Vira	inia Ev	ans o
		10
Jenr	ny Doo	ley



Express Publishing

0010111		0011101010
		0011101010
0010111	0010	01010101010



111 0 111 0

0011101010 0011101010 0011101010

Student Book & Workbook

SKILLS





1101010		011101
1101010	01010	011101
1101010	01010	011101
1101010	01010	011101



Student Book & Workbook

Virginia Evans – Jenny Dooley



Contents

	Unit	Vocabulary	Skills/Functions	Writing/Learning Evidence
4		Physical World	(pp. 5-16)	
1	forces of nature	 natural disasters 	scanningcomplete a gapped text	• a summary
2	the universe	 celestial bodies 	set a purpose for readingavoid repetition	 a paragraph describing feelings
3	human biology	 human anatomy 	identify author's purposeidentify main ideas	 a paragraph making speculations
4	elements	• chemistry elements	use prior knowledgemultiple choice	review informationidentify author's purpose
5	writing skills	• linkers	topic/supporting sentenceslinking ideas	a for-and-against essayintroduce arguments
Prog	ress Check 1 (pp. 12	7-18)		
4	MODULE 2 The	Digital Age (pp. 19	2-28)	
1	advanced technology	 gadgets 	 predict content sentence completion increase vocabulary	identify main ideas in paragraphsa summary
2	artificial intelligence	• abilities	activate prior knowledgerhetorical questions	 a summary a paragraph making speculations
3	cellphones	 parts of a cellphone 	 predict content of text multiple choice identify fact/opinion sentences 	a summarydevelop critical thinking skills
4	writing skills	• giving opinions	identify viewpoints/reasonsexpress opinion	an opinion essayhow to start/end essays
Prog	ress Check 2 (pp. 29	P-30)		
4	MODULE 3 Hist	ory, Politics, and	Society (pp. 31-40)	
1	world history	• war	 complete a gapped text use collocations	• a summary
2	urbanization	• urban drift	T/F/DS statementsmake inferences	a summaryanalyze a quotation
3	politics	 systems of government 	predict contentmultiple matching	 express opinion
4	writing skills	• appearance/character	give biographical details	 a biography
Prog	ress Check 3 (pp. 41	-42)		
-0		A NUTRITION (pp. 4	43-52)	
1	food preparation	 cooking methods 	 predict content answer comprehension questions T/F statements 	 a paragraph discussing how information in a text can be of use analyze a quotation
2	genetic engineering	 food groups 	 activate prior knowledge match headings to paragraphs answer questions 	 complete a summary research a topic
3	fish farming	 types of fish 	 predict content multiple choice	 a summary a paragraph speculating on a topic
4	writing skills	 make suggestions 	make suggestionssummarize an opinion	 a letter to the editor making suggestions
Prog	ress Check 4 (pp. 53	3-54)		

Progress Check 4 (pp. 53-54)

	Unit	Vocabulary	Skills/Functions	Writing/Learning Evidence
Art & Design (pp. 55-64)				
1	art	 art movements 	 activate prior knowledge multiple choice identify main ideas in paragraphs 	take notesanalyze a quotation
2	3D art	 art materials 	 arouse interest T/F statements answer questions 	 a summary a paragraph commenting on a topic
3	design	• materials	predict contentmultiple choicedescribe a sculpture	 develop research skills & make a presentation analyze a quotation
4	writing skills	 adjectives 	use the senses in descriptionsanalyze a rubric	 an article describing a place/building use adjectives in descriptions

Progress Check 5 (pp. 65-66)

-		Environment (pp.	67-76)	
1	water	• water facts	 set a purpose match paragraphs to headings correct sentences 	 develop research skills & make a presentation a paragraph giving reasons
2	overpopulation	• environmental issues	activate prior knowledgecomplete sentencesmatch headings to paragraphs	• a summary
3	recycling	 things to recycle 	 predict content multiple matching match main ideas to paragraphs	 take notes & give a presentation
4	writing skills	 make suggestions 	 identify topic sentences match suggestions to results develop supporting sentences 	 an essay providing solutions to a problem express result

Progress Check 6 (pp. 77-78)

Workbook

Listening Practice (pp. 79-80)

