of similarity states that elements within an assortment of objects are perceptually grouped together if they are similar to each other. This similarity can occur in the form of shape, colour, shading or other *features*.

Law of Closure. The law of closure states that individuals perceive objects such as shapes, letters, pictures, etc., as being whole when they are not complete. Specifically, when parts of a whole picture are missing, our perception fills in the visual *blank*.

Law of Symmetry. The law of symmetry states that the mind perceives objects as being symmetrical and forming around a center point. It is perceptually pleasing to divide objects into an even number of symmetrical parts. Therefore, when two symmetrical *details* are unconnected the mind perceptually connects them to form a coherent shape.

Law of Common Fate. The law of common fate states that objects are perceived as lines that move along the smoothest path. We perceive elements of objects to have trends of *mobility*, which indicate the path that the object is on. The law of continuity implies the grouping together of objects that have the same trend of motion and are therefore on the same path.

Law of Continuity. The law of continuity states that elements of objects tend to be grouped together, and therefore integrated into perceptual wholes if they are aligned within an object. In cases where there is *a junction* between objects, individuals tend to perceive the two objects as two single uninterrupted entities.

Law of Good Gestalt. The law of good gestalt explains that elements of objects tend to be perceptually grouped together if they form a *design* that is regular, simple, and orderly. This law implies that as individuals perceive the world, they eliminate complexity and unfamiliarity so they can observe a reality in its most simplistic form.

Figure-ground organization is a type of perceptual grouping which is a vital necessity for recognizing objects through vision. In Gestalt psychology it is known as identifying a figure from the background. For example, you see words on a printed paper as the "figure" and the white sheet as the "background". The most famous example of figure-ground perception is the faces-vase drawing that Danish psychologist Edgar Rubin described.

pattern; motion; an intersection; qualities; an assortment; gap; elements

Reading

4. Read the text. Open the brackets, using the correct form of words.

The **a) (found)** of Gestalt therapy, Fritz and Laura Perls, had worked with Kurt Goldstein, a **b) (neurology)** who had applied principles of Gestalt psychology to the functioning of the organism. Laura Perls had been a Gestalt psychologist before she became a **c) (psychoanalysis)** and before she began developing Gestalt therapy together with Fritz Perls. The extent to which Gestalt psychology influenced Gestalt therapy is disputed, however. In any case it is not **d) (identity)** with Gestalt psychology. On the one hand, Laura Perls preferred not to use the term "Gestalt" to name the emerging new therapy, because she thought that the gestalt psychologists would object to it; on the other hand Fritz and Laura Perls clearly adopted some of Goldstein's work. Thus, though recognizing the **e) (history) f) (connect)** and the influence, most gestalt psychologists emphasize that gestalt therapy is not a form of Gestalt psychology.

5. Task. Prepare PowerPoint presentation for one of the following topics:

1) History and principles of Gestalt therapy.

2) The phenomenon of Zeigarnik effect.

Task performing

Present your findings, using the model below.

Good morning / afternoon. My name's …
Today I'm going to tell you about/ present….
Firstly I'd like to talk about …
Then I'll move on to outline the …
Finally I want to outline the ...
To conclude I'll …

Main body

So, first of all…
Let me say a few words about…
Moving on to my next point let's look at...
I'd just like to draw your attention to (these statistics) ...
The key thing to note here is that ...
As I mentioned a few minutes ago, …
Finally let's turn to the important question of ...

Summary

So, to summarise the main points again briefly…
To sum up ...

Conclusion

In conclusion, …
Thank you for your attention and if you have any questions please feel free to ask.

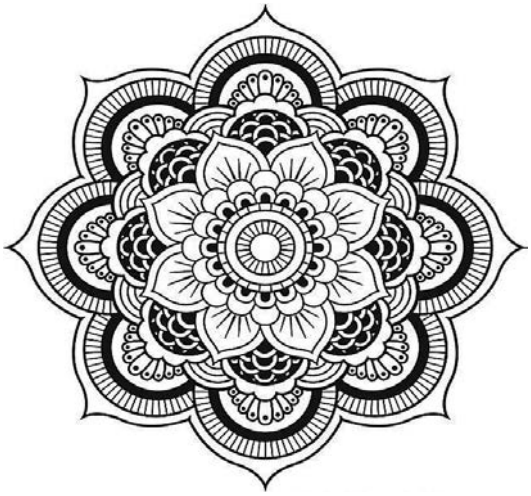
Answering questions

That's a good point. I think that ...
Well, as I mentioned earlier, ...
I'm afraid I don't have the information with me, but if you could give me your email address, I'll look into that and get back to you.
Can I get back to you on that?
That's an interesting point. Do you have a view on that?
I see, so what you are asking is ...
OK, if there are no more questions, perhaps we could finish.
Thank you very much.

Key vocabulary of the lesson

assortment; closure; common fate; continuity; figure-ground perception; Gestalt psychology; intersection; motion; pattern; proximity; similarity; symmetry; Zeigarnik effect

Lesson 9
Art therapy



Lead-in

Work individually. Write at least 5 questions which you'd like to ask a specialist about art therapy. Work in groups, compare your questions. Make a common list of the most interesting questions.

1. Watch the video: Art Therapy.
https://www.youtube.com/watch?v=Rb5XeBVzvg4

Tick your questions if they are mentioned in the video. Make notes, giving the answers for your questions. Report to the whole group.

Reading

2. Read the text. Answer the questions that follow the text.

What is Art Therapy?

According to a dictionary definition Art therapy is "a type of psychotherapy that encourages the expression of emotions through artistic activities such as painting, drawing, or sculpture; psychotherapy based on the belief that the creative process involved in the making of art is healing and life-enhancing".

Art therapy uses the creative process of art making to improve the physical, mental and emotional well-being of individuals of all ages. It is based on the belief that the creative process involved in artistic self-expression helps people to resolve conflicts and problems, develop interpersonal skills, manage behaviour, reduce stress, increase self-esteem and self-awareness and achieve insight.

Art therapy is used with children, adolescents, adults, older adults, groups, and families to assess and treat the following: anxiety, depression, and other mental and emotional problems and disorders; mental illness; addictions; family and relationship issues; abuse and domestic violence; social and emotional difficulties related to disability and illness; trauma and loss; physical, cognitive, and neurological problems; and psychosocial difficulties related to medical illness. Art therapists are master's level professionals who hold a degree in art therapy or a related field. They work in a wide variety of settings including the following: hospitals and clinics, both medical and psychiatric; schools, colleges, and universities; art studios; private practice etc.

An art therapist may work as part of a team that includes physicians, psychologists, nurses, mental health counselors, marriage and family therapists, rehabilitation counselors, social workers, and teachers. Together, they determine and implement a client's therapeutic goals and objectives. Other art therapists work independently and maintain private practices with children, adolescents, adults, groups, and/or families.

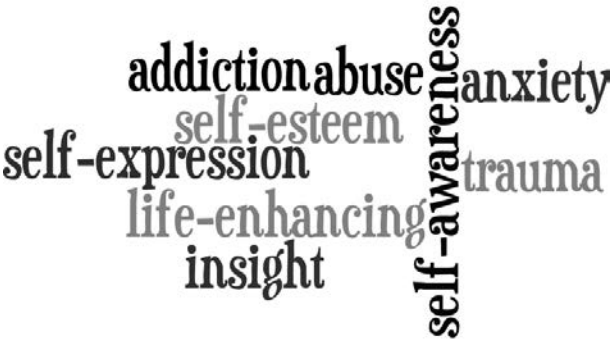
Comprehension check.

a) Which physical and mental problems does art therapy help with?

b) Who can be the clients of an art therapist?

c) In your opinion what kind of art can heal a person best? Why?

3. Vocabulary. Look at the word cloud, containing the words from the text. Match the words to their definitions below.



a) having a positive effect on one's life; makes you feel happier and more content;
b) the expression of one's own personality, feelings, etc. in painting, poetry, or other creative activity;
c) respect for or a favourable opinion of oneself;
d) the quality of being conscious of one's own feelings, character, etc.;
e) the immediate understanding of the significance of an event or action;
f) a state of uneasiness or tension;
g) the condition of being abnormally dependent on something;
h) cruel and violent treatment to smb.;
i) any bodily injury or wound; a powerful shock that may have long-lasting effects.

4. Watch the video: The great things about art therapy
https://www.youtube.com/watch?v=89MF1_Y8qr8

While-watching: fill in the columns in the table.

Forms of therapy	Notes
Theatre	
Dance	
Music	
Visual art	

Which form of art therapy do you find the most appealing to you? Why?

Reading

5. Pre-reading

Look at the headings. Discuss in pairs what these techniques mean.

1. Photo Collage 2. Visual Journaling 3. Mandala Drawing 4. Active Imagination
5. Creating Together 6. Mask Making 7. Family Sculpture
8. Metaphor

While-reading

Read only the first sentence of the paragraphs. Match the headings to the paragraphs.

Eight Art therapy techniques

A.

The appearance of Carl Gustav Jung's invention of "active imagination" in the early 20th century opened the door to the emergence of art therapy as a psychotherapeutic approach. With Sigmund Freud's concept of free association and his work on the importance of images in dreams, it set a path for the use of art in psychotherapy into the 21st century. Jung's own visualizations, dreams, artworks, and fantasies brought him crucial insight into his psyche. He discovered that as long as he could translate his emotions into symbolic images through visualization, art or imagination, he felt more at peace. Depending on the therapeutic framework a practitioner uses, it might be free association with the artwork contents, spontaneous journaling about an artwork, witnessing one's drawing or painting. It can also involve using another art form such as movement or music to explore an image. For example, instead of asking an individual to talk about a painting, the therapist might invite the person to respond with a physical movement, use a drum or other instruments to develop a musical piece, or engage in a dramatic enactment that communicates the feeling.

B.

The use of metaphor in psychiatry and psychology has a long tradition going back to psychoanalytic theory. Freud frequently used metaphor to formulate and explain his ideas; historically, the field of art therapy adopted the psychoanalytic framework as its way of approaching visual metaphors in client-created art expressions. The ultimate goal of most insight-oriented art therapy is to help the individual develop

a visual language for the purpose of communicating personal metaphor through drawing, painting, sculpture, collage, photography, or other art media. Visual metaphors are really symbols (images that represent something else by association, resemblance, or convention). In art therapy, symbolic meanings found in self-created artwork can be important; over the years clients who have experienced trauma often include and repeat symbols pertaining to abuse, crisis, and recovery in their art expressions.

C.

Visual journals are "art diaries". They often contain both images (usually drawings) and words. Their contents may be rough drafts that may later become finished artworks. Like an actual diary, they are meant to document day-to-day experiences, activities, and emotions and are often autobiographical in nature. Although they are defined as an art form, visual journals have been used for centuries as records of ideas and imagination. Da Vinci's drawing journals of flying machines and physicist Stephen Hawking's diagrams of the space-time continuum are just a couple of well-known examples. The regular practice of creating via an art journal can reduce your heart rate, increase serotonin flow and immune cells, and decrease stress responses. These findings complement previous well-known studies by James Pennebaker on the benefits of writing about distressful experiences and the physiological changes that journaling can bring. "Altered books" are visual journals that involve taking actual books and changing them in a variety of ways. You can draw, paint, collage or even destroy pages as a form of artistic self-expression. So rather than working with a sketchbook or journal with blank white pages, the nature of the book itself provides a stimulus for creative journaling.

D.

Circular forms in art are often referred to as *mandalas*, the Sanskrit word for "sacred circle." For thousands of years the creation of circular, often geometric designs has been part of spiritual practices around the world. Eastern cultures have used specific mandalas for visual meditation for many centuries. Carl Gustav Jung is credited with introducing the Eastern concept of the mandala to Western thought. Jung noted that when a mandala image suddenly turned up in dreams or art, it was usually an indication of movement toward a new self-knowledge. He observed that his patients often spontaneously created circle drawings. Because mandala drawing can be a very relaxing and meditative experience, you might want to play some soft instrumental music to set the mood. If you commit to making mandala drawings over a period of weeks or months, you'll also find that the content and style will change along with your personality, emotions, and experiences. (*You can find more information about this technique in **Additional reading** for this unit*).

E.

Masks are worn for performance, entertainment, disguise, concealment, or protection. They have been around since ancient times and have been used in ceremony, storytelling, and dramatic enactment. Making a mask invites you to explore the persona you reveal or conceal from the world. In art and drama, they are used for their expressive potential in enactment and ritual. Masks are a universal art form that generally evokes power, magic, and mystery for both those who wear them and their audience. In art and drama, they are used for their expressive potential in enactment and ritual. Mask making is a popular art therapy intervention because it touches on many of Jung's concepts, including persona and shadow. Masks can bring to consciousness how we both see ourselves or what we fantasize we would like to be. Because a mask has an outside and an inside, clients are asked to consider portraying "how others see you" on the outside of the mask and "how you really feel inside" on the reverse side of the mask. For individuals with addictions or history of physical or sexual abuse, working with a therapist to explore persona and shadow in this way is a profound, revealing, and often personally liberating experience.

F.

«Creating together" is the therapeutic use of art making within group formats. There is a distinctive kind of creative energy generated when people work together to create art – synergy or collective flow. Group art therapy is one form of "creating together." It generally focuses on the dynamics between participants, transference reactions among group members, and the developmental stages of group formation. It is sometimes called "group interactive art therapy" and is based on social psychiatry. Individuals come together to create art individually or collectively; participants may pursue their own art making or may work toward a common goal through a group painting, mural, or other creative endeavor. When individuals share life's challenges of loss, disability, illness, or trauma through art with each other, it's a deceptively simple, yet profoundly powerful intervention. Creating together in this way allows us to see that we are more similar than different, to be witnessed and valued by others and transcend ourselves by becoming part of a greater whole.

G.

Magazine photo collage is widely used by art therapists largely because it's a forgiving medium, especially for individuals who are intimidated by pencils, paint, or clay. In making a collage, you don't have to go through drawing something realistic and don't feel embarrassed that your pictures look like a ten-year-old drew them. Magazines are the most popular material used, although books, junk mail, and photographs are sources for collage, too. There are millions of digital images available today on a Google images search. Therapists often use magazine photo

images as a projective technique; get an individual to tell a story in response to visual stimuli. In the 21st century, working with photo images also means inviting clients to find images on the Internet and introducing them to software or websites that provide ways to modify photos or found images and create compositions of pictures. Digital art therapy is the contemporary descendent of magazine photo collage, offering another way to "cut, move, and paste". It has made available a virtually limitless gallery of images that can be used to create that "picture that's worth a thousand words" in therapy.

H.

When psychologists or marriage and family therapists hear the term "family sculpture," an expressive technique invented by experiential family therapists David Kantor, Fred Duhl, and Bunny Duhl often comes to mind. They think of a nonverbal method where a family member is asked to physically place other family members in positions in relation to one another, a three dimensional arrangement of actual people. A client makes a clay representation of each family member: mother, father, siblings, and any other close or influential family members. The goal is not to make a realistic image of each family member, but rather an abstraction that reflects that individual's personality and role in the family. When all the sculptures are complete, the client arranges them in relation to each other, reflecting relationships and interactions. Family sculpture is an expedient way to symbolically bring a client's family into the session without the family actually being there. The figures become the mouthpiece for family messages and provide client and therapist with a visible set of relationships.

(adapted from https://www.psychologytoday.com/blog/arts-and-health/201002/the-ten-coolest-arttherapy-interventions)

6. Work in groups of 4 (or 8). Share the parts of the text among your members. Read different paragraphs. Present the information from your part(s) to the rest of the group.

Post-reading

Vocabulary

7. Find the English translation in the text above for the words and collocations in the box.

образа/жорстоке поводження; згубна звичка/схильність; приховування; сучасний нащадок; вирішальне розуміння; маскування; творчі зусилля; фреска; психіка; схожість; чорновий проект; священне коло; кінцева мета

Speaking

8. Discuss in pairs if your predictions as for the techniques were correct. Which technique is the most interesting for you? Justify your answers.

Pronunciation

9. Find the word in each line with a different sound.

a) [ju:] ab**u**se, cr**u**cial, purs**u**e, gratit**u**de
b) [ʌ] m**u**ral, **u**ltimate, dr**u**m, r**ou**gh
c) [ɪ] s**y**nergy, ps**y**che, d**i**sguise, s**i**blings
d) [a:] dr**a**fts, **a**rt, dr**a**ma, r**ou**gh

10. Study the examples from the text.

Make a collage, make mandala drawings

Make is used for **producing, constructing, creating or building** something new. Read about the difference of using verbs **make** and **do** in Grammar reference. Then study the table below.

Do	**Make**
business	an offer
a job	money
an exercise	a complaint
the accounts	a decision
an experiment	a forecast
damage	progress
harm	a profit/loss
homework	a mistake
research	a phone call
someone a favour	an attempt
your duty	an improvement
something for a living	a business trip

Use 2 collocations with *do* and 2 with *make* to write your own sentences. Read them to the whole class.

Key vocabulary of the lesson

abuse; addiction; concealment; contemporary descendent; crucial insight; disguise; drum; enactment; endeavor; life-enhancing; mandala drawing; mural; psyche; resemblance; rough drafts; sacred circle; self-awareness; self-esteem; self-expression; sketchbook; synergy; ultimate goal

Lesson 10
Positive psychology

Lead-in

Work in pairs. Share your ideas as for the notion and the task of Positive psychology.

Writing

1. Work in small groups. Brainstorm and write a list of your associations with Positive psychology. Report to the whole class.

Reading

2. While-reading the text, underline the ideas which are similar to yours, expressed in previous activities.

What Is Positive Psychology?

Positive psychology is the study of happiness. Psychology has traditionally focused on **dysfunction** and how to treat it. Positive psychology, in contrast, is a field that examines how ordinary people can become happier and more fulfilled. Positive psychology studies what makes life most worth living.

Positive Psychology is a **subset** within the broader field called the Science of Happiness, which extends to the natural as well as social sciences. For example, Positive Psychology is largely focused on the study of positive emotions and "signature strengths," yet the Science of Happiness extends, for example, to such areas as exercise and psychological well-being as well as the **impact** of social media on happiness in human relationships. Positive psychology is the scientific study of what makes life most worth living. It is a call for psychological science and practice to be as concerned with strength as with weakness; as interested in building the best things in life as in repairing the worst; and as concerned with making the lives of normal people fulfilling as with healing pathology.

Nowhere does this definition say or imply that psychology should ignore or **dismiss** the very real problems that people experience. Nowhere does it say or imply that the rest of psychology needs to be discarded or replaced. The value of positive psychology is to complement and extend the problem-focused psychology that has been dominant for many decades.

Positive psychology is science and science requires checking theories. Accordingly, positive psychology is not to be confused with untested self-help and footless **affirmation**. Consider what has been learned in recent years about the psychological good life, none of which was mentioned in any of the psychology courses a few decades ago:

• Most people are happy.

• Happiness is a cause of good things in life.

• People who are satisfied with life eventually have more reason to be satisfied, because happiness leads to desirable **outcomes** at school and work, to fulfilling social relationships, and even to good health and long life.

• The good life can be taught.

This latter point is especially important because it means that happiness is not simply the result of a fortunate spin of the genetic roulette wheel. There are things that people can do to lead better lives.

(adapted from https://www.psychologytoday.com/blog/the-good-life/200805/what-is-positive-psychology-and-what-is-it-not)

Vocabulary

3. Look at the words in bold in the text above. Choose the correct meaning: a) or b).

- dysfunction

a) unhealthy interaction; b) abnormal functioning;

- subset

a) division; b) portion;

- impact

a) pressing together; b) direct effect;

- dismiss

a) to reject; b) to permit to leave;

- affirmation

a) emotional support or encouragement; b) pronouncement;

- outcome

a) result; b) walking out.

4. Watch the video: What makes life worth living? (Part 1)
https://www.youtube.com/watch?v=DRiIAqGXLKA

What are the essentials of a happy, satisfying life? What choices can help you build a life with meaning? University of Michigan psychology professor Christopher Peterson has some deceptively simple answers.

While-watching

Complete the sentences below:

In addition to happiness positive psychologist are interested in ……, ……, in our ……, what we are really interested in, what gets us out of bed in the morning.

Positive psychologist are also interested in ……. that enable the good life: ……., ……., good ……., …….. …… .

I think happiness is often an …… that you're living well, but it's not a …… …… .

Happiness is a product of our …….. .
People are always looking for the …….. People are always looking for the seven easy ……, the ……. ……. ……, the magic …….. .
What is your opinion of the ideas in the video?

Home assignment
Watch a video "The new era of positive psychology" with Martin Seligman (commonly known as the founder of Positive Psychology, the director of the positive psychology center at the University of Pennsylvania) at TED talks: **https://www.ted.com/talks/martin_seligman_on_the_state_of_psychology/transcript#t-671064**
Take notes on how to make life happy.

Reading

5. Read about the seven habits of happy people. Put them in the order of importance personally for you (where 1 – is the most important, 7 – the least important).

The 7 Habits of Happy People

1. Relationships
Express your heart. People who have one or more close friends are happier. It doesn't seem to matter if we have a large network of close relationships or not. What seems to make a difference is if and how often we cooperate in activities and share our personal feelings with a friend or relative. "Active-constructive responding," which is the ability to express genuine interest in what people say, and respond in encouraging ways, is a powerful way to enrich relationships and cultivate positive emotions.

2. Acts of Kindness
Cultivate kindness. People who volunteer or simply care for others on a consistent basis seem to be happier and less depressed. Although "caring" can involve volunteering as part of an organized group or club, it can be as simple as reaching out to a colleague or classmate who looks lonely or is struggling with an issue.

3. Exercise and Physical Wellbeing
Keep moving and eat well. Regular exercise has been associated with improved mental well-being and a lower incidence of depression. The Cochrane Review (the

most influential medical review of its kind in the world) has produced a landmark analysis of 23 studies on exercise and depression. One of the major conclusions was that exercise had a "large clinical impact" on depression. Many studies are proving the ancient adage, "sound body, sound mind," including the recent discovery of a "gut-brain axis," and a possible link between excessive sugar consumption and depression.

4. Flow

Find your flow. If we are deeply involved in trying to reach a goal, or an activity that is challenging but well suited to our skills, we experience a joyful state called "flow." Many kinds of activities, such as sports, playing an instrument, or teaching, can produce the experience of flow. According to Mihaly Csikszentmihalyi, a pioneer of the scientific study of happiness, flow is a type of intrinsic motivation. In his words, "you do what you're doing primarily because you like what you're doing. If you learn only for external, extrinsic reasons, you will probably forget it as soon as you are no longer forced to remember what you want to do."

5. Spiritual Engagement and Meaning

Studies demonstrate a close link between spiritual and religious practice and happiness. Spirituality is closely related to the discovery of greater meaning in our lives. As the psychologist Martin Seligman emphasizes, through the meaningful life we discover a deeper kind of happiness.

6. Strengths and Virtues

Discover and use your strengths. Studies by experts such as Martin Seligman in the new field of Positive Psychology show that the happiest people are those that have discovered their unique strengths (such as persistence and critical thinking) and virtues (such as humanity) and use those strengths and virtues for a purpose that is greater than their own personal goals.

7. Positive mindset: optimism, mindfulness and gratitude

Treasure gratitude, mindfulness, and hope. Of all the areas studied in the relatively young field of positive psychology, gratitude has perhaps received the most attention. Grateful people have been shown to have greater positive emotion, a greater sense of belonging, and lower incidence of depression and stress.

(adapted from http://www.pursuit-of-happiness.org/science-of-happiness**)**

Compare your results in groups. Justify your answers.

6. Phrasal verbs. Read the definition and look through the examples below.

A phrasal verb is a verb that is made up of a main verb together with an adverb or a preposition, or both. Typically, their meaning is not obvious from the meanings of the individual words themselves (https://en.oxforddictionaries.com/grammar/phrasal-verbs).

Up and ***down*** phrasal verbs connected with feelings often refer to positive (up) and negative (down) emotions and events.

UP		**DOWN**	
example	**meaning**	**example**	**meaning**
Brighten up. You're depressing everyone!	suddenly feel or look happier	She **broke down** when she was told the bad news.	was unable to control her feelings and started to cry
The film **cheared** us **up** considerably.	made us feel happier	**Calm down**! Losing your temper won't solve the problem.	stop feeling angry, upset or excited
There's no point in **being hung up** about it; there's nothing we can do.	becoming very worried about smth. and spend a lot of time thinking about it	I need some time to **cool down** before I meet him.	become calmer

Writing

Write at least 4 examples of your own, using the phrasal verbs from the box.

Role play

7. Work in pairs. Choose your roles. Make a conversation.

Student A

You are a positive psychologist. You have done a lot of research. A patient comes to you with his/her problem. Listen to the complaints and give advice.

Student B

You have recently started feeling depressed. You don't see the sense of your life. You go to a specialist to get consultation. Invent all necessary details.

Use the following structures to give advice:

I think you should/shouldn't…
You'd better….
If I were you, I'd…

Key vocabulary of the lesson

affirmation; consumption; dismiss; dysfunction; extrinsic; gratitude; impact; intrinsic; mindfulness; outcome; positive mindset; sound mind; subset; treasure; virtues; volunteering

Article review

Find the following articles:

1) The New Science of Happiness by Claudia Wallis (Sunday, Jan. 09, 2005) at http://content.time.com/time/magazine/article/0,9171,1015832,00.html

2) Positive education: positive psychology and classroom interventions by Martin E. P. Seligman, Randal M. Ernst, Jane GillhamKaren Reivich and Mark Linkins at http://www.ugc.ac.in/mrp/paper/MRP-MAJOR-PSYC-2013-42525-PAPER.pdf

3) Positive Psychology: An Introduction by Martin E. P. Seligman at https://www.researchgate.net/publication/11946304_Positive_Psychology_An_Introduction

Look them through. Choose one for detailed reading.
Study 2 forms for writing an article review on the following pages.

Writing

Write the article review.

Article Summary Worksheet

Directions: Complete one Article Summary Worksheet for each article read. Remember to staple a copy of the article to the back of the worksheet. Use the copy to highlight, underline, and make notes as you read.

❖ **Bibliographic Information**

- Author(s) of article: _____
- Title of article: _____
- Name of magazine, newspaper, website, etc. containing the article:

  _____
- Date article was published and page number: _____

❖ **Summary Information**

- Briefly state the main idea or thesis presented in this article:

  _____

  _____

  _____
- Summarize the most important information, ideas, facts, etc. presented in this article:

  _____

  _____

  _____

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  _____

Journal Article Review Assignment

The Journal Article Reviews for this class are to follow the five paragraph APA format as follows:

1. Purpose of the study/article.
2. Method/procedures used.
3. Outcome/summary of major points covered.
4. Counseling applications of study/article *and* your reactions to the article.

One to two pages total. **Please double space your assignment.**

Sample

Your name
Date

Citronella, C. (2003). Hispanic employment and the Holland typology of work. *Career Development Quarterly, 37*(3), 257-268.

1. The **purpose** of this article is to extend the earlier work of Gottfredson, Holland, and Gottfredson (1975) by examining the representation of Hispanics in Holland types across educational levels.

2. Arbona **analyzed data** obtained from tables of 1980 employment by sex and ethnic group published by the U.S. Bureau of the Census. Occupational titles were classified according to General Educational Level, using the General Educational Development Scale, and Holland type of work, using the Dictionary of Holland Occupational Codes.

3. Arbona **found** that both Black and Hispanic men are over-represented in "realistic" low-level jobs, and under-represented in all other types of work. Women, regardless of ethnic group, are over-represented in social and conventional work. Women of color, however, are also over-represented in low-level realistic jobs. Other within-ethnic group differences are noted.

4. This article underscores the **importance of counselors reaching out to students of color** to help them assess their potentialities, and to assist them to expand their knowledge of and exposure to career options. The **findings of the study suggest** that the interplay of specific school factors, such as "tracking", grade delay decisions, and role modeling, may result in decreased educational and occupational opportunities for people of color. The relationship between school/counseling factors and the occupational segregation of people of color needs to be examined further. Counselors may be able to help students of color by carefully examining how curriculum "tracking" and grade delay decisions are made. In counseling people of color

5. **I learned that** it is very important that counselors work as change agents, helping clients to identify external sources of problems and suggesting methods for dealing with them.

3/97 frm JAG

Check Yourself

1. Pronunciation

A. Find the word in each line with a different sound.

[θ] apa**th**y, empa**th**y, hypo**th**alamus, **th**erapist, brea**th**e;

[m] **m**nemonic, **m**ultitasking, per**m**anent, **m**emories, trau**m**atic;

[k] en**c**ompass, parapsy**ch**ology, emergen**c**e, **c**ognitive, sa**c**red;

[ɜ:] c**i**rcadian, v**i**rtues, c**i**rcle, v**e**rtebral, w**i**thdrawn;

[h] compre**h**end, **h**umanistic, r**h**ythm, **h**emispheres, **h**ostility.

B. Distribute the words from the list into six columns. Pay attention to number of syllables and stress.

anonymity, dysfunction, affirmation, volunteer, ambiguity, prejudiced, emergence, bystander, amygdala, forebrain, nightmare, mandala, mural, encompass, hypothalamus

oOo	Oo	Ooo	ooOoo	ooO	oOoo

2. Vocabulary

Check if you remember the translation of the words in the box.

включати, охоплювати; підхід; (практичне) застосування; запобігати, попереджати; сприяти, пропагувати; тривалість життя; втручання; взаємодія, взаємний вплив; одержувач (реципієнт); модель поведінки; галузь, розділ; розуміти; передбачення; ясновидіння; приховування; сучасний нащадок; вирішальне розуміння; маскування; творчі зусилля; психіка; схожість; чорновий проект; священне коло; кінцева мета; худорлявий; скорочуватися; зменшення; міркувати; наслідки; уразливий; оборотний; об’єм; нестача; здібність; мигдалина; мозочок; мозкова кора; головний мозок; черепні нерви; передній мозок; лобова доля; сіра речовина мозку; півкулі; гіпокамп; гіпоталамус; середній мозок; потилична доля; тім'яна доля; гіпофіз; скронева доля; таламус; шлуночки головного мозку

3. Find the odd word out in each line. Explain your logic.

a) Photo Collage, Mandala Drawing, Mask Making, Metaphor, Gestalt;

b) Halo Effect, Figure-ground organization, Law of closure, Law of proximity, Law of common fate;

c) Wundt, Nietzsche, Freud, Seligman, Jung;

d) encoding, storage, flashbulb memory, REM, retrieval;

e) anger, disgust, fear, happiness, contempt.

4. Answer the questions below.

a) Which topic of this book was the most interesting for you? Why?

b) Which field of psychology would you like to work in? Explain your choice.

c) Predict the future of psychology: which sub-fields will disappear, which ones will be developing fast.

Additional material

Lesson 2. Human brain

1. Read the text below and use the Indirect Speech to report Dr Lisa Ronan, Professor Paul Fletcher and Professor Sadaf Farooqi's statements.

The best way to keep your brain younger

The brain is particularly sensitive during the middle years. The brains of obese individuals are physiologically 10 years older than lean individuals, new research finds. Scientists looked at the brain's white matter. The white matter is the tissue that connects the areas and enables them to communicate with each other.

Dr Lisa Ronan, first author of this study, said: "As our brains age, they naturally shrink in size, but it isn't clear why people who are overweight have a greater reduction in the amount of white matter. We can only speculate on whether obesity might in some way cause these changes or whether obesity is a consequence of brain changes."

The study looked at the brains of 473 people aged between 20 and 87. Overweight individuals had significantly less white matter in their brains than lean individuals. The differences were only seen from middle-age onwards.

Professor Paul Fletcher, senior author of the study, added: "We're living in an ageing population, with increasing levels of obesity, so it's essential that we establish how these two factors might interact, since the consequences for health are potentially serious.

The fact that we only saw these differences from middle-age onwards raises the possibility that we may be particularly vulnerable at this age. It will also be important to find out whether these changes could be reversible with weight loss, which may well be the case."

Professor Sadaf Farooqi, co-author of the study, said: "We don't yet know the implications of these changes in brain structure. Clearly, this must be a starting point for us to explore in more depth the effects of weight, diet and exercise on the brain and memory."

Despite the differences in brain volume, there were no deficits in cognitive abilities in overweight or obese people.

The study was published in the journal Neurobiology of Aging (Ronan et al., 2016). (adapted from http://www.spring.org.uk/2016/08/youngerbrain.php?omhide=true&utm_source=PsyBlog&utm_campaign=3c6389ac98RSS_EMAIL_CAMPAIGN_MAILCHIMP&utm_medium=email&utm_term=0_10ef814328-3c6389ac98-214066021**)**

Vocabulary

1. Find English equivalents in the text for the following words:

Товстий/ожирілий; худорлявий; скорочуватися; зменшення; міркувати; наслідки; уразливий; оборотний; об'єм; нестача; здібність

2. Find the synonyms and antonyms in the box for the words from the list below. There are 3 extra words you don't need to use.

overweight; shrink; deficit; ability; vulnerable

expand, lack, fat, safe, consequence, slender, capacity, contract, incapability, surplus, unprotected, cognitive, reversible

Speaking

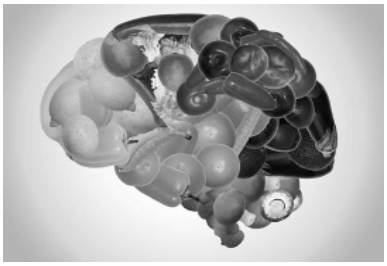
3. Work in groups of 3-4. Discuss if there is a direct dependence of cognitive abilities on the people's weight according to the article.
What is your opinion of the article? Comment on your answers.

Vocabulary

Amygdale мигдалина
brainstem стовбур мозку
cerebellum мозочок
cerebral cortex мозкова кора
cerebrum головний мозок; кінцевий, (великий мозок)
cranial nerves черепні нерви;
forebrain передній мозок
frontal lobe лобова доля
grey matter сіра речовина мозку;
hemispheres півкулі
hindbrain задній мозок
hippocampus гіпокамп
hypothalamus гіпоталамус
medulla oblongata довгастий мозок
midbrain середній мозок
occipital lobe потилична доля
parietal lobe тім'яна доля
pituitary gland гіпофіз
pons міст
temporal lobe скронева доля
thalamus таламус
ventricles шлуночки головного мозку

Lesson 3. Memory (Part I)

10 Foods That Improve Memory



*Vegetable brain image **from Shutterstock***

1. Read the text. Put the verbs in brackets in the correct tenses.

The Mediterranean diet can improve your memory no matter where you **1) (live)** or what your age, new research **2) (show).** A review of 18 separate studies carried out over 5 years **3) (find)** that memory was particularly positively affected by the Mediterranean diet.

People on the 'MedDiet' saw improvements in their working memory, long-term memory and visual memory, the researchers found. Positive effects **4) (also see)** for attention and language.

Here are ten typical ingredients of the MedDiet: Green leafy vegetables, other vegetables, nuts, berries, beans, whole grains, fish, poultry, olive oil and wine.

The MedDiet also has relatively little red meat, little dairy and uses olive oil as the largest source of fat. Mr Roy Hardman, the study's first author, said: "The most surprising result was that the positive effects **5) (find)** in countries around the whole world. So regardless of being located outside of what **6) (consider**) the Mediterranean region, the positive cognitive effects of a higher adherence to a MedDiet were similar in all evaluated papers". Mr Hardman went on: "Why is a higher adherence to the MedDiet related to slowing down the rate of cognitive decline? The MedDiet **7) (offer)** the opportunity to change some of the modifiable risk factors. These include reducing inflammatory responses, increasing micronutrients, improving vitamin and mineral imbalances, changing lipid profiles by **8) (use)** olive oils as the main source of dietary fats, maintaining weight and potentially reducing obesity, improving polyphenols in the blood, improving cellular energy metabolism and maybe changing the gut microbiota, although this **9) (not examine)** to a larger extent yet".

The benefits to memory extended to the young as well as the old, the researchers also found. Mr Hardman said: "I would therefore recommend people to try to adhere or switch to a MedDiet, even at an older age. I follow the diet patterns and do not eat any red meats, chicken or pork. I have fish two-three times per week and adhere to a Mediterranean style of **10) (eat)**".

The study was published in the journal Frontiers in Nutrition, (Hardman et al., 2016).

Vocabulary

2. Find the words in the text to complete the table below.

berries	vegetables	fruit	meat	other food

Add at least three words of your own to each column.

3. Match the words from the text with their meanings and translation.

1) adherence	capable of being changed	піддається зміні
2) modifiable	a localized protective reaction of tissue to irritation, injury, or infection, characterized by pain, redness, swelling, and sometimes loss of function.	дотримання, прихильність
3) inflammation	lack of proportion or relation between corresponding things	мікроелемент
4) micronutrient	a clinical chemistry assessment of the levels of fats in a patient's blood.	запалення
5) imbalance	a chemical element or substance required in trace amounts for the normal growth and development of living organisms	ліпідний профіль
6) lipid profile	relating to, derived from, or composed of cells	дисбаланс
7) cellular (energy)	a complex of microorganism species that live in the digestive tracts	мікрофлора кишківника
8) gut microbiota	faithful support for some cause	клітинна енергія

Speaking

4. What is your opinion of the article? How likely are you to adhere or switch to a MedDiet?

Lesson 3. Memory (Part II)

1. Read the first paragraph of the text and choose the best definition of cramming

a) practice of adding unauthorized charges to a customer’s phone bill;
b) forcing or squeezing smth. into an insufficient space;
c) studying hastily for an impending examination.

Read the rest of the text, find benefits and drawbacks of cramming.

To Cram or Not to Cram?

It’s a rare and lucky student who loves to study. Most students, although they may enjoy reading assigned material, find that they must make a concentrated effort

to recall it during a test. And, since studying can be a strenuous process, students commonly put it off until the last possible moment – and then find that they must learn a great deal of material in the few hours remaining before the examination. This concentrated learning is called massed practice, or cramming. Is cramming the best way to study?

Of course it isn't, you say. Everybody knows it's a stupid thing to do – a sign of procrastination and poor study habits. The good student will study material regularly as it is assigned. Conversely, a bad student will cram. Therefore, it must be better not to cram. Sounds logical, but is it true? The spacing effect has shown that information is recalled more accurately if it is learned more than once, especially if there is a large gap in time between the first and the second exposure to the material. The spacing effect, therefore, certainly argues against cramming. But why does the spacing effect work? It has been argued that, if there is a significant amount of time between the first and the second exposure to the same material, it's likely that the material will be learned in different contexts and moods.

Thus, the chances are better that the mood and physical surroundings at the time of the test will be similar to at least one of the study sessions. If you are in the same mood, feel about the same way, and have similar physical surroundings when you take your test as you did when you studied the material, you'll have more access to the memory networks containing the information.

For the same reasons, cramming can work well if you know exactly when you are due to take a particular test. If you cram within limits, so that you don't become excessively fatigued, there is a good chance that you will be in the same mood and mental set during studying and testing. If you study thoroughly for many hours before a test and then walk straight into the testing situation feeling much as you did while you studied, you're likely to do well (Glenberg, 1976; Anderson, 1980). If, however, you have to study long in advance of the test, you're likely to be in a different mood, physical condition, and setting when you finally take the test. In that case, spaced practice is best.

Cramming has both weaknesses and strengths. It is not an effective way to learn material permanently. It might get you through one test, but it's a poor way to study for long-term gain or for comprehensive examinations. For lasting comprehension, spaced practice in many different moods and contexts works better. Or, as memory researcher John Anderson has stated: "Although I hate to admit this, if one's purpose is to pass an exam, concentrating a lot of study the night before the exam should be advantageous; in other words, it's best to cram. Of course, cramming will lead to poor long-term retention, as frequently noted by students a year after a course. Studying throughout the term does have some benefit, though this method is just not as efficient as cramming. The strategy that will result in the best grade combines the

techniques of studying during the term and cramming the night before" (Anderson, 1980, pp. 216-217).

When massed and spaced practice are combined, people can remember a surprising amount of material, often for as long as 50 years, without the need of rehearsal. In one study, researchers found that students who 50 years ago had taken 3 years of Spanish and engaged in both massed and spaced practice retained about 72 percent of the Spanish vocabulary that they had originally learned (Bahrick, 1984). Amazingly, these students had not practiced their Spanish or used it since their last Spanish class. The 28 percent of Spanish vocabulary they had forgotten had been lost within 6 years of taking their last class. Following that, their long-term memory of Spanish vocabulary remained stable. A very different result usually is found among students who rely only on cramming at the last minute to pass their tests. Years later, such students typically retain less than 10 percent of what they originally learned. In a more recent study of language students, spaced practice was found to account for almost all long-term retention (Bahrick & Phelps, 1987). These results argue for widely spaced language sessions throughout one's education if long-term retention is desired. This is not the common practice in college language courses, which usually are offered within one specific period, such as a semester.

Vocabulary

2. Find the words in the text for the following definitions:

a) the action of delaying or postponing something;

b) a practice or trial performance of a play or other work for later public performance;

c) the fact of keeping something in one's memory.

3. Match the adjectives from the left column to the nouns from the right.

assigned	effect
concentrated	surroundings
strenuous	set
massed	material
stupid	examinations
poor	practice
spacing	effort
physical	process
mental	practice
comprehensive	thing
common	habits

Check in the text.

4. Choose at least five collocations from Exercise 3 to write your own sentences.

Speaking

5. What is your opinion of the text? Do you usually cram before exams or use spaced practice? Why?

Lesson 4. Emotions

Cut the cards. Give 1 emotion for every student. Ask them to show the emotion without naming it. The rest of the group should guess.

angry	annoyed	disgusted	bored
despaired	satisfied	disappointed	embarrassed
worried	shocked	surprised	guilty
happy	excited	frustrated	proud

Vocabulary wheel for describing emotions

Lesson 5. Sleep and dreams

1. Read the text. Work in pairs. Student A find underlined words in the dictionary, student B find the words in italics. Teach each other the new words.