Grammar Bank (pp. 81-115)

- Present tenses (p. 81)
- -ing form/(to) infinitive (p. 85)
- Future tenses (p. 89)
- Comparatives/Superlatives Like/As (p. 92)
- Modal verbs (p. 94)
- Past tenses (p. 97)

- A/An The (p. 101)
- Some/Any/No & Compounds, Each/Every, (A) few/ (A) little, A lot of/Lots of/Much/Many (p. 102)
- Conditionals/Wishes (p 103)
- Passive voice (p. 106)
- Reported speech (p. 109)
- Relative clauses (p. 113)

Language Review (LR1-LR-25)

Word List (WL1-WL9)

American English – British English Guide

Rules for Punctuation

Irregular Verbs

The Physical World

Before you start ...

- What was your summer vacation like? Tell the class.
- What are your plans for this academic/school year?

What's in the module?



Vocabulary

- natural disasters
- celestial bodies
- anatomy of the human body
- elements in the periodic table

Skills & Strategies

- scan a text
- set a purpose for reading
- identify the author's purpose
- identify main ideas in paragraphs
- predict content using prior knowledge

Reading Skills

- complete gapped texts
- multiple matching
- identify pronoun references
- reading comprehension
- read for specific information (T/F)
- multiple choice

Writing Skills

summarize a text

- describe your feelings
- analyze rubrics
- use topic sentences
- develop paragraphs
- use linkers
- write a for-and-against essay



Speaking

- summarize a text
- give a presentation on a topic
- present main points
- agree/disagree on a topic
- describe impressive moments

Find the page numbers for ...

- a sketch of the human body
- chemical symbols

Forces of Nature

Vocabulary Natural disasters

GEOLOGY

Listen and say. Have you heard of any of these disasters recently? Where did they occur? What happened? Tell the class.

Reading Scanning

Scan the text. What is it about?
a) a specific earthquake?
b) why earthquakes happen?
c) how to protect ourselves
in an earthquake?
Listen and check.

EARTHQUAKES: A FORCE OF NATURE

On March 11, 2011, a 33-foot-high tsunami hit northern Japan causing the country's worst destruction and loss of life since World War II. The tsunami was triggered by an earthquake in the Pacific Ocean. Measuring 9.0 on the Richter Scale, the earthquake was the sixth largest ever recorded by seismologists. **O** <u>C</u> Not only that, it shifted the Earth's axis by 10 inches. This deviation led to a shortening of the length of a day by 1.8 microseconds!

Earthquakes hit the headlines only rarely, but events like Japan's megaquake serve to remind us of their truly aweinspiring power. Every year, some 3 million earthquakes take place on the planet – equivalent to about 8,000 a day or one every 11 seconds. 1

Earthquakes happen because the Earth's crust is not contiguous. Rather, like a boiled egg with a broken shell, it is separated into about 20 pieces. These pieces are called tectonic plates.

The theory that explains the movement of these plates on the earth's surface is known as plate tectonics. According to plate tectonics, the Earth's plates are not stationary but are instead moving very slowly around the planet. 2 The result is that sometimes the plates crash into each other, sometimes they move away from each other, and sometimes they slide past each other. 3

Take, for example, plates that are sliding horizontally past each other. Because the edges of the plates are rough, they get stuck. However, even though the edges get stuck, the rest of the plate keeps moving. $\boxed{4}$ At some point (i.e.,



hailstorm



tornado



lightning strike

when the plate has moved far enough), the edges suddenly become unstuck. The sudden unsticking and jerking apart of the plates releases the built-up pressure in an instant. The result is an earthquake.

There is a special region of the globe known as the Pacific Ring of Fire. **5** In the Pacific Ring of Fire, plates are crashing into each other constantly.

When two plates crash together, one of two things can happen. Either one plate is forced to slide beneath the other one, or the two plates push against each other to form mountains and volcanoes. In either case, earthquakes can result.

Earthquakes in the Pacific Ring of Fire result from plates colliding and slipping under each other. **6** It was the Pacific Plate sliding under the Eurasian Plate that caused the earthquake and tsunami in Japan on that fateful day in March 2011.