This Sleep Pattern Leads To Faster Learning That Lasts Longer

50% improvement in learning from this sleep technique

Sleeping in between study sessions could be the key to better recall, new research finds. The technique aids recall up to six months later, psychologists have found.

Dr Stephanie Mazza, the study's first author, said: "Our results suggest that interleaving sleep between practice sessions leads to a **twofold** advantage, reducing

the time spent relearning and ensuring a much better long-term ***retention*** than practice alone. Previous research suggested that sleeping after learning is definitely a good strategy, but now we show that sleeping between two learning sessions greatly improves such a strategy." The study compared groups that were learning new words in Swahili. Half did two learning sessions on one day: in the morning and evening. The other half did the sessions either side of sleeping: evening and then the next morning. The results showed that sleeping in between learning sessions allowed people to learn the words quicker and with less effort.

Dr Mazza said: "Memories that were not **explicitly** accessible at the beginning of relearning appeared to have been transformed by sleep in some way. Such transformation allowed subjects to re-encode information faster and to save time during the relearning session." Sleeping in between learning had ***boosted*** memory by about 50%, when both groups were tested a week later. The effect was even still noticeable when participants were followed up after six months.

How does sleep **enhance** learning? Sleep after learning encourages brain cells to make connections with other brain cells, recent research has shown. The connections, called ***dendritic spines***, enable the flow of information across the **synapses**. The findings, published in the prestigious journal "Science", were the first to show physical changes in the ***motor cortex*** resulting from learning and sleep.

(The new study was published in the journal Psychological Science (Mazza et al., 2016).

2. Grammar. Reported speech.

Report Dr Mazza's words.

3. Speaking. Discuss what you think of the information in the article.

Lesson 6. Social Psychology Experiments

Social psychology experiments

The Halo Effect: When Your Own Mind is a Mystery

The 'halo effect' is a classic finding in social psychology. It is the idea that global evaluations about a person (e.g. she is likeable) bleed over into judgements about their specific traits (e.g. she is intelligent). Hollywood stars demonstrate the halo effect perfectly. Because they are often attractive and likeable we naturally assume they are also intelligent, friendly, display good judgement and so on. That is, until we come across (sometimes plentiful) evidence to the contrary.

In the same way politicians use the 'halo effect' to their advantage by trying to

appear warm and friendly, while saying little of any substance. People tend to believe their policies are good, because the person appears good.

In the 1970s, well-known social psychologist Richard Nisbett set out to demonstrate how little access we actually have to our thought processes in general and to the halo effect in particular.

Likeability of lecturers

Nisbett and Wilson wanted to examine the way student participants made judgements about a lecturer (Nisbett & Wilson, 1977). Students were told the research was investigating teacher evaluations. Specifically, they were told, the experimenters were interested in whether judgements varied depending on the amount of exposure students had to a particular lecturer. This was a total lie. In fact the students had been divided into two groups who were going to watch two different videos of the same lecturer, who happened to have a strong Belgian accent (this is relevant!). One group watched the lecturer answer a series of questions in an extremely warm and friendly manner. The second group saw exactly the same person answer exactly the questions in a cold and distant manner. Experimenters made sure it was obvious which of the lecturers' alter-egos was more likeable. In one he appeared to like teaching and students and in the other he came across as a much more authoritarian figure who didn't like teaching at all. After each group of students watched the videos they were asked to rate the lecturer on physical appearance, mannerisms and even his accent (mannerisms were kept the same across both videos). Consistent with the halo effect, students who saw the 'warm' incarnation of the lecturer rated him more attractive, his mannerisms more likeable and even is accent as more appealing. This was unsurprising as it backed up previous work on the halo effect.

Unconscious judgements

The surprise is that students had no clue whatsoever why they gave one lecturer higher ratings, even after they were given every chance. After the study it was suggested to them that how much they liked the lecturer might have affected their evaluations. Despite this, most said that how much they liked the lecturer from what he said had not affected their evaluation of his individual characteristics at all. For those who had seen the bad lecturer the results were even worse – students got it the wrong way around. Some thought their ratings of his individual characteristics had actually affected their global evaluation of his likeability. Even after this, the experimenters were not satisfied. They interviewed students again to ask them whether it was possible their global evaluation of the lecturer had affected their ratings of the lecturer's attributes. Still, the students told them it hadn't. They were convinced they had made their judgement about the lecturer's physical appearance, mannerisms and accent without considering how likeable he was.

Common uses of the halo effect

The halo effect in itself is fascinating and now well-known in the business world. According to "Reputation Marketing." by John Marconi, books that have 'Harvard Classics' written on the front can demand twice the price of the exact same book without the Harvard endorsement. The same is true in the fashion industry. The addition of a well-known fashion designer's name to a simple pair of jeans can inflate their price tremendously.

But what this experiment demonstrates is that although we can understand the halo effect intellectually, we often have no idea when it is actually happening. This is what makes it such a useful effect for marketers and politicians. We quite naturally make the kinds of adjustments demonstrated in this experiment without even realising it. And then, even when it's pointed out to us, we may well still deny it.

So, the next time you vote for a politician, consider buying a pair of designer jeans or decide whether you like someone, ask yourself whether the halo effect is operating. Are you really evaluating the traits of the person or product you thought you were? Alternatively is some global aspect bleeding over into your specific judgement? This simple check could save you voting for the wrong person, wasting your money or rejecting someone who would be a loyal friend.

How and Why We Lie to Ourselves: Cognitive Dissonance

Understanding this experiment sheds a brilliant light on the dark world of our inner motivations. The ground-breaking social psychological experiment of Festinger and Carlsmith (1959) provides a central insight into the stories we tell ourselves about why we think and behave the way we do. The experiment is filled with ingenious deception so the best way to understand it is to imagine you are taking part. So sit back, relax and travel back. The time is 1959 and you are an undergraduate student at Stanford University…

As part of your course you agree to take part in an experiment on 'measures of performance'. You are told the experiment will take two hours. As you are required to act as an experimental subject for a certain number of hours in a year – this will be two more of them out of the way.

The set-up

Once in the lab you are told the experiment is about how your expectations affect the actual experience of a task. So you settle down to the first task you are given, and quickly realise it is extremely boring. You are asked to move some spools around in a box for half an hour, then for the next half an hour you move pegs around a board. At the end of the tasks the experimenter thanks you for taking part, then tells you that many other people find the task pretty interesting. This is a little confusing – the task was very boring.

Experimental slip-up

Then the experimenter looks a little embarrassed and starts to explain haltingly that there's been a cock-up. He says they need your help. The participant coming in after you is in the other condition they mentioned before you did the task – the condition in which they have an expectation before carrying out the task. This expectation is that the task is actually really interesting. Unfortunately the person who usually sets up their expectation hasn't turned up.

So, they ask if you wouldn't mind doing it. Not only that but they offer to pay you $1. Because it's 1959 and you're a student this is not completely insignificant for only a few minutes work. And, they tell you that they can use you again in the future. It sounds like easy money so you agree to take part. This is great – what started out as a simple fulfilment of a course component has unearthed a little ready cash for you. You are quickly introduced to the next participant who is about to do the same task you just completed. As instructed you tell her that the task she's about to do is really interesting. She smiles, thanks you and disappears off into the test room. You feel a pang of regret for getting her hopes up. Then the experimenter returns, thanks you again, and once again tells you that many people enjoy the task and hopes you found it interesting.

Then you are ushered through to another room where you are interviewed about the experiment you've just done. One of the questions asks you about how interesting the task was that you were given to do. This makes you pause for a minute and think. Now it seems to you that the task wasn't as boring as you first thought. You start to see how even the repetitive movements of the spools and pegs had a certain symmetrical beauty. And it was all in the name of science after all. This was a worthwhile endeavour and you hope the experimenters get some interesting results out of it. The task still couldn't be classified as great fun, but perhaps it wasn't that bad. You figure that, on reflection, it wasn't as bad as you first thought. You rate it moderately interesting.

After the experiment you go and talk to your friend who was also doing the experiment. Comparing notes you found that your experiences were almost identical except for one vital difference. She was offered way more than you to brief the next student: $20! This is when it first occurs to you that there's been some trickery at work here. You ask her about the task with the spools and pegs:

"Oh," she replies. "That was so boring, I gave it the lowest rating possible."

"No," you insist. "It wasn't that bad. Actually when you think about it, it was pretty interesting." She looks at you incredulously. What the hell is going on?

Cognitive dissonance

What you've just experienced is the power of cognitive dissonance. Social psychologists studying cognitive dissonance are interested in the way we deal with

two thoughts that contradict each other – and how we deal with this contradiction. In this case: you thought the task was boring to start off with then you were paid to tell someone else the task was interesting. But, you're not the kind of person to casually go around lying to people. So how can you resolve your view of yourself as an honest person with lying to the next participant? The amount of money you were paid hardly salves your conscience – it was nice but not that nice. Your mind resolves this conundrum by deciding that actually the study was pretty interesting after all. You are helped to this conclusion by the experimenter who tells you other people also thought the study was pretty interesting.

Your friend, meanwhile, has no need of these mental machinations. She merely thinks to herself: I've been paid $20 to lie, that's a small fortune for a student like me, and more than justifies my fibbing. The task was boring and still is boring whatever the experimenter tells me.

A beautiful theory

Since this experiment numerous studies of cognitive dissonance have been carried out and the effect is well-established. Its beauty is that it explains so many of our everyday behaviours. Here are some examples provided by Morton Hunt in "The Story of Psychology.":

When trying to join a group, the harder they make the barriers to entry, the more you value your membership. To resolve the dissonance between the hoops you were forced to jump through, and the reality of what turns out to be a pretty average club, we convince ourselves the club is, in fact, fantastic.

People will interpret the same information in radically different ways to support their own views of the world. When deciding our view on a contentious point, we conveniently forget what jars with our own theory and remember everything that fits. People quickly adjust their values to fit their behaviour, even when it is clearly immoral. Those stealing from their employer will claim that "Everyone does it" so they would be losing out if they didn't, or alternatively that "I'm underpaid so I deserve a little extra on the side." Once you start to think about it, the list of situations in which people resolve cognitive dissonance through rationalisations becomes ever longer and longer. If you're honest with yourself, I'm sure you can think of many times when you've done it yourself. Being aware of this can help us avoid falling foul of the most dangerous consequences of cognitive dissonance: believing our own lies.

War, Peace and the Role of Power in Sherif's Robbers Cave Experiment

Sherif's Robbers Cave experiment, a classic study of prejudice and conflict, has at least one hidden story. The typical retelling of Sherif's classic Robbers Cave experiment highlights the resolution of intergroup prejudice, but recent interpretations suggest a darker conclusion that demonstrates the corrupting influence of power.

The well-known story emerged in the decades following the experiment as textbook writers adopted a particular retelling. With repetition people soon accepted this story as reality, forgetting it is just one version of events, one interpretation of a complex series of studies. As scholars have returned to the Robbers Cave experiment another story has emerged, putting a whole new perspective on the findings.

In this experiment twenty-two 11 year-old boys were taken to a summer camp in Robbers Cave State Park, Oklahoma, little knowing they were the subjects of an experiment. Before the trip the boys were randomly divided into two groups. It's these two groups that formed the basis of Sherif's study of how prejudice and conflict build up between two groups of people (Sherif et al., 1961).

When the boys arrived, they were housed in separate cabins and, for the first week, did not know about the existence of the other group. They spent this time bonding with each other while swimming and hiking. Both groups chose a name which they had stencilled on their shirts and flags: one group was the Eagles and the other the Rattlers.

Name calling

The two groups now established, the experiment moved into its second phase. For the first time the two groups were allowed to find out about each other and soon the signs of intergroup conflict emerged in the form of verbal abuse.

A little name-calling wasn't enough, though. The experimenters wanted to increase the conflict substantially. To do this they pitted the groups against each other in a series of competitions. This ratcheted up the antagonism between the two groups, especially once all the team scores were added up and the Rattlers won the overall trophy for the competitive activities. They didn't let the Eagles forget it. The Rattlers staked their claim to the ball field by planting their flag in it. Later on each group started name calling at the other and singing derogatory songs. Soon the groups were refusing to eat in the same room together.

Making peace

With conflict between the groups successfully instigated, the experiment now moved into its final phase. Could the experimenters make the two groups kiss and make up? First of all they tried some activities in which the two groups were brought together, such as watching a film and shooting firecrackers, but neither of these worked.

The experimenters then tried a new approach. They took the two groups to a new location and gave them a series of problems to try and solve. In the first problem the boys were told the drinking water supply had been attacked by vandals. After the two groups successfully worked together to unblock a faucet, the first seeds of peace were sown.

In the second problem the two groups had to club together to pay for the movie they

wanted to watch. Both groups also agreed on which movie they should watch. By the evening the members of both groups were once again eating together.

The groups "accidentally" came across more problems over the next few days. The key thing about each of them was that they involved superordinate goals: boys from both groups worked together to achieve something they all had an interest in. Finally all the boys decided to travel home together in the same bus. Peace had broken out all over.

Sherif reached an important conclusion from this study, and other similar work carried out in the 1940s and 50s. He argued that groups naturally develop their own cultures, status structures and boundaries. *Think of each of these groups of boys as like a country in microcosm. Each country has its own culture, its government, legal system and it draws boundaries to differentiate itself from neighbouring countries.* From these internal structures, the roots of conflict in both the groups of boys and between countries are created.

One of the reasons Sherif's study is so famous is that it appeared to show how groups could be reconciled, how peace could flourish. The key was the focus on superordinate goals, those stretching beyond the boundaries of the group itself. It seemed that this was what brought the Rattlers and the Eagles back together.

The other story

What is often left out of the familiar story is that it was not the first of its type, but actually the third in a series carried out by Sherif and colleagues. The two earlier studies had rather less happy endings. In the first, the boys ganged up on a common enemy and in the second they ganged up on the experimenters themselves. How does this alter the way we look at the original Robbers Cave experiment?

Michael Billig argues that when looking at all three studies, Sherif's work involves not just two groups but three, the experimenters are part of the system as well (Billig, 1976). In fact, with the experimenters included, it is clear they are actually the most powerful group. Much of the conflict between the two groups of boys is orchestrated by the experimenters. The experimenters have a vested interest in creating conflict between the two groups of boys. It was they who had the most to lose if the experiment went wrong, and the most to gain if it went right.

Power relations

The three experiments, then, one with a "happy" ending, and two less so, can be seen in terms of the possible outcomes when a powerful group tries to manipulate two weaker groups. Sometimes they can be made to play fair (experiment three), sometimes the groups will unite against a common enemy (experiment one) and sometimes they will turn on the powerful group (experiment two).

For psychologist Frances Cherry it is the second experiment which makes this analysis plausible. When the boys rebel against the experimenters, they showed

understanding of how they were being manipulated (Cherry, 1995). Although the Robbers Cave experiment is, in some sense, the "successful" study, taken together with the other two it is more realistic. In reality, Cherry argues, it is more often the case that groups hold unequal amounts of power.

Weak groups can rebel

Unequal levels of power between groups fundamentally changes the dynamic between them. Whether it's countries, corporations, or just families, if one group has more power, suddenly the way is open for orchestrated competitions and cooperation, not to mention manipulation. Manipulating other groups, though, is a dangerous game, and weaker groups don't always play by the rules set for them. Perhaps this is the more subtle, if less enduring message of the Robbers Cave experiment and its supposedly less successful predecessors.

Our Dark Hearts: The Stanford Prison Experiment

The experiment that inspired a novel, two films, countless TV programs, re-enactments and even a band. "The vilest deeds like poison weeds bloom well in prison air" – Oscar Wilde. The best psychological experiments ask timeless questions about human nature, like what makes a person evil? Can a good person commit evil acts? If so, what can make people cross the line? Is there some set-point which when crossed unleashes the evil? Or is it something about the situations in which people are placed that determines our behaviour? This nomination for the best social psychology research – the famous "Stanford Prison Experiment" – argues a strong case for the power of the situation (Zimbardo, 1971).

Prisoners and guards

The idea was simple: to see how ordinary men, chosen to be the most healthy and "normal" would respond to a radical change to their normal roles in life. Half were to become prison guards, the other half their prisoners. In this experiment there were no half-measures, for it to be effective it had to closely approximate the real experience of prisoners and guards. These participants were in for the ride of their lives. "Prisoners" were "arrested" by a police car with sirens wailing while they were out going about their everyday business. Then they were fingerprinted, blindfolded and put in a cell, then stripped naked, searched, deloused, given a uniform, a number and had a chain placed around one foot. The other participants were made into guards who wore uniforms and were given clubs. A prison was mocked up in the basement of a Stanford University building. And so the experiment began.

All was quiet until the second day when the "prisoners" rebelled against their incarceration. The guard's retaliation was swift and brutal. Guards stripped the prisoners naked, removed the beds from the prison, placed the rebellion's ringleader in solitary confinement and began harassing all the "prisoners". Soon the "prisoners" began behaving with blind obedience towards the prison guards. After only a few

day's realistic role-playing participants reported it felt as though their old identities had been erased. They had become their numbers. So too had the "guards" taken on their roles – taunting and abusing their prisoners. Even the lead researcher, Philip Zimbardo, admits he became submerged in his role as the "prison superintendent". In fact, Zimbardo believes the most powerful result of his experiment was his own transformation into a rigid institutional figure, more concerned with his prison's security than the welfare of his participants. Other members of the experimental team became engrossed in their new role. Craig Haney, like Zimbardo, explained he became completely engaged in the day-to-day crises they were facing in running the "prison" and forgot about the aim of their experiment.

Playing the roles

It was only when one of his colleagues intervened that the experiment was finally stopped. In total it only lasted six of the planned 14 days. Young men previously found to be pacifists were, in their roles as guards, humiliating and physically assaulting the "prisoners" – some even reported enjoying it. The "prisoners", meanwhile, quickly began to show classic signs of emotional breakdown. Five had to leave the "prison" even before the experiment was prematurely terminated. The psychological explanation for the participant's behaviour was that they were taking on the social roles assigned to them. This included adopting the implicit social norms associated with those roles: guards should be authoritarian and abuse prisoners while prisoners should become servile and take their punishment. Inevitably the experiment has attracted criticism for being unethical, involving a small sample size, lack of ecological validity and so on. Despite this it's hard to deny that the experiment provides important insights in to human behaviour, perhaps helping to explain the abuses that occurred in situations like the Abu Ghraib Prison.

Rikers Island

Does this experiment mirror what occurs in real prisons? Probably. Writing in Inside Rikers: Stories from the World's Largest Penal Colony. Jennifer Wynn interviews prison guards from New York City's largest penal colony, Rikers Island. One captain explained that guards easily become used to the level of violence inflicted on inmates – it's part of the job and they soon become immune. Some can't understand how they become different people at work. Levels of violence against prisoners were so bad in one unit, called the "Central Punitive Segregation Unit" of Rikers', that almost a dozen guards were officially charged with assaulting inmates in 1995. Eventually the inmates won $1.6 million dollars in compensation. This is just one example.

Popular culture and the Stanford Prison Experiment

The study is now so well-known it has crossed over into popular culture. It has inspired a novel, "Das Experiment". by Mario Giordano, which was later filmed,

and a new movie by the writer of the "Usual Suspects" is slated for filming. The experiment has also been covered or recreated in countless TV shows, most notably on the BBC. Not only this, but the experiment has even inspired the name of a band. "Stanford Prison Experiment" released their first eponymously titled album. in 1994, following up a year later with "The Gato Hunch". What other psychology study can say it's got a band named after it?

Stanley Milgram: Obedience to Authority Or Just Conformity?

Welcome to the sixth nomination for the top ten psychology studies and as you'll have guessed it's a big one. Hold on for controversy though, as this study has come in for considerable criticism with some saying its claims are wildly overblown.

Explaining human cruelty

"Many wondered after the horrors of WWII, and not for the first time, how people could be motivated to commit acts of such brutality towards each other."Stanley Milgram's now famous experiments were designed to test obedience to authority (Milgram, 1963). What Milgram wanted to know was how far humans will go when an authority figure orders them to hurt another human being. Not just those in the armed forces, but ordinary people were coerced into carrying out the most cruel and gruesome acts.

But Milgram didn't investigate the extreme situation of war, he wanted to see how people would react under relatively "ordinary" conditions in the lab. How would people behave when told to give an electrical shock to another person? To what extent would people obey the dictates of the situation and ignore their own misgivings about what they were doing?

The experimental situation into which people were put was initially straightforward. Participants were told they were involved in a learning experiment, that they were to administer electrical shocks and that they should continue to the end of the experiment. Told they would be the "teacher and another person the "learner", they sat in front of a machine with a number of dials labelled with steadily increasing voltages. This was the "shock machine". The third switch from the top was labelled: "Danger: Severe Shock", the last two simply: "XXX".

During the course of the experiment, each time the "learner" made a mistake the participant was ordered to administer ever-increasing electrical shocks. Of course the learner kept making mistakes so the teacher (the poor participant) had to keep giving higher and higher electrical shocks, and hearing the resultant screams of pain until finally the learner went quiet.

"When the participant baulked at giving the electrical shocks, the experimenter – an authority figure dressed in a white lab coat – ordered them to continue." Participants were not in fact delivering electrical shocks, the learner in the experiment was actually an actor following a rehearsed script. The learner was kept out of sight

of the participants so they came to their own assumptions about the pain they were causing. They were, however, left in little doubt that towards the end of the experiment the shocks were extremely painful and the learner might well have been rendered unconscious.

Results

Before I explain the results, try to imagine yourself as the participant in this experiment. How far would you go giving what you thought were electrical shocks to another human being simply for a study about memory? What would you think when the learner went quiet after you apparently administered a shock labelled on the board "Danger: Severe Shock"? Honestly. How far would you go?

How ever far you think, you're probably underestimating as that's what most people do. Like the experiment, the results shocked. Milgram's study discovered people are much more obedient than you might imagine. 63% of the participants continued right until the end – they administered all the shocks even with the learner screaming in agony, begging to stop and eventually falling silent. These weren't specially selected sadists; these were ordinary people like you and me who had volunteered for a psychology study.

How can these results be explained?

At the time Milgram's study was big news. Milgram explained his results by the power of the situation. This was a social psychology experiment which appeared to show, beautifully in fact, how much social situations can influence people's behaviour.

The experiment set off a small industry of follow-up studies carried out in labs all around the world. Were the findings still true in different cultures, in slightly varying situations and in different genders (only men were in the original study)? By and large the answers were that even when manipulating many different experimental variables, people were still remarkably obedient. One exception was that one study found Australian women were much less obedient. Make of that what you will.

Now think again. Sure, the experiment relies on the situation to influence people's behaviour, but how real is the situation? If it was you, surely you would understand on some level that this wasn't real, that you weren't really electrocuting someone, that knocking someone unconscious would not be allowed in a university study?

"How good would the actors have to be in order to avoid giving away the fact they were actors?"Also, people pick up considerable nonverbal cues from each other. People are adept at playing along even with those situations they know in their heart-of-hearts to be fake. The more we find out about human psychology, the more we discover about the power of unconscious processes, both emotional and cognitive. These can have massive influences on our behaviour without our awareness.

Assuming people were not utterly convinced on an unconscious level that the

experiment was for real, an alternative explanation is in order. Perhaps Milgram's work really demonstrates the power of conformity. The pull we all feel to please the experimenter, to fit in with the situation, to do what is expected of us. While this is still a powerful interpretation from a brilliant experiment, it isn't what Milgram was really looking for.

Whether you believe the experiment shows what it purports to or not, there is no doubting that Milgram's work was some of the most influential and impressive carried out in psychology. It is also an experiment very unlikely to be repeated nowadays (outside of virtual reality) because of modern ethical standards. Certainly when I first came across it, my view of human nature was changed irrevocably. Now, thinking critically, I'm not so sure.

Why We All Stink as Intuitive Psychologists: The False Consensus Effect

Many people quite naturally believe they are good "intuitive psychologists", thinking it is relatively easy to predict other people's attitudes and behaviours. We each have information built up from countless previous experiences involving both ourselves and others so surely we should have solid insights?

In reality people show a number of predictable biases when estimating other people's behaviour and its causes. And these biases help to show exactly why we need psychology experiments and why we can't rely on our intuitions about the behaviour of others.

One of these biases is called the false consensus effect. In the 1970s Stanford University social psychologist Professor Lee Ross set out to show just how the false consensus effect operates in two neat studies (Ross, Greene & House, 1977).

False consensus

In the first study participants were asked to read about situations in which a conflict occurred and then told two alternative ways of responding. They were asked to do three things:

- Guess which option other people would choose;
- Say which option they would choose;
- Describe the attributes of the person who would choose each of the two options.

The results showed more people thought others would do the same as them, regardless of which of the two responses they actually chose themselves. This shows what Ross and colleagues dubbed the "false consensus" effect – the idea that we each think other people think the same way we do when actually they often don't.

Another bias emerged when participants were asked to describe the attributes of the person who made the opposite choice to their own. Compared to other people who made the same choice they did, people made more extreme predictions about the personalities of those who didn't share their choice.

To put it a little crassly: people tend to assume that those who don't agree with them

have something wrong with them! It might seem like a joke, but it is a real bias that people demonstrate.

Eat at Joe's!

While the finding from the first study is all very well in theory, how can we be sure people really behave the way they say they will? After all, psychologists have famously found little connection between people's attitudes and their behaviour.

In a second study, therefore, Ross and colleagues abandoned hypothetical situations, paper and pencil test and instead took up the mighty sandwich board.

This time a new set of participants, who were university students, were asked if they would be willing to walk around their campus for 30 minutes wearing a sandwich board saying: "Eat at Joe's". (No information is available about the food quality at "Joe's", and consequently how foolish students would look.)

For motivation participants were simply told they would learn "something useful" from the study, but that they were absolutely free to refuse if they wished. The results of this study confirmed the previous study. Of those who agreed to wear the sandwich board, 62% thought others would also agree. Of those who refused, only 33% thought others would agree to wear the sandwich board.

Again, as before, people also made more extreme predictions about the type of person who made the opposite decision to their own. You can just imagine how that thinking might go. The people who agreed to carry the sandwich board might have said: "What's wrong with someone who refuses? I think they must be really scared of looking like a fool." While the people who refused: "Who are these show-offs who agreed to carry the sandwich board? I know people like them – they're weird."

We're poor intuitive psychologists

This study is fascinating not only because it shows a bias in how we think about others' behaviours but also because it demonstrates the importance of psychology studies themselves. Every psychologist has, at some point, been driven to distraction when trying to explain a study's finding by one form of the following two arguments (amongst others!):

I could have told you that – it's obvious!

No, in my experience that's not true – people don't really behave like that.

As this social psychology study shows, people are actually pretty poor intuitive psychologists. One of the few exceptions to this is when the answer is really obvious, such as asking people whether it is OK to commit murder. But questions we can all agree on are generally not as interesting as those on which we are divided. People are also more likely to assume someone who doesn't hold the same views as them has a more extreme personality than their own. This is because people think to themselves, whether consciously or unconsciously, surely all right-thinking (read "normal") people think the same way as me?

Well, apparently not. Although knowing that we don't know other people, is a great start. And that is one good reason why we need psychology studies.

Why Groups and Prejudices Form So Easily: Social Identity Theory

This classic social psychology experiment shows how little excuse people need to form into groups and start discriminating against others. People's behaviour in groups is fascinating and frequently disturbing. As soon as humans are bunched together in groups we start to do odd things: copy other members of our group, favour members of own group over others, look for a leader to worship and fight other groups. Just glance at Sherif's Robbers Cave experiment for proof of how easy it is to provoke war between groups.

But think about the types of groups you belong to, and you'll realise they differ dramatically. Some groups are more like soldiers in the same unit or friends who have known each other from childhood. Perhaps it's not surprising people in these groups radically change their behaviour, preferring members of their own group over others in many ways. Other groups, though, are much looser. Supporters of a large sports club, for example, or work colleagues only together on a project for a few months or even a group of people in an art gallery appreciating a painting.

It seems impossible that people stood together for only 30 seconds to look at a painting can be said to form a group in any measurable way. This is exactly the type of question social psychologist Henry Tajfel and colleagues set out to answer (Tajfel et al., 1971).

They believed it was possible for a group, along with its attendant prejudices, to form at the drop of a hat. In fact they thought a group could form even when there was no face-to-face contact between members, none of the people knew each other and their "group" behaviour had no practical consequences. In other words they had absolutely nothing to gain (or lose) from this barely existent group.

Tajfel and colleagues came up with a neat solution for testing their idea. Participants, who were 14 and 15 year-old boys, were brought into the lab and shown slides of paintings by Klee and Kandinsky. They were told their preferences for the paintings would determine which of two groups they would join.

Of course, this was a lie designed to set up the idea of "us" and "them" in their minds. The experimenters wanted two groups of boys with not the faintest idea who was also in their own group or what the grouping meant or what they had to lose or gain. After this setup, the boys were taken to a cubicle, one at a time. Each was then asked to distribute virtual money to the other members of both groups. The only information they had about who they were giving it to was a code number for each boy and that boy's group membership.

There were a series of rules for the distribution of the money that were designed to tease out who the boys favoured: their own group or the other group. The rules

were changed slightly in different trials so that it was possible to test a number of theories. Did the boys distribute the money:
Fairly?
To obtain maximum joint profit?
For maximum ingroup (own group) profit?
For maximum difference between groups?
Using favouritism? This involves a combination of maximum ingroup profit and maximum difference?

Startling findings

From the way the virtual money was distributed, the boys indeed demonstrated the classic behavioural markers of group membership: they favoured their own group over the other. And this pattern developed consistently over many trials and has subsequently been replicated in other experiments in which groups were even more minimal.

The most puzzling aspect of this experiment is that the boys had nothing whatsoever to gain from favouring their own group – there didn't seem to be anything riding on their decisions. Out in the real world there's a good reason to favour your own group – normally it is also advantageous to yourself. You protect yourself by protecting others like you.

Social identity theory

What Tajfel argued, though, was that there was something riding on the decisions the boys made, but it was something very subtle, yet incredibly profound. Tajfel argued that people build their own identities from their group memberships. For example, think of each of the groups you belong to: at work, or within your family. Part of who you are is probably defined by these groups. Putting it the other way around: the nature of your group membership defines your identity.

As our group membership forms our identity, it is only natural for us to want to be part of groups that are both high status and have a positive image. Crucially though, high status groups only have that high status when compared to other groups. In other words: knowing your group is superior requires having a worse group to look down upon. Seen in the light of social identity theory, then, the boys in the experiment do have a reason to be selfish about the allocation of the virtual cash. It is all about boosting their own identities through making their own group look better.

Criticisms

No experiment can, or should, be automatically taken at face value. Questions have to be asked about whether it is really telling us what the authors claim. There are two criticisms often levelled at this experiment and its interpretation: The participant's behaviour can be explained by simple economic self-interest. But:

in another experiment only symbols were used rather than "virtual" money and the results were the same. The participants were responding to what they thought the experimenters wanted (psychologists call this "demand characteristics"). But: Tajfel argues it is unclear to the participants what the experimenters wanted. Recall that the rules for distributing money frequently changed. Also, the participants were encouraged to think that choosing whose paintings they liked (the "first" experiment) was unrelated to the allocation of virtual money (the "second" experiment).

Despite these criticisms, Tajfel and colleagues' findings have stood the test of time. The experiment, or something like it, has been repeated many times with different variations producing much the same results. Social identity theory states that our identities are formed through the groups to which we belong. As a result we are motivated to improve the image and status of our own group in comparison with others. Tajfel and colleagues' experiment shows that group membership is so important to us that we join the most ephemeral of groups with only the slightest prompting. We will then go out of our way to make our own group look better compared to others. The simple fact of how important group membership is to us, and how easily we join groups, often without realising it, is both a subtle and profound observation about human nature.

How to Avoid a Bad Bargain: Don't Threaten

An award-winning social psychology experiment reveals why we often fail to bargain effectively with each other. Bargaining is one of those activities we often engage in without quite realising it. It doesn't just happen in the boardroom, or when we ask our boss for a raise or down at the market, it happens every time we want to reach an agreement with someone. This agreement could be as simple as choosing a restaurant with a friend, or deciding which TV channel to watch. At the other end of the scale, bargaining can affect the fate of nations.

Big-scale or small-scale, bargaining is a central part of our lives. Understanding the psychological processes involved in bargaining can provide us with huge benefits in our everyday lives. In a classic, award-winning series of studies, Morgan Deutsch and Robert Krauss investigated two central factors in bargaining: how we communicate with each other and how we use threats (Deutsch & Krauss, 1962).

To do this, they used a game which forces two people to bargain with each other. Although Deutsch and Krauss used a series of different conditions – nine in fact – once you understand the basic game, all the conditions are only slight variations.So, imagine you were a clerical worker at the Bell Telephone Laboratories in the late 1950s and you've been asked to take part in a psychology study. Every psychology study has a story, and this one revolves around two trucking companies.

Experiment 1: Keep on trucking

Before the experiment proper starts, the researcher explains that you'll be playing a

game against another participant. In the game you will run a trucking company. The object of the game is the same as a real trucking company: to make as much money as possible. Like the real-life trucking company you have to deliver as many of your goods as possible to their destination in the shortest possible time. But in this game you only have one starting point, one destination and one competitor. It looks like a pretty simple game.

Here's the catch. The road map your one truck has to travel across presents you with a dilemma. You are the 'Acme' trucking company and your fellow participant is the 'Bolt' trucking company, although both of you have an identical problem. There are two possible routes you can take from the start to your destination: the short and the long. Remember, time is money, so the longer it takes you to get to your destination, the less profit you make, which is the aim of the game. Unfortunately the short route has a major shortcoming: it is one-way. Only one of you can travel down it at a time towards your destination.

It seems you'll be forced to work out some agreement with your unknown rival to share this one-way route so that you can both make money. How you'll do this is another mystery, though, as there is going to be no communication between the two of you during the experiment. You are to be seated in a cubicle from where you'll only be able to see the control box for your "truck" and the experimenter.

You are to be given one method of communication with your rival, albeit indirect communication. Each of you controls a gate at your own end of the one-way road. Your gate can be opened or closed whenever you pass through it. This will be your threat. It is reinforced by the experimenter that you are out to make as much money as you can for yourself – the other person's profit is not a concern.

Once the experimenter sets you off, it soon becomes clear you're not going to make much money at all. In the first of 20 trials, both you and your rival shut your gates, forcing both trucks onto the alternative route. This is 50% longer and means you make a loss on the trip as a whole. In the second trial your trucks meet head-on travelling up the one-way road. You both have to reverse, costing you time and money.

The rest of the trials aren't much better. Occasionally you make a profit on a trip but more often than not it's a bust. You spend more time on the long route or reversing than you do chugging happily along the main route making money. At the end of the experiment, the researcher announces how much profit you made. None. In fact you made a crippling loss. Perhaps trucking companies aren't so easy to run.

You find out later that you were in one of three experimental conditions. The only differences in the other two conditions were that in one there were no gates at either end of the one-way road. In the other there was only one active gate controlled by one player. Before I tell you the results of the other two conditions, try to guess. One

condition, which you've taken part in, contained bilateral threat – you could both threaten each other. One condition had unilateral threat – only one could threaten the other. And the final condition had no threat at all. What was the order of profit? In fact it turns out that your condition, of bilateral threat, made the least profit when both participant's scores were added up. The next most profitable was the unilateral threat condition, while the most profitable overall was the no-threat condition. Here's the first rather curious result. While the person who had the threat – control of the gate – in the unilateral condition did better than the person who didn't, they were still better off, individually and collectively, than if they both had threats. What this experiment is showing is that the availability of threats leads to worse outcomes to the extent that unilateral threat is preferable to bilateral threat to both parties.

Experiment 2: Lines of communication

But surely a little communication goes a long way. You weren't allowed to talk to the other participant in this experiment, so your trucks had to do the talking for you. Bargaining is all about reaching a compromise through negotiation – surely this should help. To test the effect of communication Deutsch and Krauss (1962) set up a second experiment which was identical in all respects to the first except participants were given headphones to talk to each other.

Here's the next curious result: allowing the two participants to communicate with each other made no significant difference to the amount of money each trucking company made. In fact the experimenters found no relationship between words spoken and money made. In other words those who communicated more did not manage to reach a better understanding with each other.

Participants in the second study reported that it was difficult to start talking to the other person, who was effectively a stranger. As a result they were considerably less talkative than normal. Could it be that it was this situational constraint that meant little talking, and therefore little bargaining was going on?

Experiment 3: Forced communication

Deutsch and Krauss decided to test the effect of forced communication in their third experiment. Again the procedure is the same as last time but now participants are instructed that on each of the 20 trials they have to say something. If they don't talk on one of the trials they are gently reminded by the experimenter to do so. They are told they can talk about whatever they like, as long as they say something.

The results finally showed some success for communication. Performance in the one-gate (unilateral threat) condition came close to that achieved in the "no-threat" condition (remember the no-threat condition has the best outcomes). Forced communication didn't have much effect on the "no-threat" condition when compared with no communication, and neither did it improve the bilateral threat

condition much. It still seems that people are so competitive when they both have threats it's very difficult to avoid both sides losing out.

The most surprising finding of this study is how badly people do under conditions of bilateral threat. In this experiment not even forcing communication can overcome people's competitive streaks. Before drawing some general conclusions from these studies, we should acknowledge the particular circumstances of this research. Deutsch and Krauss's experiment covers a situation in which bargaining is carried out under time pressure. Recall that the longer participants take to negotiate, the less money they make. In real life, time isn't always of the essence.

The present game also has a relatively simple solution: participants make the most profit if they share the one-way road. In reality, solutions are rarely that clear-cut. Finally, our participants were not professional negotiators, they were clerical and supervisory workers without special training.

Despite these problems the trucking game has the advantage of being what game theorists call a non-zero-sum game. In other words if you win, it doesn't automatically mean the other person loses. When you total the final results, as you sometimes can in a financial sense, they don't add to zero. In real life many of the situations in which we find ourselves are of this nature. Cooperation can open the way to more profit, in financial or other form, for both parties. As a result the trucking game has clear implications for real life:

Cooperative relationships are likely to be much more beneficial overall than competitive relationships. Deutsch and Krauss's experiment clearly shows the friction caused by competitive relationships, such as those encouraged by capitalism. I'm not saying capitalism is bad, I'm just saying competition isn't always good. This simple fact is often forgotten.

Just because people can communicate, doesn't mean they will – even if it is to their advantage. Forcing parties to communicate, even if they already have the means to communicate, encourages mutually beneficial outcomes. In competitive relationships, communication should be aimed at increasing cooperation. Other methods will probably create more heat than light. Threats are dangerous, not only to other's interests, but also to our own.

Why We Don't Help Others: Bystander Apathy

The next nomination for the best social psychology study was inspired by the highly publicised murder of Kitty Genovese in 1964 and it is mentioned in every textbook. The study investigates the "bystander effect". In social psychology this is the surprising finding that the mere presence of other people inhibits our own helping behaviours in an emergency.

John Darley and Bibb Latane were inspired to investigate emergency helping behaviours after the murder of Kitty Genovese in 1964. The newspaper report of the

murder stated that 38 people had heard and seen the attack, which lasted an hour, yet they did nothing. Subsequent reports, however, suggest the number of witnesses was much lower and few, perhaps none, had witnessed the whole attack.

Whatever the status of this incident the facts of the study are well-known. Participants were invited into the lab under the pretext they were taking part in a discussion about "personal problems" (Darley & Latane, 1968). Participants were talking to a number of unknown others, varying from just one up to four in each of the experimental trials.

Because of the sensitive nature of the discussion they were told the discussion would take place over an intercom. In fact this was just a ruse to ensure the participants couldn't physically see the other people they were talking to. During the discussion one member of the group would suddenly appear to be having an epileptic seizure. Here is the script: The experimenters then measured how long it took for participants to go the person's aid. They clearly found that the more people were involved in the group discussion, the slower participants were to respond to the apparent emergency. It seems that the presence of others inhibits people's helping behaviours.

Some participants made no move to intervene in the apparent emergency. What was going on? Darley and Latane (1968) report that those who did not act were far from uncaring about the seizure victim. Quite the reverse in fact, compared to those who did report the emergency, they appeared to be in a more heightened state of arousal. Many were sweating, had trembling hands and looked to be in considerable discomfort.

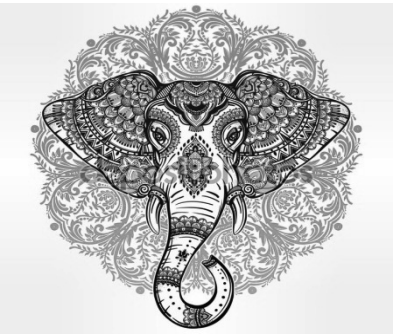
The non-helpers appeared to be caught in a double bind that locked them up. One part of them felt shame and guilt for not helping. Another part of them didn't want to expose themselves to embarrassment or to ruin the experiment which, they had been told depended on each conversant remaining anonymous from the others.

It's here that I wonder about the originality of the finding. Certainly Milgram's study of obedience casts a long shadow over this experiment. Similar to the Milgram situation, participants here were put under pressure to continue with the experiment by authority figures (the psychologists). Again, someone was suffering discomfort and participants felt conflicted about whether or not to intervene. In this case in an epileptic seizure, in Milgram's study, it was the electrical shocks participants themselves were administering.

This study's originality comes from the finding that the more people are present, the longer participants take to help. And this is certainly an important insight in social psychological terms. Because of the way the experiment was set up participants had no way of knowing how the other people who heard the seizure had responded. This meant that the only variable was how many other people they knew to be present.

(http://www.spring.org.uk/2007/11/10-piercing-insights-into-human-nature.php)

Lesson 9. Art therapy



Mandala Drawing

We humans have always had a fascination with the circle. We experience it throughout nature – in the spiral of the Milky Way, the orbiting planets, and the cycles of life itself. As children, we also discover that we can use a crayon to make circular forms on paper; it's a universal stage of artistic development that every normal child throughout the world experiences. In fact, it is the first major milestone in image-making and for that reason, a child's circle drawing may be one the earliest representations of the self.

Circular forms in art are often referred to as mandalas, the Sanskrit word for "sacred circle." For thousands of years the creation of circular, often geometric designs has been part of spiritual practices around the world and almost every culture has revered the power of the circle. Eastern cultures have used specific mandalas for visual meditation for many centuries; the Tibetan Buddhist Kalachakra, also known as the Wheel of Time, is probably one of the most famous mandalas and symbolically illustrates the entire structure of the universe. Circular forms are found at the prehistoric Stonehenge monument in England and the 13th century labyrinth at the base of Chartres Cathedral in France. Spiritual seekers have consistently created mandalas to bring forth the sacred through images and have evoked the circle in ritual and art making for the purpose of transcendence, mindfulness, and wellness.

Carl Gustav Jung is credited with introducing the Eastern concept of the mandala to Western thought and believed this symbol represented the total personality–the Self. Jung noted that when a mandala image suddenly turned up in dreams or art, it was usually an indication of movement toward a new self-knowledge. He observed that his patients often spontaneously created circle drawings and had his own profound personal experience with mandala images. From 1916 through 1920, Jung created mandala paintings and sketches that he felt corresponded to his inner situation at the time. He believed that mandalas denoted a unification of opposites, served as expressions of the self, and represented the sum of who we are.

Art therapist Joan Kellogg spent much of her life developing a system of understanding the wisdom of the mandala, which she called the "Great Round." In her theory about patterns, forms, and colours in mandalas, Kellogg integrates parts of Jung's discoveries and her own research that spanned several decades. In particular, she posited that our attraction to certain shapes and configurations found in mandalas conveys our current physical, emotional, and spiritual condition in the moment. Kellogg also developed a series of cards, each with a different mandala design representing character traits, interpersonal relationships, aspirations, and the unconscious, ever-changing within the life cycle of the Great Round of the Mandala. An entire system for analyzing mandala art evolved from Kellogg's concepts, assessing everything from an individual's personality to physical health. The idea of interpreting symbols found in mandalas intrigues many art therapists and Jungian analysts who seek meaning in images. But the evocative and health-giving power of the mandala is much more than just symbol-finding. It is really the creative process of making mandalas that helps us revisit the universal experience of the circle and, as Jung found, helps us to experience and reflect on the essence of who we are in the here and now.

If you want to try your hand at creating your own mandala drawings, all you need are a set of good coloured pencils or oil pastels, graphite pencil and eraser, ruler, paper, and a round plate or compass to make a circle. Try a circle about 10 inches in diameter, but you can use any size paper to make your drawing. White paper is fine, but also try a sheet of black paper, too. It will make the colours "pop" because of the darker background. Because mandala drawing can be a very relaxing and meditative experience, you might want to play some soft instrumental music to set the mood. If you commit to making mandala drawings over a period of weeks or months, you'll also find that the content and style will change along with your personality, emotions, and experiences.

According to Jung, mandalas symbolize "a safe refuge of inner reconciliation and wholeness." They have the potential to call forth something universal within, perhaps even the proverbial archetypal Self. And at the same time, they give us an experience of wholeness amid the chaos of every day life, making the "sacred circle" one of the very coolest art therapy interventions for both soothing the soul and meeting oneself.

(adapted from https://www.psychologytoday.com/blog/arts-and-health/201002/the-ten-coolest-art-therapy-interventions)

Lesson 10. Positive psychology

Martin Seligman (Commonly known as the founder of Positive Psychology, Today he is the director of the positive psychology center at the University of Pennsylvania).

The new era of positive psychology (Tapescript**)**

When I was President of the American Psychological Association, they tried to media-train me. And an encounter I had with CNN summarizes what I'm going to be talking about today, which is the eleventh reason to be optimistic. The editor of Discover told us 10 of them; I'm going to give you the eleventh.

So they came to me, CNN, and they said, "Professor Seligman would you tell us about the state of psychology today? We'd like to interview you about that." And I said, "Great." And she said, "But this is CNN, so you only get a sound bite." I said, "Well, how many words do I get?" And she said, "Well, one."

(Laughter)

And the cameras rolled, and she said, "Professor Seligman, what is the state of psychology today?" "Good."

"Cut! Cut. That won't do. We'd really better give you a longer sound bite." "How many words do I get this time?" "Well, you get two."

(Laughter)

"Doctor Seligman, what is the state of psychology today?" "Not good."

(Laughter)

"Look, Doctor Seligman, we can see you're really not comfortable in this medium. We'd better give you a real sound bite. This time you can have three words. Professor Seligman, what is the state of psychology today?" "Not good enough." That's what I'm going to be talking about.

I want to say why psychology was good, why it was not good, and how it may become, in the next 10 years, good enough. And by parallel summary, I want to say the same thing about technology, about entertainment and design, because I think the issues are very similar.

So, why was psychology good? Well, for more than 60 years, psychology worked within the disease model. Ten years ago, when I was on an airplane and I introduced myself to my seatmate, and told them what I did, they'd move away from me, because, quite rightly, they were saying psychology is about finding what's wrong with you. Spot the loony. And now, when I tell people what I do, they move toward me. What was good about psychology – about the $30 billion investment NIMH made, about working in the disease model, about what you mean by psychology– is that, 60 years ago, none of the disorders were treatable; it was entirely smoke and mirrors. And now, 14 of the disorders are treatable, two of them actually curable.

And the other thing that happened is that a science developed, a science of mental illness. We found out we could take fuzzy concepts like depression, alcoholism, and measure them with rigor; that we could create a classification of the mental illnesses; that we could understand the causality of the mental illnesses. We could look across time at the same people (people, for example, who were genetically vulnerable to schizophrenia) and ask what the contribution of mothering, of genetics are, and we could isolate third variables by doing experiments on the mental illnesses.

And best of all, we were able, in the last 50 years, to invent drug treatments and psychological treatments. And then we were able to test them rigorously, in random-assignment, placebo-controlled designs, throw out the things that didn't work, keep the things that actively did.

The first was moral; that psychologists and psychiatrists became victimologists, pathologizers; that our view of human nature was that if you were in trouble, bricks fell on you. And we forgot that people made choices and decisions. We forgot responsibility. That was the first cost.

The second cost was that we forgot about you people. We forgot about improving normal lives. We forgot about a mission to make relatively untroubled people happier, more fulfilled, more productive. And "genius," "high-talent," became a dirty word. No one works on that.

And the third problem about the disease model is, in our rush to do something about people in trouble, in our rush to do something about repairing damage, it never occurred to us to develop interventions to make people happier – positive interventions.

So that was not good. And so that's what led people like Nancy Etcoff, Dan Gilbert, Mike Csikszentmihalyi and myself to work in something I call, "positive psychology," which has three aims. The first is that psychology should be just as concerned with human strength as it is with weakness. It should be just as concerned with building strength as with repairing damage. It should be interested in the best things in life. And it should be just as concerned with making the lives of normal people fulfilling, and with genius, with nurturing high talent.

So in the last 10 years and the hope for the future, we've seen the beginnings of a science of positive psychology, a science of what makes life worth living. It turns out that we can measure different forms of happiness. And any of you, for free, can go to that website: [www.authentichappiness.org] and take the entire panoply of tests of happiness. You can ask, how do you stack up for positive emotion, for meaning, for flow, against literally tens of thousands of other people? We created the opposite of the diagnostic manual of the insanities: a classification of the strengths and virtues that looks at the sex ratio, how they're defined, how to diagnose them, what builds them and what gets in their way. We found that we could discover the

causation of the positive states, the relationship between left hemispheric activity and right hemispheric activity, as a cause of happiness.

I've spent my life working on extremely miserable people, and I've asked the question: How do extremely miserable people differ from the rest of you? And starting about six years ago, we asked about extremely happy people. How do they differ from the rest of us? It turns out there's one way, very surprising - they're not more religious, they're not in better shape, they don't have more money, they're not better looking, they don't have more good events and fewer bad events. The one way in which they differ: they're extremely social. They don't sit in seminars on Saturday morning.

(Laughter)

They don't spend time alone. Each of them is in a romantic relationship and each has a rich repertoire of friends.

But watch out here – this is merely correlational data, not causal, and it's about happiness in the first, "Hollywood" sense, I'm going to talk about, happiness of ebullience and giggling and good cheer. And I'm going to suggest to you that's not nearly enough, in just a moment. We found we could begin to look at interventions over the centuries, from the Buddha to Tony Robbins. About 120 interventions have been proposed that allegedly make people happy. And we find that we've been able to manualize many of them, and we actually carry out random-assignment efficacy and effectiveness studies. That is, which ones actually make people lastingly happier? In a couple of minutes, I'll tell you about some of those results.

But the upshot of this is that the mission I want psychology to have, in addition to its mission of curing the mentally ill, and in addition to its mission of making miserable people less miserable, is, can psychology actually make people happier? And to ask that question –"happy" is not a word I use very much – we've had to break it down into what I think is askable about "happy." And I believe there are three different – I call them "different" because different interventions build them, it's possible to have one rather than the other – three different happy lives. The first happy life is the pleasant life. This is a life in which you have as much positive emotion as you possibly can, and the skills to amplify it. The second is a life of engagement: a life in your work, your parenting, your love, your leisure; time stops for you. That's what Aristotle was talking about. And third, the meaningful life. I want to say a little bit about each of those lives and what we know about them.

The first life is the pleasant life, and it's simply, as best we can find it, it's having as many of the pleasures as you can, as much positive emotion as you can, and learning the skills – savoring, mindfulness – that amplify them, that stretch them over time and space. But the pleasant life has three drawbacks, and it's why positive psychology is not happy-ology, and why it doesn't end here.

The first drawback is, it turns out the pleasant life, your experience of positive emotion, is about 50 percent heritable, and, in fact, not very modifiable. So the different tricks that Matthieu and I and others know about increasing the amount of positive emotion in your life are 15 to 20 percent tricks, getting more of it. Second is that positive emotion habituates. It habituates rapidly, indeed. It's all like French vanilla ice cream: the first taste is 100 percent; by the time you're down to the sixth taste, it's gone. And, as I said, it's not particularly malleable. And this leads to the second life. I have to tell you about my friend Len, to talk about why positive psychology is more than positive emotion, more than building pleasure. In two of the three great arenas of life, by the time Len was 30, Len was enormously successful. The first arena was work. By the time he was 20, he was an options trader. By the time he was 25, he was a multimillionaire and the head of an options trading company. Second, in play, he's a national champion bridge player. But in the third great arena of life, love, Len is an abysmal failure. And the reason he was, was that Len is a cold fish.

(Laughter)

Len is an introvert. American women said to Len, when he dated them, "You're no fun. You don't have positive emotion. Get lost." And Len was wealthy enough to be able to afford a Park Avenue psychoanalyst, who for five years tried to find the sexual trauma that had somehow locked positive emotion inside of him. But it turned out there wasn't any sexual trauma. It turned out that – Len grew up in Long Island and he played football and watched football, and played bridge. Len is in the bottom five percent of what we call positive affectivities.

The question is: Is Len unhappy? And I want to say, not. Contrary to what psychology told us about the bottom 50 percent of the human race in positive affectivity, I think Len is one of the happiest people I know. He's not consigned to the hell of unhappiness, and that's because Len, like most of you, is enormously capable of flow. When he walks onto the floor of the American Exchange at 9:30 in the morning, time stops for him. And it stops till the closing bell. When the first card is played till 10 days later, when the tournament is over, time stops for Len.

And this is indeed what Mike Csikszentmihalyi has been talking about, about flow. And it's distinct from pleasure in a very important way: pleasure has raw feel – you know it's happening; it's thought and feeling. But what Mike told you yesterday– during flow ... you can't feel anything. You're one with the music. Time stops. You have intense concentration. And this is indeed the characteristic of what we think of as the good life. And we think there's a recipe for it, and it's knowing what your highest strengths are – again, there's a valid test of what your five highest strengths are – and then re-crafting your life to use them as much as you possibly can. Re-crafting your work, your love, your play, your friendship, your parenting.

Just one example. One person I worked with was a bagger at Genuardi's. Hated the job. She's working her way through college. Her highest strength was social intelligence. So she re-crafted bagging to make the encounter with her the social highlight of every customer's day. Now, obviously she failed. But what she did was to take her highest strengths, and re-craft work to use them as much as possible. What you get out of that is not smileyness. You don't look like Debbie Reynolds. You don't giggle a lot. What you get is more absorption.

So, that's the second path. The first path, positive emotion; the second path is eudaemonian flow; and the third path is meaning. This is the most venerable of the happinesses, traditionally. And meaning, in this view, consists of – very parallel to eudaemonia – it consists of knowing what your highest strengths are, and using them to belong to and in the service of something larger than you are.

I mentioned that for all three kinds of lives – the pleasant life, the good life, the meaningful life – people are now hard at work on the question: Are there things that lastingly change those lives? And the answer seems to be yes. And I'll just give you some samples of it. It's being done in a rigorous manner. It's being done in the same way that we test drugs to see what really works. So we do random-assignment, placebo-controlled, long-term studies of different interventions. Just to sample the kind of interventions that we find have an effect: when we teach people about the pleasant life, how to have more pleasure in your life, one of your assignments is to take the mindfulness skills, the savoring skills, and you're assigned to design a beautiful day. Next Saturday, set a day aside, design yourself a beautiful day, and use savoring and mindfulness to enhance those pleasures. And we can show in that way that the pleasant life is enhanced.

Gratitude visit. I want you all to do this with me now, if you would. Close your eyes. I'd like you to remember someone who did something enormously important that changed your life in a good direction, and who you never properly thanked. The person has to be alive. Now, OK, you can open your eyes. I hope all of you have such a person. Your assignment, when you're learning the gratitude visit, is to write a 300-word testimonial to that person, call them on the phone in Phoenix, ask if you can visit, don't tell them why. Show up at their door, you read the testimonial – everyone weeps when this happens. And what happens is, when we test people one week later, a month later, three months later, they're both happier and less depressed.

Another example is a strengths date, in which we get couples to identify their highest strengths on the strengths test, and then to design an evening in which they both use their strengths. We find this is a strengthener of relationships. And fun versus philanthropy. It's so heartening to be in a group like this, in which so many of you have turned your lives to philanthropy. Well, my undergraduates and

the people I work with haven't discovered this, so we actually have people do something altruistic and do something fun, and contrast it. And what you find is when you do something fun, it has a square wave walk set. When you do something philanthropic to help another person, it lasts and it lasts. So those are examples of positive interventions.

So the next to last thing I want to say is: we're interested in how much life satisfaction people have. This is really what you're about. And that's our target variable. And we ask the question as a function of the three different lives, how much life satisfaction do you get? So we ask – and we've done this in 15 replications, involving thousands of people: To what extent does the pursuit of pleasure, the pursuit of positive emotion, the pleasant life, the pursuit of engagement, time stopping for you, and the pursuit of meaning contribute to life satisfaction?

And our results surprised us; they were backward of what we thought. It turns out the pursuit of pleasure has almost no contribution to life satisfaction. The pursuit of meaning is the strongest. The pursuit of engagement is also very strong. Where pleasure matters is if you have both engagement and you have meaning, then pleasure's the whipped cream and the cherry. Which is to say, the full life – the sum is greater than the parts, if you've got all three. Conversely, if you have none of the three, the empty life, the sum is less than the parts.

And what we're asking now is: Does the very same relationship – physical health, morbidity, how long you live and productivity – follow the same relationship? That is, in a corporation, is productivity a function of positive emotion, engagement and meaning? Is health a function of positive engagement, of pleasure, and of meaning in life? And there is reason to think the answer to both of those may well be yes.

So, Chris said that the last speaker had a chance to try to integrate what he heard, and so this was amazing for me. I've never been in a gathering like this. I've never seen speakers stretch beyond themselves so much, which was one of the remarkable things. But I found that the problems of psychology seemed to be parallel to the problems of technology, entertainment and design in the following way: we all know that technology, entertainment and design have been and can be used for destructive purposes. We also know that technology, entertainment and design can be used to relieve misery. And by the way, the distinction between relieving misery and building happiness is extremely important. I thought, when I first became a therapist 30 years ago, that if I was good enough to make someone not depressed, not anxious, not angry, that I'd make them happy. And I never found that; I found the best you could ever do was to get to zero; that they were empty.

And it turns out the skills of happiness, the skills of the pleasant life, the skills of engagement, the skills of meaning, are different from the skills of relieving

misery. And so, the parallel thing holds with technology, entertainment and design, I believe. That is, it is possible for these three drivers of our world to increase happiness, to increase positive emotion. And that's typically how they've been used. But once you fractionate happiness the way I do – not just positive emotion, that's not nearly enough - there's flow in life, and there's meaning in life. As Laura Lee told us, design and, I believe, entertainment and technology, can be used to increase meaning engagement in life as well.

So in conclusion, the eleventh reason for optimism, in addition to the space elevator, is that I think with technology, entertainment and design, we can actually increase the amount of tonnage of human happiness on the planet. And if technology can, in the next decade or two, increase the pleasant life, the good life and the meaningful life, it will be good enough. If entertainment can be diverted to also increase positive emotion, meaning eudaemonia, it will be good enough. And if design can increase positive emotion, eudaemonia, and flow and meaning, what we're all doing together will become good enough.

Thank you.

(https://www.ted.com/talks/martin_seligman_on_the_state_of_psychology/transcript#t-671064)

Psychology games

Entertain, and educate, yourself with these quick and fun psychology quizzes
(Posted Aug. 10, 2013)

Many of us enjoy playing games, in part because it's fun to compete with other people but also because we gain knowledge in the process. This knowledge includes information we didn't know before as well as information about ourselves and how our own minds operate. Knowing that people often learn best when they're motivated, psychology instructors also have a strong propensity for creating games that we use to teach, and entertain, our own students.

Over the course of my teaching career, I've invented my own share of psychology-themed games, often incorporating well-known TV games shows, such as Jeopardy! and Who Wants to be a Millionaire? I've also incorporated a number of psychology websites into my teaching, both in class and in online assignments. In gearing up for the autumn semester, I rediscovered many old favourites and added a few new ones. I thought I would share them here for psychology teachers, students, and just fans of the field. Since we can't do automatic calculations on this website, you'll have to do a little work to arrive at your scores. I hope you'll find the process was worthwhile! We'll start with concepts from everyone's "favourite" area in basic psychology – conditioning. Taking this quiz will help you polish up your mastery of the terminology as well as give you insight into some of the behavioural factors that motivate you in your everyday life.

How is conditioning affecting you in your daily life?

See if you can answer these questions about common situations involving learning through conditioning.

1. You hear a song on the radio and suddenly you feel sad; you realize it was popular when you were dating your ex. What is the conditioned stimulus?
2. After listening to the constant pestering of your roommate (or lover) to clean up your desk, you finally clean it up just to make the pestering go away. What is type of reinforcement does this situation involve?
3. While passing through an intersection where you were nearly run over by a car, you feel a slight twinge of anxiety. What is the conditioned response?
4. You're standing in the kitchen and start to open a can of pet food. Your pet instantly shows up, whimpering to get fed. What type of stimulus is the sound of the can being opened?
5. Smelling diesel fuel when you're around boats makes you feel ill and seasick because on your last boat trip, you became violently ill. What was the experience of being violently ill when it first occurred?
6. You used to enjoy working out, but now you've stopped because on your last trip to the gym, you dropped a weight on your foot. What was the weight in this situation?
7. You're trying to quit smoking, and so when you go for 4 hours without smoking, you allow yourself to play 5 minutes of your favourite videogame. What is the videogame?

Answers:

1. The song (because it is associated with sadness at losing your ex)
2. Negative (because by cleaning up your desk, you made the aversive stimulus go away)
3. Your twinge of anxiety (because it is now associated with being in that intersection)
4. Conditioned (because it is associated with the food)
5. Unconditioned response (because no learning took place when you were first ill; later it became a conditioned response)
6. Punishment (because it made you stop going to the gym)
7. Positive reinforcement (because it's a reward for not smoking)

How did you score? These were tough questions but the answers suggest ways that you gain unwanted emotions and can change your habits.

How good is your attention to detail?

This next quiz should be easy, but it probably won't be. I use this quiz to demonstrate the principle that if you don't encode, you can't retrieve. To play this game honestly means that you promise not to open your wallet. All of these questions concern a

U.S. dollar bill. If you don't have any in your wallet (or are from a country using different currency), you can make up your own version of this game.

We handle money all the time, but we rarely pay attention to the details of the currency we pull out of our pockets. How many of these facts about the U.S. dollar bill can you get right?

1. Whose face is on the bill?
2. What words are on the top middle portion of the face side?
3. How many times is "United States of America" printed on the bill?
4. What words appear before "One" on the reverse side of the bill?
5. What is the symbol on left side of the reverse side of the bill?
6. What words appear at the bottom of the two circles on the reverse side of the bill?
7. Which way is the eagle facing inside the circle on the right side of the reverse side of the bill?

Answers

1. This should be easy – it's George Washington
2. Federal Reserve Note
3. Two- on the front and on the reverse
4. "In God We Trust"
5. Pyramid (with an eye on the top- bonus point)
6. "The Great Seal," on the left and "of the United States" on the right
7. To its right, the viewer's left

Maximum score is 7 plus the bonus (no half points). If you're like most people, you probably got only 1 or 2. If your score was 1-2 (or 0), it means you need to start looking more closely at what you're doing on a daily basis.

If you want to improve your memory in general, take this quick and easy test of memory for visual objects.

How do you cope?

This next quiz allows you test both your ability to reduce stress through effective coping strategies and your knowledge of how these coping strategies work. In *emotion-focused coping*, we try to reduce stress by making ourselves feel better but we don't change the situation. In *problem-focused coping*, we try to change the situation.

Start by thinking of a recent stressful event. This can be either a major life event or just a hassle (running late, losing something of value). Then rate yourself from 0 (not used) to 3 (used a great deal) on each of the following items.

1. Tried to get the person responsible to change his or her mind.
2. I tried to keep my feelings to myself.
3. Criticized or lectured myself.

4. Changed or grew as a person in a good way.
5. Stood my ground and fought for what I wanted.
6. I knew what had to be done, so I doubled my efforts to make things work.
7. Found new faith.
8. I made a plan of action and followed it.
9. Refused to believe it had happened.
10. Came up with a couple of different solutions to the problem.

Answers:

Items 1, 5, 6, 8, and 10 represent problem-focused coping.

Items 2, 3, 4, 7, and 9 represent emotion-focused coping.

In general, there's no one best way to cope. Emotion-focused coping works better in situations that you can't change, and problem-focused when there's something you can do to fix the situation. If you're using problem-focused coping for unchangeable situations, you'll be frustrated and disappointed but if you use emotion-focused coping where you could fix the problem by taking action, you stand to lose out.

(Source: https://www.psychologytoday.com/blog/fulfillment-any-age/201308/psychology-games-anyone-can-play**;** Susan Krauss Whitbourne, Ph.D. 2013 **)**

Grammar Reference

The verb *to research* in all Tense-forms (The Active Voice)

Tense	Simple	Continuous	Perfect	Perfect Continuous
Present	I (don't)research He researches She doesn't research Does he research?	I am(not) He is(not) They are(not) researching Is she researching?	I have(not) She has(not) We have(not) researched Have you researched?	I have(not) been He has(not) been They have(not)been researching Have you been researching?
Past	I, he, they researched She/we didn't research Did you/she research?	I was(not) He was(not) They were(not) researching Was she researching?	I had(not) She had(not) We had(not) researched Had you researched?	I had(not) been He had(not) been They had(not)been researching Had you been researching?
Future	I, he, we will(not) research Will they/ she research?	I, he, we will(not) be researching Will they/she be researching?	I, he, we will(not) have researched Will they/she have researched?	*I will(not) have been He will(not) have been They will(not) have been researching Will you have been researching?

* Note: this form is rarely used

The verb *to deliver* in all Tense-forms (The Passive Voice)

Tense	Simple	Continuous	Perfect	Perfect Continuous
Present	I am(not) He is(not) They are(not) delivered Is she delivered?	I am(not) He is(not) They are(not) being delivered Is she being delivered?	I have(not) She has(not) We have(not)been delivered Have you been delivered?	_____
Past	I was(not) He was(not) They were(not) delivered Was she delivered?	I was(not) He was(not) They were(not) being delivered Was it being delivered?	I had(not) She had(not) We had(not) been delivered Had you been delivered?	_____
Future	I, he, we will(won't) be delivered Will it be delivered?	_____	I, he, we will(not) have been delivered Will they, she have been delivered?	_____

Form We form the Passive Voice by using the appropriate tense of *to be* + past participle (V3/-ed)

Conditionals

If introduces a condition – something may or may not happen depending on the circumstances. Conditional sentences have a number of uses.

1. Stating a general rule

0 (Zero) Conditional can be used to say what generally happens when something else happens. Both verbs in this type of sentence are in the present simple tense:
If you **have a Degree in Psychology,** you **can work** in this sphere.

2. Speculating about the future

I Conditional is used to speculate about the future consequences of a specific event.
If I **do** the research, **I'll prove** the hypothesis.

The use of the Present tense in the first part of the sentence indicates that the situation is possible.
Note: WILL is not normally used in if/when clause
NOT If I will do the research...

3. Imagining
II Conditional
If + Past Simple is used to refer to less probable situations.
Would / *should* / *could* / *might* precede the verb in the subordinate clause.
For example:
What **would** happen if you **studied** psychology at Harward University?
It is possible to use *if I were* or *if I was* in both formal and informal styles: If I **was** rich, I **would buy** a new house.

4. Speculating about the past
III Conditional
When talking about things which did not happen in the past (and the consequences if they had happened) we use
if + past perfect together with *would* / *could I might + have* past participle:
If we **had anticipated** the crash, we **wouldn't have lost** so much money.
The presentation **might** have been better **if** she **had felt** more confident.

5. **Mixed Conditionals**
The sequence of tenses depends on the meaning that has to be conveyed.
If Robert **wasn't** so lazy he **could have been promoted**, (he is permanently lazy which explains why he failed to get promotion)
If you **had set off** earlier you **would be** there by now (this is true at the moment of speaking; the second part of the sentence does not refer to the past so *would have been* is incorrect).

Do versus **Make**

DO is used as follows:
1. DO is used when talking about **work, jobs or tasks**. Note, they do not produce any physical object.

- Have you **done** your homework?
- I have guests visiting tonight so I should start **doing** the housework now.
- I wouldn't like to **do** that job.

2. DO is used when we refer to **activities in general without being specific**. In these cases, we normally use words like thing, something, nothing, anything, everything etc.

- Hurry up! I've got things to **do**!
- Don't just stand there – **do** something!

- Is there anything I can **do** to help you?

3. We sometimes use DO to **replace a verb when the meaning is clear** or obvious. This is more common in informal spoken English:

- Do I need to **do** my hair? (do = brush or comb)
- Have you **done** the dishes yet? (done = washed)
- I'll **do** the kitchen if you **do** the lawns (do = clean, do = mow)

Make is for producing, constructing, creating or building something new.
It is also used to indicate the **origin of a product or the materials that are used** to make something.

- His wedding ring is **made** of gold.
- Wine is **made** from grapes.
- The watches were **made** in Switzerland

We also use Make for **producing an action or reaction**:

- Onions **make** your eyes water.
- You **make** me happy.
- It's not my fault. My brother **made** me do it!

We use make before certain nouns about **plans and decisions**:

- He has **made** arrangements to finish work early.
- They're **making** plans for the weekend.
- You need to **make** a decision right now.

We use Make with nouns about **speaking and certain sounds**:

- She **made** a nice comment about my dress.
- The baby is asleep so don't **make** any noise.
- Can I use your phone to **make** a call?
- Don't **make** a promise that you cannot keep.

We use Make with **Food, Drink and Meals**:

- I **made** a cake for her birthday.
- She **made** a cup of tea.
- I must go now. I have to **make** dinner.

Compare Do and Make

A: You have to **make** a cake for Simon.
B: I'll **do** it later.

Notice how in the response the verb DO is used. This is because the meaning is clear and to avoid saying "I'll make it later." which could sound repetitive.

Changes of the verb in Reported Speech

Tense	Direct Speech	Reported Speech
Present Simple	I like psychology.	She said (that) she liked psychology.
Present Continuous	I am living in London.	She said (that) she was living in London.
Past Simple	I bought a car.	She said (that) she had bought a car OR She said (that) she bought a car.
Past Continuous	I was walking along the street.	She said (that) she had been walking along the street.
Present Perfect	I haven't finished my research yet.	She said (that) she hadn't finished her research.
Past Perfect*	I had taken English lessons before.	She said (that) she had taken English lessons before.
will	I'll see you later	She said (that) she would see me later.
would*	I would help, but…"	She said (that) she would help but...
can	I can speak perfect English.	She said (that) she could speak perfect English.

could*	I could swim when I was four.	She said (that) she could swim when she was four.
should*	I should call my mother.	She said (that) she should call her mother.
might*	I might be late.	She said (that) she might be late.
must	I must study at the weekend.	She said (that) she must study at the weekend OR She said she had to study at the weekend.

* doesn't change

Occasionally, we don't need to change the present tense into the past if the information in Direct speech is still true (but this is only for things which are general facts).

Keys to Lessons

Lesson 1

Ex. 1 Psychology is the systematic, scientific study of behaviours and mental processes [8].

Ex. 2 Video
Answers:
Socrates developed a method of learning called introspection, which means to carefully examine our own thoughts and feelings.
1879, Wilhelm Wundt (father of modern psychology), established the first laboratory in Leipzig, Germany. He founded the field of psychology known as structuralism.
William James was one of the founders of functionalism. Functionalism is the study of how mental processes help organisms adapt to their environment. Influenced by Darwin's theory of natural selection.
Freud – the father of psychoanalysis, which emphasizes unconscious motives and internal conflicts in human behaviour.
J. Watson and B. Skinner turned behaviour into science, founded the school of behaviourism, which defined psychology as the scientific study of observable behaviour.
Gestalt psychology is the alternative to behaviourism and structuralism. It is based on the idea that our perceptions of objects are more than the sum of their parts.

Ex. 3 Psychology disciplines
Psychology encompasses a vast domain, and includes many different approaches to the study of mental processes and behavior.
16-a Clinical psychology includes the study and application of psychology for the purpose of understanding, preventing, and relieving psychologically-based distress or dysfunction and to promote subjective well-being and personal development.
15-b Cognitive psychology studies cognition, the mental processes underlying mental activity. Perception, learning, problem solving, reasoning, thinking, memory, attention, language and emotion are areas of research.
14-c Developmental psychology Mainly focusing on the development of the human mind through the life span, developmental psychology seeks to understand

how people come to perceive, understand, and act within the world and how these processes change as they age.

6-d Educational psychology is the branch of psychology concerned with the scientific study of human learning. It studies how humans learn in educational settings, the effectiveness of educational interventions, the psychology of teaching, and the social psychology of schools as organizations.

13-e Environmental psychology is an interdisciplinary field focused on the interplay between humans and their surroundings.

12-f Industrial and organizational psychology (I-O) applies psychological concepts and methods to optimize human potential in the workplace.

9-g Legal psychology The term has only recently come into use, and typically refers to any non-clinical law-related research. It explores such topics as jury decision-making, eyewitness memory, scientific evidence, and legal policy.

10-h Media psychology seeks an understanding of the relationships between mediated communication and the thoughts, feelings, and behaviours of the senders and recipients of the communication.

8-i Personality psychology studies patterns of behaviour, thought, and emotion in individuals, commonly referred to as personality.

7- j Social psychology is the study of social behaviour and mental processes, with an emphasis on how humans think about each other and how they relate to each other.

5-k Positive psychology is the branch of psychology that uses scientific understanding and effective intervention to aid in the achievement of a satisfactory life, rather than treating mental illness.

11- l Organizational psychology is a subfield of I-O psychology which examines the effects of work environments and management styles on worker motivation, job satisfaction, and productivity.

4-m Psycholinguistics or **psychology of language** is the study of the psychological and neurobiological factors that enable humans to acquire, use, comprehend and produce language.

2-n The psychology of art is an interdisciplinary field that studies the perception, cognition and characteristics of art and its production.

3-o Parapsychology is a field of study concerned with the investigation of paranormal and psychic phenomena which include telepathy, precognition, clairvoyance, psychokinesis, near-death experiences, reincarnation and other paranormal claims. It is often identified as pseudoscience.

1-p Political psychology is an interdisciplinary academic field dedicated to understanding politics, politicians and political behaviour from a psychological perspective.

Ex. 4

Encompass; domain; approach; application; prevent; promote; life span; intervention; interplay; recipient; patterns of behaviour; branch; comprehend; precognition; clairvoyance

Ex. 5

Noun	Verb
comprehension	comprehend
achievement	achieve
perception	perceive
intervention	intervene
investigation	investigate
approach	approach
application	apply
prevention	prevent
promotion	promote

a) It was hard work, but the sense of **achievement** is huge.
b) Early **intervention** may help children with autism to speak.
c) A common **approach** that is taken up at the drug treatment center to treat addiction is cognitive behaviour therapy.
d) Teens need to reduce their daily intake of sugar to **prevent** problems like hyperactivity.
e) Languages demand involvement by the whole personality, both for passive **comprehension** and active expression.
f) The campaign is concerned with the **promotion** of health.
A similar technique can be **applied** to the treatment of cancer.

Ex. 6 Word search.

										L		H					H
		P								O		U					I
		E								G		M					E
		R	P	S	Y	C	H	O	S	O	M	A	T	I	C	S	R
		S								T		N			O		A
		O								H		I			G		R
	B	N								E		S			N		C
	E	C								R		T			I		H
	H	E								A		I			T		Y
	A	N								P		C			I		O
	V	T								Y					V		F
	I	E							G						E		N
	O	R							E								E
	U	E							S								E
	R	D							T								D
	I								A								S
P	S	Y	C	H	O	A	N	A	L	Y	S	I	S				
	M								T								

Ex. 8

An **approach** refers to a **focus** or perspective, which may use a particular **research method** or technique. The **approaches** to understanding behavior include the biological, cognitive, behavioral, psychoanalytic, humanistic, cross-**cultural**, and, most recently, evolutionary. The biological **approach focuses** on how our genes, hormones, and nervous system interact with our **environments** to influence learning, personality, memory, motivation, emotions, and coping techniques. The cognitive **approach** examines how we **process**, store, and use information and how this information influences what we **perceive**, learn, remember, believe, and feel. The behavioral **approach** studies how organisms learn new behaviors or modify existing ones, depending on whether events in their **environments** reward or punish these behaviors. The psychoanalytic **approach** stresses the influence of unconscious fears, desires, and motivations on thoughts, behaviors, and the

development of personality traits and psychological problems later in life. The psychoanalytic **approach** is based on the belief that childhood experiences greatly influence the development of later personality traits and psychological problems. It also stresses the influence of unconscious fears, desires, and motivations on thoughts and behaviors. The humanistic **approach** emphasizes that each **individual** has great freedom in directing his or her future, a large capacity for personal growth, a considerable amount of intrinsic worth, and enormous **potential** for self-fulfillment. The cross-cultural (socio-cultural) **approach** examines the influence of **cultural** and ethnic **similarities** and differences on the psychological and social **functioning** of a **culture**'s members. The evolutionary **approach** studies how evolutionary ideas, such as adaptation and natural **selection**, explain behaviors and mental **processes**. This **approach** asserts that today's behaviors and mental **processes** can be linked to the challenges our human ancestors encountered in adapting to their **environments**. Although the evolutionary **approach** is relatively new, **research** has already examined how evolution influences a variety of behaviors and mental **processes**, such as aggression, mate **selection**, fears, depression, and decision making.

Ex. 9

Decide if the following sentences are TRUE or FALSE. Correct the false sentences.

a) The evolutionary approach is relatively new**. True**

b) The cognitive approach examines how our genes, hormones, and nervous system interact with our environments to influence learning, personality, memory, motivation, emotions, and coping techniques. **False** (it's biological approach).

c) The behavioral approach studies how organisms learn new behaviors or modify existing ones. **True.**

d) The psychoanalytic approach is based on the belief that childhood experiences influence the development of later personality traits and psychological problems. **True.**

e) The humanistic approach underestimates individual's potential for self-fulfillment. **False (**The humanistic approach emphasizes that each individual has enormous potential for self-fulfillment)**.**

f) The cross-cultural approach examines the challenges our human ancestors encountered in adapting to their environments. **False** (The evolutionary approach does).

Lesson 2.

Vocabulary

Ex. 4

a) An animal having a backbone. **vertebrate**

b) The main bone of the head. **skull**

c) Producing internal secretions that are transported around the body by the bloodstream. **endocrine**

d) Relating to the size, shape, and position of things, and the relation of objects to each other in space. **spatial**

e) Natural substances produced by our body that control important physical processes such as growth and sexual development. **hormones**

f) The fact of awareness by the mind of itself and the world. **consciousness**

Ex. 5 Find the synonyms.

Underneath – below, layer – cover, cognitive – mental, cavity – hole, fluid – liquid, memory – recollection, spinal – vertebral, sensory – sensual, consciousness – awareness, coordination – location.

Ex. 6 Read the third part of the text. Open the brackets, using the correct form of the verbs in the Active or Passive Voice.

Left brain vs. right brain

1) is divided; 2) controls; 3) are not well supported; 4) contains; 5) is also associated; 6) plays; 7) involve

Ex. 7 Comprehension check.

a) How does the human brain differ from animals brains?

The human brain has the same basic structure as other mammal brains, but is larger in relation to body size than any other brains.

b) What lobes does the cerebral cortex consist of?

The cerebral cortex consists of four lobes: the frontal lobe, the parietal lobe, the temporal lobe and the occipital lobe.

c) Which part of the brain processes sound and language?

The temporal lobe processes sound and language.

d) Which part of the brain plays an important role for spatial orientation and navigation?

The parietal lobe integrates input from different senses and is important for spatial orientation and navigation.

e) What are some important differences between the right and left hemispheres of the brain?

The left brain contains regions involved in speech and language, and is also associated with mathematical calculation and fact retrieval. The right brain plays a role in visual and auditory processing, spatial skills and artistic ability – more instinctive or creative things.

Ex. 9 Derivatives.
1) conclusions; 2) investigate; 3) sclerosis; 4) generally; 5) progressively;
6) shrinkage; 7) certainly; 8) mechanism; 9) redistribution

Ex. 10 Idioms.
a) There was a large **brain drain** from the UK to the US in the second half of the 20th century.
b) I've **made up my mind** to apply for a new job in the international company.
c) If it'll **put/set your mind at rest**, I'll phone home every day.
d) I've had that piece of news **on the brain** since hearing it on the radio this morning.

Lesson 3

Ex. 2
1) operate; 2) remember; 3) processing; 4) permanent; 5) storage.

Ex. 3 Video.
First input must be a) **encoded** and it must be b) **stored** and retained for some period of time ranging from a moment to a c) **lifetime**. It must be retrieved on demand when it is needed. There are two kinds of memory: d) **long-term** memory is a store house of everything you know about the world and yourself. It is essentially unlimited. In theory anything you have experienced which is stored in long-term memory is available for later recall.
e) Short-term memory (f) **working** memory) holds all the g) **knowledge** currently in use. All new h) **information**, things we are paying attention to right now must first pass through this narrow channel. The information we i) **retrieve** from our long-term memory must also pass through here for inspection. Short-term memory has two major j) **limitations**: only a small amount of information can be held there; the information can be held for a short period of time. Short-term memory is an essential part of our k) **psychological** present. It can only store from in average l) **seven** items.
How can we get around of these limitations of short-term memory? m) **Rehearse** the new information carefully without distractions. More information can be held if

we group items according to some n) **pattern** or something we are already familiar with. This process is called o) **chunking** (a word, a meaningful phrase or number segments).

Ex. 4 Synonyms.

A	B
essential	necessary
amount	quantity
mental	intellectual
storage	keeping
input	contribution
unlimited	unrestricted
available	accessible
narrow	thin
major	main
average	typical
familiar	aware
segment	section

Ex. 5 Opposites.

retain	release
involve	exclude
store	spend
encode	decode
place	remove
hold	loose

Ex. 6 Idioms.

1) Out of **sight**, out of **mind**.
2) The class reunion gave us a great opportunity for a trip down **memory** lane.
3) I'm sorry I forgot to post your letters. It just slipped my **mind**.
4) Please bear me in **mind** if you need someone to work on this project.
5) I don't think I know him, but his name rings **a bell**.
6) I was so embarrassed that my **mind** just went blank.

Ex. 8 Matching the headings to the paragraphs.

A-2 Two kinds of encoding; B-1 Repressed memories; C-5 Photographic memory; D-3 Flashbulb memory; E-6 Location of memories in the brain

Ex. 9 True or False.

1) Learning how to perform motor skills is encoded effortfully. (False – automatically).

2) Repression is a conscious process. (False – Repression is the process by which the mind pushes a memory of some threatening or traumatic event deep into the unconscious).

3) Flashbulb memories are emotionally arousing and have a very important meaning for the person. (True).

4) Amygdala plays a very important role in processing of emotionally intense experiences. (True).

5) The hypothalamus transfers words, facts, and personal events from short-term memory into permanent long-term memory. (False – The hippocampus transfers words, facts, and personal events from short-term memory into permanent long-term memory).

Lesson 4

Ex. 2 Reading.

"An emotion is a complex psychological state that **involves** three distinct components: a subjective experience, a physiological **response**, and a behavioral or expressive response"(Hockenbury & Hockenbury, 2007). According to some **theories**, emotions are a state of feeling that results in physical and psychological changes that influence our behavior. Emotion is also linked to behavioral tendency. Extroverted people are more likely to be social and express their emotions, while introverted people are more likely to be more socially withdrawn and conceal their emotions. Emotions **involve** different components, such as subjective experience, cognitive **processes**, expressive behavior, psychophysiological changes, and instrumental behavior. At one time, academics attempted to **identify** the emotion with one of the components: William James with a subjective experience, behaviorists with instrumental behavior, psychophysiologists with physiological changes. More recently, emotion is said to **consist** of all the components. Emotions have been described by some **theorists** as discrete and **consistent responses** to internal or external events which have a particular **significance** for the organism. Emotions are brief in duration and **consist** of a coordinated set of **responses**, which may include verbal, physiological, behavioural, and neural mechanisms.

For more than 40 years, Paul Ekman has supported the view that emotions are discrete, measurable, and physiologically distinct. Ekman's most influential work revolved around the finding that certain emotions appeared to be universally recognized,

even in cultures that were preliterate and could not have learned associations for facial expressions through media. His **research** findings led him to classify seven emotions as basic: anger, disgust, fear, happiness, sadness, surprise and contempt. Robert Plutchik agreed with Ekman's biologically driven perspective but developed the "wheel of emotions", suggesting eight primary emotions grouped on a positive or negative basis: joy versus sadness; anger versus fear; trust versus disgust; and surprise versus anticipation.

Ex. 3 Answer the questions about the text.

a) What types of people tend to express and hide their emotions?

Extroverted people are more likely to be social and express their emotions, while introverted people are more likely to be more socially withdrawn and conceal their emotions.

b) What components do emotions involve?

Emotions involve different components, such as subjective experience, cognitive processes, expressive behavior, psychophysiological changes, and instrumental behavior.

c) Are emotions longstanding?

Emotions are brief in duration.

d) What is the main finding of Paul Ekman's research?

Ekman's most influential work revolved around the finding that certain emotions appeared to be universally recognized, even in cultures that were preliterate and could not have learned associations for facial expressions through media.

e) What are the seven basic emotions according to Ekman?

Seven basic emotions: anger, disgust, fear, happiness, sadness, surprise and contempt.

f) How does the "wheel of emotions", developed by R. Plutchik, differ from the idea of seven basic emotions proposed by P. Ekman?

Robert Plutchik agreed with Ekman's biologically driven perspective but developed the "wheel of emotions", suggesting eight primary emotions grouped on a positive or negative basis: joy versus sadness; anger versus fear; trust versus disgust; and surprise versus anticipation.

Ex. 4 Video.

a) Why does P.Ekman mention Charles Darwin at the beginning of the lecture?

He says that it is where his work began. With the publication of the book "The expression of the emotions in man and animals" in 1872. Darwin claimed in that book that expressions are universal and shared with animals. But gestures are conventional, different from one culture to another.

b) What research did Ekman do to test Darwin's idea?
He travelled to find people who didn't have opportunity to learn expressions and gestures from contact with outside world or the media. He made an expedition to Guinea in 1967 and 1968. He studied people who hadn't seen magazines, films, photographs.
c) Why does P. Ekman call seven emotions universal (or basic)?
Because people looking at your face expression can identify your feelings, these seven emotions have a specific universal signal.
d) What did the experiment in Japan show?
That in private people showed the same expressions as Americans, but in public Japanese covered negative emotions with the mask of smiling. So, in private – universal expressions, in public – socially, culturally different management of emotional expression.
e) What is the Facial action coding system?
The Facial action coding system was published nearly 30 years ago. It's the first instrument that allows specifying how many different expressions a person can make; widely used in advertising, animation films.
f) What happened when the lady from the experiment and Ekman himself try to show each of the expressions on their faces?
They experienced the emotion physically in the body.
g) What is special about gestures?
They are culture specific language. Gestures have specific meaning, sometimes different in different cultures.

Ex. 5 Find all the hidden emotions in this word search.

G	R	I	E	F	R	D	R	E	W	C	P	C
C	U	A	B	C	I	K	M	E	X	R	R	A
P	E	N	T	H	U	S	I	A	S	M	I	S
J	N	T	F	F	I	I	Z	Z	P	A	D	H
G	E	I	E	U	P	H	O	R	I	A	E	D
Z	L	C	A	S	A	D	N	E	S	S	B	I
N	D	I	V	H	A	P	P	I	N	E	S	S
P	G	P	E	Z	T	R	E	G	N	A	J	G
F	E	A	R	W	K	J	L	C	S	Z	I	U
Y	H	T	A	P	A	X	I	R	X	I	J	S
G	X	I	P	N	C	O	Y	C	P	M	O	T
G	H	O	S	T	I	L	I	T	Y	L	Y	B
M	P	N	A	J	E	A	L	O	U	S	Y	F

Ex. 6 Complete the table below with the words from the puzzle.

Positive emotions	joy, enthusiasm, pride, euphoria, happiness, anticipation
Negative emotions	apathy, grief, fear, anger, hostility, sadness, jealousy, disgust

Ex. 7 Complete the column with the missing adjectives for the given nouns.

NOUN	ADJECTIVE
joy	joyful
enthusiasm	enthusiastic
pride	proud
grief	grievous
fear	fearful
anger	angry
hostility	hostile
sadness	sad
jealousy	jealous
disgust	disgusted/ing

Ex. 12 Derivatives.

Emotional Intelligence, IQ, and Personality are different

Emotional intelligence is distinct from intellect. There is no known connection between IQ and emotional intelligence. **1) Intelligence** is our ability to learn, and it's the same at age 15 as it is at age 50. Emotional intelligence, on the other hand, is a flexible set of skills that can be acquired and **2) improved** with practice. Although some people are naturally more **3) emotionally** intelligent than others, we can develop high emotional intelligence even if we aren't born with it.

4) Personality is the stable "style" that defines each of us. Personality is the result of hard-wired preferences, such as the inclination toward **5) introversion** or extroversion. Like IQ personality can't be used to predict emotional intelligence. Also like IQ, personality is stable over a lifetime and doesn't change. IQ, emotional intelligence, and personality each cover unique ground.

The **6) communication** between our emotional and rational "brains" is the physical source of emotional intelligence. The pathway for emotional intelligence starts in the brain, at the spinal cord. Our primary senses enter here and must travel to the front of our brain before we can think **7) rationally** about our experience. However, first they travel through the limbic system, the place where emotions are generated. So, we have an emotional reaction to events before our rational mind is able to engage. Emotional intelligence requires effective communication between the rational and emotional centers of the brain. "Plasticity" is the term **8) neurologists** use to describe the brain's ability to change. Our brain grows new connections as we learn new skills. The change is gradual, as our brain cells develop new connections to speed the efficiency of new skills acquired.

Using strategies to increase our emotional intelligence allows the billions of microscopic neurons to line the road between the rational and emotional centers of our brain. A single cell can grow 15,000 **9) connections** with its neighbours. Once we train our brain by repeatedly using new emotional intelligence strategies, emotionally intelligent **10) behaviours** become habits.

A review published in the journal of *Annual Psychology* [Mayer, John D (2008). *"Human Abilities: Emotional Intelligence"*. Annual Review of Psychology] found that higher emotional intelligence is positively correlated with:

1. Better social relations for children and adults.
2. Highly emotionally intelligent individuals are perceived more positively by others. Other individuals perceive those with high EI to be more **11) pleasant**, socially skilled and empathic.
3. Better family and intimate relationships.
4. Better academic **12) achievement**.
5. Better social relations during work performance and in negotiations.

6. Better psychological **13) well-being**. Emotional intelligence is positively correlated with higher life **14) satisfaction**, self-esteem and lower levels of insecurity or depression. It is also negatively correlated with poor health and behaviour.

Lesson 5

Ex. 1

Why Do I Sleep?

Why we sleep remains one of the greatest mysteries **of** nature. One reason we know sleep is important comes from studies of animals who are deprived **of** sleep. Rats can live **about** 16 days without food (water provided) and **about** 17 days without sleep. So far, the longest a human has voluntarily gone without sleep is 11 days. Two currently popular theories – the repair and adaptive theories – explain why we spend about one-third of each day asleep. The repair theory is supported **by** three findings. First, during sleep there is a marked secretion of physical growth, development (Pandi-Perumal et al., 2008). Second, during sleep there is increased production of immune cells to fight infection (Barth, 2009; M. R. Irwin et al., 2008). Third, during wakefulness there is a decline in the brain's energy stores (glycogen), which are restored during sleep and needed **for** normal functioning (Geiger, 2002). The brain needs sleep to grow, repair its immune system, and restore its energy and chemicals.

Support for the adaptive theory comes **from** observations that large predatory animals, such as lions, sleep a lot and wherever they wish, while prey animals, such as antelope, sleep far less and in protected areas. Many birds sleep with one hemisphere at a time, to guard **against** predators. Animals (humans) that rely primarily **on** visual cues and have little night vision have evolved a circadian clock for sleeping at night and thus avoid becoming prey. The adaptive and repair theories are not really at odds. Both have support but just focus **on** different reasons **for** sleep.

Ex. 2

a) circadian clock – A daily rhythmic activity cycle, based on 24-hour intervals, that is exhibited by many organisms.
b) mystery Something that is a secret
c) predator an animal that hunts other animals for food
d) secretion the process of separating and releasing a substance that fulfills some function within the organism
e) prey An animal hunted or caught by another for food

Ex.5 True/False

1) Freud was the first scientist who said that the dreams could be interpreted. **T**
2) A lot of therapists believe that dreams can represent past, present, or future fears or worries of waking life. **T**
3) Some typical characteristics of dreams: they are static and more likely to take place indoors. **F** (they involve motion such as running or walking)
4) All people see dreams in colour. **F** (dreams usually have visual imagery and are in colour in sighted people, but in people blind from birth, dreams are never visual but only tactile, olfactory (smell), or gustatory (taste))
5) The ability to remember dreams is positively correlated to verbal ability. **F** (one researcher found that the ability to remember dreams was positively related or correlated with how well one can create mental images during waking and was not related to verbal ability, which might influence dream recall).

Ex. 6

A	B
bizarre	strange
disguised	hidden
motion	movement
injury	harm
encounter	chance meeting
correlate	correspond
verbal	oral

Lesson 6

Ex. 2

noun	verb	adjective
ambiguousness ambiguity	ambiguate	ambiguous
conformer conformity conformist	conform	conformist
inhibition	inhibit	inhibited
bargain		

prejudice	prejudice	prejudiced
bias	----------	biased
emergence	emerge	emerged
obedience	obey	obedient
assumption	assume	assumed

Ex. 3

a) He demanded complete **obedience** from his soldiers.
b) The news channel has been accused of **bias** in favour of the government.
c) At $8.95, it's a **bargain**.
d) These calculations are based on the **assumption** that prices will continue to rise.
e) Many refused, including a number of the **conformist** ministers.
f) Their threats **inhibited** witnesses from giving evidence.
g) A figure **emerged** from the shadows.

Ex. 4 Video: "Asch conformity experiment".

- One after another they say the line, that you see is shorter, is the same as the **standard.**
- This study is one of the first classic studies on the **power of a group.**
- The **reality** is not the way you see it.
- Only one of the people in the group is a real **subject**.
- In this case the subject knows he is **right**, but goes along to avoid the discomfort of **disagreement** with the group.
- Sometimes we go along with the group, because what they say **convinces** us they are right. This is called informational **conformity**.
- Asch's experiment is classic. It reveales that people will **deny** what they see and submit the group **pressure**.

Ex. 6

Conforming to the norm

This study **1) shows** that many of us will deny our own senses just to conform with others. Have a look at the figure below. Compare the line on the left with the three lines on the right: A, B & C. Which of these three lines is the same length as the lonesome line on the left?

It's obviously C. And yet in a classic psychology experiment conducted in the 1950s, 76% of people **2) denied** their own senses at least once, choosing either A or

B. What kind of strong-arm psychological pressure tactics made them do this? The fascinating thing about this experiment was that its creator, renowned psychologist Solomon Asch, set out to prove the exact opposite. A previous experiment by Muzafer Sherif (see his well-known Robbers Cave experiment) had found that when people **3) were faced** with making a judgement on an ambiguous test, they used other people's judgements as a reference point. This makes perfect sense. If **4) I'm** not sure about something, I'll check with someone else. But this is only when I'm not sure. The situation is quite different when I have unambiguous information, such as when I can clearly **5) see** the answer myself. Other people's judgement should then have no effect – or at least that's what Asch thought.

The experiment

To test his theory he **6) brought** male undergraduates, one at a time, into a room with eight other people who were passed off as fellow participants (Asch, 1951). They **7) were shown** three lines with another for comparison, similar to the figure above. Participants **8) were asked** to call out which line – A, B or C – was the same length as the reference line. This procedure **9) was repeated** 12 times with participants viewing variations of the above figure. What the participants didn't realise was that all the other people sat around the table were in the game. They were all confederates who **10) had been told** by the experimenter to give the wrong answer. On half of the trials they called out the line that was too short, and on the other half the line that was too long.

The real experimental participant, who knew nothing of this, was actually the sixth to call out their answer after five other confederates of the experimenter **11) had given** the wrong answer.

Surprising findings

The results were fascinating, and not at all what Asch **12) had expected**: 50% of people gave the same wrong answer as the others on more than half of the trials. Only 25% of participants refused to be swayed by the majority's blatantly false judgement on all of the 12 trials. 5% always conformed with the majority incorrect opinion. Over all the trials the average conformity rate was 33%. Intrigued as to why participants had gone along with the majority, Asch interviewed them after the experiment. Their answers are probably very familiar to all of us: All felt anxious, feared disapproval from others and became self-conscious.

Most explained they saw the lines differently to the group but then felt the group was correct. Some said they went along with the group to avoid standing out, although they knew the group was wrong. A small number of people actually said they saw the lines in the same way as the group. The findings of this study were so startling they **13) inspired** many psychologists to investigate further. Here **14) are** a few of their findings:

Asch himself found that if the participant only had to write down their answer (while others called theirs out) conformity **15) was reduced** to 12.5%. Deutsch and Gerard (1955) still found conformity rates of 23% even in conditions of high anonymity and high certainty about the answer.

Those who are "conformers" typically **16) have** high levels of anxiety, low status, high need for approval and often authoritarian personalities. Cultural differences are important in conformity. People from cultures which view conformity more favourably – typically Eastern societies – are more likely to conform.

The variations on the original theme go on and on, examining many possible experimental permutations, but the basic finding still remains solid. While there's no surprise that we **17) copy** each other, it's amazing that some people will conform despite the evidence from their own eyes. Imagine how much easier it is to encourage conformity when ambiguity levels are much higher, as they often are in everyday life. Conformity itself is something of a mixed blessing. In many situations we **18) need** conformity. In fact, many aspects of our social lives would be much harder if we didn't conform to a certain extent – whether it's to legal rules or just to queuing in the post office.

The dangers of conformity are well-known; just take a look at the implications of Milgram's obedience experiments for a glimpse at what humans will do in the name of conformity. Sometimes it really is better if we **19) think** for ourselves rather than relying on what others say and do.

Lesson 7

Ex. 1

PART 1

The specialty of industrial-organizational psychology (also called I/O psychology) is characterized by the scientific study of human behaviour in organizations and the work place. The specialty focuses on deriving principles of individual, group and organizational behaviour and applying this knowledge to the solution of problems at work.

Specialized knowledge and training in the science of behaviour in the workplace requires **1) in-depth** knowledge of organizational development, attitudes, career development, human performance, consumer behaviour, job and task analysis and individual assessment. Industrial Organizational Psychology addresses issues of recruitment, selection and placement, training and development, performance measurement, workplace motivation and reward systems, quality of work life, structure of work and human factors, organizational development and consumer behaviour.

I/O psychologists:

- Identify training and development needs;
- Design and optimize job and work and quality of work life;
- Formulate and implement training programs and evaluate their effectiveness;
- Coach employees;
- Develop criteria to evaluate performance of individuals and organizations;
- Assess consumer preferences, customer satisfaction and market strategies.

The *industrial* side of I/O psychology generally focuses on the individuals and their relationship to the workplace. This might cover such things as job analysis, employee safety, employee training, job performance measurement, and employee hiring systems.

The *organizational* side of I/O psychology, on the other hand, focuses on the organization and workplace as a whole. Increasing productivity and maximizing the performance of the organization. For example, professionals concerned with this aspect of I/O psychology will often look at how an organization might affect a worker's individual behaviour. This might include studies on **2**) **interpersonal relationships** in the workplace, as well as workplace environments and organizational policies.

Ex. 2 Read the second part of the text. Open the brackets, using the Past Simple in the Passive Voice.

PART 2

Both sides of industrial and organizational psychology became prominent during two different points in history. Industrial psychology, for example, came about during the First World War. Theories and techniques of this type of psychology **a) were applied** in order to assign soldiers to jobs and duty stations that suited them best. The foundations of organizational psychology **b) were largely influenced** by what **c) was known** as the Hawthorne studies, which **d) were performed** in a Western Electric plant in Hawthorne, Illinois, during the 1920's and 1930's. Western Electric officials performed a number of experiments in which they raised and lowered the levels of light to see if the workers in the plant would become more or less productive. Researchers concluded that during the experiments, workers' productivity increased whether the light levels **e) were raised** or lowered. After World War II, psychologist Harry Landsberger studied these findings and concluded that the levels of light had nothing to do with increased productivity. They became more productive because the presence of the researchers at the time of the experiments made the workers feel as though someone was interested in their work.

Ex. 3 Read the first and the third parts of the text. Complete the numbered gaps, using the adjectives from the list below.

unhappy; original; white; independent; blue; interpersonal; in-depth

PART 3

Some of the main responsibilities of an industrial and organizational psychologist are to study the results of existing research or conduct **3) original** research. In order to conduct original research, an I/O psychologist might use a number of different methods. He might observe employees in action or conduct surveys, for instance. An I/O psychologist might also study workplace policies and other similar documents. By looking closely at the results of research done on workplaces and organizations, an industrial and organizational psychologist might be able to solve any number of problems. For instance, he might be able to:

- increase productivity in the workplace;
- increase the quality of a workplace;
- counsel **4) unhappy** employees on personal and work related matters;
- help rewrite company policies so that they benefit everyone involved.

While working, industrial and organizational psychologists will typically work closely with a number of different people. This might include business owners, CEOs, supervisors, and employees.

An industrial and organizational psychologist might work in several different areas and all different types of organizations. They might work in **5) blue** collar organizations, like factories, plants, and construction sites. They might also work in **6) white** collar organizations, such as office buildings. Many industrial and organizational psychologists work directly for companies in human resources departments. Others, however, might work as **7**) **independent** consultants, coming onto the scene only when they are needed.

Ex. 4 Comprehension.

a) I/O psychologists:

- Identify training and development needs;
- Design and optimize job and quality of work life;
- Formulate and implement training programs and evaluate their effectiveness;
- Coach employees;
- Develop criteria to evaluate performance of individuals and organizations;
- Assess consumer preferences, customer satisfaction and market strategies.

b) The *industrial* side of I/O psychology generally focuses on the individuals and their relationship to the workplace. This might cover such things as job analysis, employee safety, employee training, job performance measurement, and employee

hiring systems. The *organizational* side of I/O psychology, on the other hand, focuses on the organization and workplace as a whole. Increasing productivity and maximizing the performance of the organization.

c) see Part 2 of the text.

Ex. 5 Vocabulary

counsel employees; conduct research; apply knowledge; implement training programs; identify needs; assess customer satisfaction

Lesson 8

Ex. 1

Gestalt psychology is the belief that individuals perceive objects and patterns as whole units, rather than individual parts.
"The whole is greater than the sum of its parts".

Names	Dates	Principles
Max Wertheimer Kurt Koffka Wolfgang Köhler	19th century	Phi phenomenon Law of proximity Continuity Closure Similarity Pragnanz

Ex. 2

The fundamental 1) **principle** of gestalt 2) **perception** is the law of prägnanz, which says that we tend to order our experience in a manner that is regular, orderly, symmetrical, and simple. A 3) **major aspect** of Gestalt psychology is that it implies that the mind understands external stimuli as whole rather than the sum of their parts. The original famous phrase of Gestalt psychologist Kurt Koffka, "The whole is other than the sum of the parts" is often incorrectly translated as "The whole is greater than the sum of its parts", and thus used when explaining gestalt 4) **theory**. Early 20th century 5) **theorists**, such as Kurt Koffka, Max Wertheimer, and Wolfgang Köhler saw objects as 6) **perceived** within an 7) **environment** according to all of their 8) **elements** taken together as a global 9) **construct**. Through the 1930s and '40s Wertheimer, Kohler and Koffka 10) **formulated** many of the laws of grouping through the study of visual 11) **perception**.

Ex. 3

Law of Proximity. The law of proximity states that when an individual perceives **an assortment** of objects they perceive objects that are close to each other as forming a group.

Law of Similarity. The law of similarity states that elements within an assortment of objects are perceptually grouped together if they are similar to each other. This similarity can occur in the form of shape, colour, shading or other **qualities**.

Law of Closure. The law of closure states that individuals perceive objects such as shapes, letters, pictures, etc., as being whole when they are not complete. Specifically, when parts of a whole picture are missing, our perception fills in the visual **gap**.

Law of Symmetry. The law of symmetry states that the mind perceives objects as being symmetrical and forming around a center point. It is perceptually pleasing to divide objects into an even number of symmetrical parts. Therefore, when two symmetrical **elements** are unconnected the mind perceptually connects them to form a coherent shape.

Law of Common Fate. The law of common fate states that objects are perceived as lines that move along the smoothest path. We perceive elements of objects to have trends of **motion**, which indicate the path that the object is on. The law of continuity implies the grouping together of objects that have the same trend of motion and are therefore on the same path.

Law of Continuity. The law of continuity states that elements of objects tend to be grouped together, and therefore integrated into perceptual wholes if they are aligned within an object. In cases where there is **an intersection** between objects, individuals tend to perceive the two objects as two single uninterrupted entities.

Law of Good Gestalt. The law of good gestalt explains that elements of objects tend to be perceptually grouped together if they form a **pattern** that is regular, simple, and orderly. This law implies that as individuals perceive the world, they eliminate complexity and unfamiliarity so they can observe a reality in its most simplistic form.

Ex. 4

The **a) founders** of Gestalt therapy, Fritz and Laura Perls, had worked with Kurt Goldstein, a **b) neurologist** who had applied principles of Gestalt psychology to the functioning of the organism. Laura Perls had been a Gestalt psychologist before she became a **c) psychoanalyst** and before she began developing Gestalt therapy together with Fritz Perls. The extent to which Gestalt psychology influenced Gestalt therapy is disputed, however. In any case it is not **d) identical** with Gestalt psychology. On the one hand, Laura Perls preferred not to use the term “Gestalt” to

name the emerging new therapy, because she thought that the gestalt psychologists would object to it; on the other hand Fritz and Laura Perls clearly adopted some of Goldstein's work. Thus, though recognizing the **e) historical f) connection** and the influence, most gestalt psychologists emphasize that gestalt therapy is not a form of gestalt psychology.

Lesson 9

Ex. 3

a) life-enhancing - having a positive effect on one's life; makes you feel happier and more content;

b) self-expression - the expression of one's own personality, feelings, etc in painting, poetry, or other creative activity;

c) self-esteem - respect for or a favourable opinion of oneself ;

d) self-awareness - the quality of being conscious of one's own feelings, character;

e) insight - the immediate understanding of the significance of an event or action;

f) anxiety - a state of uneasiness or tension;

g) addiction- the condition of being abnormally dependent on something;

h) abuse - cruel and violent treatment to smb.;

i) trauma - any bodily injury or wound; a powerful shock that may have long-lasting effects.

Ex. 4 Video: The great things about art therapy

Forms of therapy	Notes
Theatre	in theatrical therapy improvisation games give therapist a better understanding of what their patients are like because theatre helps people to express the underlying issues hidden within the subcontious
Dance	dance therapy works similarly freestyle dance helps therapists analyse the subcontious and can be used event or tell a story specific styles can be recommended to shape the clients mind
Music	musical therapy is brokeninto listening creating and performing music effects various people differently listening can be used as assessment tool creating less people express their emotions and performing can be stress reliever since it allows people fully express themselves

Visual art	visual art is diverse people get to work with all kinds of mediums from sculpting to painting and sketching therapists can assess the subcontious by analyzing what their patients create specific shapes and colours can reveal a lot about a person

Ex. 5

1. Photo Collage G 2. Visual Journaling C 3. Mandala Drawing D 4. Active Imagination A 5. Creating Together F 6. Mask Making E 7. Family Sculpture H 8. Metaphor B

Ex. 7

abuse; addiction; concealment; contemporary descendent; crucial insight; disguise; creative endeavor; mural; psyche; resemblance; rough draft; sacred circle; ultimate goal

Ex. 9

a) [ju:] cr**u**cial
b) [ʌ] m**u**ral
c) [ɪ] ps**y**che
d) [a:] r**ou**gh

Lesson 10

Vocabulary

Ex. 3

- dysfunction – b) abnormal functioning;
- subset – a) division;
- impact – b) direct effect;
- dismiss – a) to reject;
- affirmation – a) emotional support or encouragement;
- outcome – a) result.

Ex. 4 Video

In addition to happiness positive psychologist are interested in talents, abilities, in our passions, what we are really interested in, what gets us out of bed in the morning.

Positive psychologist are also interested in institutions that enable the good life: family, schools, good workplaces, healthy communities.

I think happiness is often an indicator that you're living well, but it's not a perfect indicator.
Happiness is a product of our pursuits.
People are always looking for the shortcuts. People are always looking for the seven easy steps, the five easy ways, the magic formula.

Check yourself answers

1. Pronunciation

A.

[θ] brea**th**e
[m] **m**nemonic
[k] emergen**c**e
[ɜ:] w**i**thdrawn
[h] r**h**ythm

B.

oOo	Oo	Ooo	ooOoo	ooO	oOoo
dysfunction emergence encompass	forebrain nightmare mural	prejudiced bystander mandala	anonymity ambiguity hypothalamus	affirmation volunteer	amygdala

3. Odd word out in each line.

a) Gestalt (the rest are art therapy techniques);
b) Halo Effect (the rest are Gestalt principles);
c) Nietzsche philosopher (the rest are psychologists);
d) REM (sleeping; all other words are connected with memory);
e) happiness (all other are negative emotions).

Keys to Additional material

Lesson 2. Human brain

Ex. 2

Товстий, ожирілий – obese, худорлявий – lean, скорочуватися – shrink (in size), зменшення – reduction, міркувати – speculate, наслідки – consequences / implications, уразливий – vulnerable, оборотний – reversible, об'єм – volume, нестача – deficit, здібність – ability

Ex. 3 Synonyms and Antonyms

Overweight syn. fat, ant. slender; shrink syn. contract, ant. expand; deficit syn. lack, ant. surplus; ability syn. capacity, ant. incapability; vulnerable syn. unprotected, ant. Safe

Lesson 3. Memory (Part I)

Ex. 1

1. The Mediterranean diet can improve your memory no matter where you 1) **live** or what your age, new research 2) **shows**. A review of 18 separate studies carried out over 5 years 3) **has found** that memory was particularly positively affected by the Mediterranean diet.

People on the 'MedDiet' saw improvements in their working memory, long-term memory and visual memory, the researchers found. Positive effects 4) **were also seen** for attention and language.

Here are ten typical ingredients of the MedDiet: Green leafy vegetables, other vegetables, nuts, berries, beans, whole grains, fish, poultry, olive oil and wine.

The MedDiet also has relatively little red meat, little dairy and uses olive oil as the largest source of fat. Mr Roy Hardman, the study's first author, said: "The most surprising result was that the positive effects 5) **were found** in countries around the whole world. So regardless of being located outside of what 6) **is considered** the Mediterranean region, the positive cognitive effects of a higher adherence to a MedDiet were similar in all evaluated papers." Mr Hardman went on: "Why is a higher adherence to the MedDiet related to slowing down the rate of cognitive decline? The MedDiet 7) **offers** the opportunity to change some of the modifiable risk factors. These include reducing inflammatory responses, increasing micronutrients, improving vitamin and mineral imbalances, changing lipid profiles by 8) **using** olive oils as the main source of dietary fats, maintaining weight and potentially

reducing obesity, improving polyphenols in the blood, improving cellular energy metabolism and maybe changing the gut micro-biota, although this 9) **has not been examined** to a larger extent yet".

The benefits to memory extended to the young as well as the old, the researchers also found. Mr Hardman said: "I would therefore recommend people to try to adhere or switch to a MedDiet, even at an older age. I follow the diet patterns and do not eat any red meats, chicken or pork. I have fish two-three times per week and adhere to a Mediterranean style of 10) **eating**".

Vocabulary

Ex. 2

berries	**vegetables**	**fruit**	**meat**	**other food**
	green leafy vegetables beans		poultry red meat chicken pork	nuts whole grains fish olive oil wine dairy

Ex. 3 Matching.

1) adherence	faithful support for some cause	дотримання, прихильність
2) modifiable	capable of being changed	піддається зміні
3) inflammation	a localized protective reaction of tissue to irritation, injury, or infection, characterized by pain, redness, swelling, and sometimes loss of function.	запалення
4) micronutrient	a chemical element or substance required in trace amounts for the normal growth and development of living organisms	мікроелемент
5) imbalance	lack of proportion or relation between corresponding things	дисбаланс
6) lipid profile	a clinical chemistry assessment of the levels of fats in a patient's blood.	ліпідний профіль

7) cellular (energy)	relating to, derived from, or composed of cells.	клітинна енергія
8) gut microbiota	a complex of microorganism species that live in the digestive tracts	мікрофлора кишківника

Lesson 3. Memory (Part II)

Ex. 1 Definition of cramming

c) studying hastily for an impending examination.

Vocabulary

Ex. 2

a) **procrastination** - the action of delaying or postponing something

b) **rehearsal** - a practice or trial performance of a play or other work for later public performance

c) **retention** - the fact of keeping something in one's memory

Ex. 3 Matching

assigned material, concentrated effort, strenuous process, massed practice, stupid thing, poor habits, spacing effect, physical surroundings, mental set, comprehensive examinations, common practice

List of Irregular Verbs

Form	Simple Past Tense	Past Participle
awake	awoke	awoken
be	was, were	been
bear	bore	born
beat	beat	beat
become	became	become
begin	began	begun
bend	bent	bent
beset	beset	beset
bet	bet	bet
bid	bid/bade	bid/bidden
bind	bound	bound
bite	bit	bitten
bleed	bled	bled
blow	blew	blown
break	broke	broken
breed	bred	bred
bring	brought	brought
broadcast	broadcast	broadcast
build	built	built
burn	burned/burnt	burned/burnt
burst	burst	burst
buy	bought	bought
cast	cast	cast
catch	caught	caught
choose	chose	chosen
cling	clung	clung
come	came	come
cost	cost	cost
creep	crept	crept
cut	cut	cut
deal	dealt	dealt
dig	dug	dug
dive	dived/dove	dived
do	did	done

draw	drew	drawn
dream	dreamed/dreamt	dreamed/dreamt
drive	drove	driven
drink	drank	drunk
eat	ate	eaten
fall	fell	fallen
feed	fed	fed
feel	felt	felt
fight	fought	fought
find	found	found
fit	fit	fit
flee	fled	fled
fling	flung	flung
fly	flew	flown
forbid	forbade	forbidden
forget	forgot	forgotten
forego (forgo)	forewent	foregone
forgive	forgave	forgiven
forsake	forsook	forsaken
freeze	froze	frozen
get	got	gotten
give	gave	given
go	went	gone
grind	ground	ground
grow	grew	grown
hang	hung	hung
hear	heard	heard
hide	hid	hidden
hit	hit	hit
hold	held	held
hurt	hurt	hurt
keep	kept	kept
kneel	knelt	knelt
knit	knit	knit
know	knew	know
lay	laid	laid
lead	led	led

leap	leaped/leapt	leaped/leapt
learn	learned/learnt	learned/learnt
leave	left	left
lend	lent	lent
let	let	let
lie	lay	lain
light	lighted/lit	lighted
lose	lost	lost
make	made	made
mean	meant	meant
meet	met	met
misspell	misspelled/misspelt	misspelled/misspelt
mistake	mistook	mistaken
mow	mowed	mowed/mown
overcome	overcame	overcome
overdo	overdid	overdone
overtake	overtook	overtaken
overthrow	overthrew	overthrown
pay	paid	paid
plead	pled	pled
prove	proved	proved/proven
put	put	put
quit	quit	quit
read	read	read
rid	rid	rid
ride	rode	ridden
ring	rang	rung
rise	rose	risen
run	ran	run
saw	sawed	sawed/sawn
say	said	said
see	saw	seen
seek	sought	sought
sell	sold	sold
send	sent	sent
set	set	set
sew	sewed	sewed/sewn

shake	shook	shaken
shave	shaved	shaved/shaven
shear	shore	shorn
shed	shed	shed
shine	shone	shone
shoe	shoed	shoed/shod
shoot	shot	shot
show	showed	showed/shown
shrink	shrank	shrunk
shut	shut	shut
sing	sang	sung
sink	sank	sunk
sit	sat	sat
sleep	slept	slept
slay	slew	slain
slide	slid	slid
sling	slung	slung
slit	slit	slit
smite	smote	smitten
sow	sowed	sowed/sown
speak	spoke	spoken
speed	sped	sped
spend	spent	spent
spill	spilled/spilt	spilled/spilt
spin	spun	spun
spit	spit/spat	spit
split	split	split
spread	spread	spread
spring	sprang/sprung	sprung
stand	stood	stood
steal	stole	stolen
stick	stuck	stuck
sting	stung	stung
stink	stank	stunk
stride	strode	stridden
strike	struck	struck
string	strung	strung

swear	swore	sworn
sweep	swept	swept
swell	swelled	swelled/swollen
swim	swam	swum
swing	swung	swung
take	took	taken
teach	taught	taught
tear	tore	torn
tell	told	told
think	thought	thought
thrive	thrived/throve	thrived
throw	threw	thrown
thrust	thrust	thrust
understand	understood	understood
uphold	upheld	upheld
upset	upset	upset
wake	woke	woken
wear	wore	worn
weep	wept	wept
wind	wound	wound
win	won	won
wring	wrung	wrung
write	wrote	written

Glossary

adj = adjective
pl = plural
n = noun
v = verb

A

Abuse *v* ображати, ганьбити; *n* жорстоке поводження
accumulate *v* накопичувати
acronym *n* акронім, абревіатура
addiction *n* згубна звичка, схильність
affirmation *n* твердження
amnesia *n* амнезія, втрата пам'яті
amygdala *n* мигдалина
annoyed *adj* роздратований
anonymity *n* анонімність
anticipation *n* очікування, сподівання
antidepressant *n* антидепресант
antioxidant *n* антиоксидант
ambiguity *n* двозначність, неясність
apathy *n* апатія, байдужість
apnea *n* припинення дихання
application *n* звернення, використання
approach *n* підхід
assortment *n* асортимент
assumption *n* припущення

B

Bargain *v* домовлятися, укладати угоду; *n* домовленість, вигідна покупка
behavioural *adj* поведінковий
benzodiazepines *n* бензодіазепіни
bizarre *adj* дивний
boost *n* підвищення; *v* піднімати
bout *n* припадок, напад
branch *n* галузь
brainstem *n* стовбур мозку
bystander *n* очевидець, свідок

C

Capacity *n* ємкість, здібність, здатність, обсяг
cataplexy *n* каталепсія, емоційна астенія
cerebellum *n* мозочок
cerebral cortex *n* кора головного мозку
cerebrum *n* мозок
chunking *n* розбивка на частини
circadian rhythm *n* добовий ритм
clairvoyance *n* ясновидіння
closure *n* завершення
coach *n* тренер
cognitive *adj* когнітивний
cognitive dissonance *adj/ n* когнітивний дисонанс; внутрішній конфлікт
common fate *n* спільна доля
company policies *n* політика компанії
comprehend *v* зрозуміти
conceal *v* приховати
concealment *n* приховування
conformity *n* підпорядкування
consciousness *n* свідомість
construction site *n* будівельний майданчик
consumer behavior *n* поведінка споживача
consumption *n* споживання
contemporary descendent *n* сучасний нащадок
contempt *n* презирство
continuity *n* безперервність,

послідовність
correlate *v* корелювати, бути у співвідношенні
counsel *v* радити
cranial nerves *n* черепні нерви
cross-cultural *adj* міжкультурний
crucial *adj* вирішальний
customer satisfaction *n* задоволеність клієнтів
D
Deny *v* заперечувати
despaired *adj* відчайдушний
deteriorate *v* погіршати
disappointed *adj* розчарований
disapproval *n* несхвалення, осуд
discrete *adj* розрізнений, переривчастий
disguise *v* маскувати
disgust *n* відраза
dismiss *v* відхиляти, звільняти
domain *n* галузь, ділянка
drum *n* барабан
dysfunction *n* дисфункція
E
Effortful *adj* потребуючий зусиль
embarrassed *adj* зніяковілий
emergence *n* поява
emotional intelligence *n* емоційний інтелект
empathy *n* співпереживання
enactment *n* дія, введення в дію
encoding *n* кодування
encounter *n* зустрі;, *v* наштовхуватися
endeavor *n* зусилля, старання*; v* прагнути
enhance *v* посилити
encompass *v* охоплювати
environment *n* середовище
excited *adj* збуджений
extrinsic *adj* зовнішній
extroverted *adj* екстравертний
F
Figure-ground perception *n* сприйняття фігури та фону
flashbulb memories *n pl* спалахи пам'яті
forebrain *n* передній мозок
frontal lobe *n* лобна доля
frustrated *adj* розчарований
functionalism *n* функціоналізм
G
Gestalt psychology *n* Гештальт психологія
gratitude *n* вдячність
grey matter *n* сіра речовина
grief *n* смуток, печаль
guilty *adj* винуватий
gustatory *adj* вкусовий
H
Halo effect *n* ефект ореолу
hemispheres *n pl* півкулі
hindbrain *n* задній мозок
hippocampus *n* гіпокамп
hiring system *n* система найму
hostility *n* ворожість
human performance *n* працездатність людини
humanistic *adj* гуманістичний
hypocretins *n pl* гіпокретин
hypothalamus *n* гіпоталамус
I
Impact *n* вплив
implications *n pl* наслідки
inhibition *n* стримування
insight *n* прозорливість
insomnia *n* безсоння
interplay *n* взаємодія
intersection *n* перетин
intervention *n* втручання
intrinsic *adj* внутрішній

introverted *adj* інтровертний

J

Jealousy *n* заздрість, ревнощі

K

Knowledgeable *adj* добре обізнаний

L

Life-enhancing *adj* підбадьорюючий

life span *n* тривалість життя

limbic system *n* лімбічна система

long-term (memory) *adj* довгострокова (пам'ять)

M

Mammal *n* ссавець

medulla oblongata *n* довгастий мозок

midbrain *n* середній мозок

mindfulness *n* уважність

mnemonic *adj* мнемонічний

motion *n* рух

motor skills *n pl* рухові навички

multitasking *n* багатозадачність

muscles *n pl* м'язи

mural *n* фреска

N

Nap *n* дрімота; *v* дрімати

narcolepsy *n* нарколепсія, підвищена сонливість

O

Obedience *n* слухняність, покірність

occipital lobe *n* потилична доля

olfactory *n* органи нюху

organizational behaviour *adj /n* організаційна поведінка

outcome *n* результат

P

Parapsychology *n* парапсихологія

parietal lobe *n* тім'яна доля

pattern *n* модель

pattern of behaviour модель поведінки

perceive *v* сприймати

performance measurement *n* вимірювання продуктивності

permanent *adj* постійний

permutation *n* перестановка

pituitary gland *n* гіпофіз

pons *n* міст

positive mindset *adj /n* позитивний настрій

precognition *n* передбачення

prejudice *n* упередження

preliterate *adj* допісьменний

prevent *v* запобігти

pride *n* гордість

processing *n* обробка

productivity *n* продуктивність

promote *v* сприяти

proud *adj* гордий

proximity *n* близькість

psyche *n* психіка

psychiatric *adj* психіатричний

psychoanalytic *adj* психоаналітичний

psycholinguistics *n* психолінгвістика

Q

Quality *n* якість

quantity *n* кількість

questionnaire *n* анкета

R

Recipient *n* одержувач, реципієнт

recruitment *n* набір

rehabilitation *n* реабілітація

REM sleep *n* сон зі швидким рухом очей

repressed memory *adj/n* пригнічена пам'ять

resemblance *n* схожість

responsibilities *n* обов'язки

retain *v* залишати, утримувати

retrieving *n* вилучення

rough drafts *n* чорновий проект, ескіз

S

Sacred circle *adj /n* священне коло
sadness *n* смуток
satisfied *adj* задоволений
sedatives *n pl.*седативні засоби
self-awareness *n* самосвідомість
self-esteem *n* самоповага
self-expression *n* самовираження
sensory *adj* сенсорний, чутливий
short-term (memory) *adj /n* коротко-часна (пам'ять)
similarity *n* схожість
sketchbook *n* альбом для замальовок
sleepwalking *n* лунатизм
sound mind *adj /n* здоровий розум
spatial orientation *adj /n* орієнтація у просторі
storage *n* зберігання
subset *n* різновид
surprised *adj* здивований
symmetry *n* симетрія
synergy *n* синергія

T

Temporal lobe *n* скронева доля
thalamus *n* таламус
therapist *n* терапевт
traumatic event *adj /n* травматична подія
treasure *n* скарб
treatment *n* лікування

U

Ultimate goal *adj /n* кінцева мета
unconscious *adj* несвідомий, непритомний

V

Ventricles *n pl.* шлуночки головного мозку
vertebrate *adj* хребетний
virtue *n* доброчесність
volunteering *n* волонтерство

W

Weird *adj* дивний
withdrawn *adj* замкнений, усамітнений
worried *adj* стурбований

Z

Zeigarnik effect *n* ефект Зейгарнік

Index

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