Check these words

earthquake

hit, destruction, trigger, shift, axis, deviation, awe-inspiring, Earth's crust, contiguous, stationary, slide past, rough, get stuck, jerk apart, release, built-up pressure, in an instant, the globe, collide, slip, fateful day





STUDY SKILLS

Gapped texts

Read the text quickly to see what it is about. Read it again sentence by sentence. Pay attention to the words before and after each blank as they will help you decide on your answer. Read the completed text again to see if it makes sense.

Completing a gapped text

- 3 a) The article in Ex. 2 is about earthquakes. Seven sentences have been removed from it. Choose from the sentences (A-H) the one which fits each blank (1-6). There is one extra sentence you don't need to use. There is an example at the beginning (0).
 - A The result is an enormous build-up of pressure.
 - B It is the movement of plates at their edges that causes earthquakes.
 - C So great was its power that it caused the entire island of Japan to move 16 feet eastwards.
 - D It is an explanation for mountains and volcanoes, not just earthquakes.
 - E The sudden drop of one plate below another, when it occurs under the sea, can generate a tsunami.
 - F Most are so small they go unnoticed, but a few (about 20 a year) are big enough to cause damage.
 - G / It is here that an incredible 90% of all earthquakes (and 80% of the world's largest earthquakes) occur.
 - H Because the plates are interconnected, no single plate can move without affecting the others.

b) Which words helped you decide on each blank? Compare with your partner.

- Fill in: trigger, recorded, shift, jerk apart, collide.
 - 1 It was the most destructive earthquake in the last 100 years.
- 2 An earthquake can fires and damage a lot of buildings.
- 3 When tectonic plates _____ they cause earthquakes.
- 4 When the plates _____, pressure is released and this causes an earthquake.
- 5 A 9.0 earthquake can _____ the Earth's axis.

Checking understanding

5

Complete the sentences. Compare with your partner.

- 1 The tsunami that hit Japan on March 11, 2011, was the result of _____.
- 2 The earthquake measured _____
- 3 Because of the earthquake, the Earth's axis

.

- 4 Not all earthquakes cause _____.
- 5 Earthquakes happen because the Earth's plates
- 6 When the edges of tectonic plates become unstuck, the _____
- 7 The Pacific Ring of Fire is the place where
- 8 A tsunami is caused when

Speaking & Writing

- 6 Summarize the text using the words in the Check these words box (50-60 words). Tell your partner.
 - 😳 😳 🚺 Collect information about a force of nature from Ex. 1. Present it to the class.

QUOTATION

"Nature cannot be tricked or cheated. She will give up to you the object of your struggles only after you have Napoleon Hill, American author paid her price."

The Universe HOW DID IT ALL BEGIN?

Vocabulary Celestial bodies

PHYSICS

a) C Listen and say. Then, read the dictionary entries.

planet /plænt/ (n) a large round object in space that moves around a star. e.g., the Earth

asteroid /æstəroid/ (n) a small celestial s body that moves around the sun (mainly between the orbits of Mars and Jupiter)

comet /kpimit/ (n) a bright object with a long tail that travels around the sun

galaxy /gæləksı/ (n) a large group of stars and planets that extends over many billions of light years

star /sta:/ (n) a large ball of burning gas in space

meteor /mi:tiə/ (n) a small mass traveling through space

moon /mu:n/ (n) any planet's natural satellite

constellation /konstileɪʃən/ (n) a group of stars that form a pattern and are named after it

> b) Can you name the planets in our solar system? Listen and check.

Throughout history, mankind has wondered about the origin of the universe. Has it existed eternally with no beginning or end, or was it created at some point in time? Physicists still can't say for certain how the universe came to exist, or why it exists, but they have several theories ...

A The Big Bang Theory

Before the 20th century, people believed that the universe had existed forever, and had looked the same way forever. But in 1929, astronomers made a startling discovery. Looking through their telescopes they noticed that the galaxies in our universe are actually moving away from each other at enormous speed – our universe is expanding!

If our universe is expanding, then logically at some point in the past the entire universe was contained in a single point in space. The Big Bang

Theory states that about 14 billion years ago, our universe exploded out of nowhere from a single point and <u>it</u> has been expanding ever since to form the universe we know today. Our universe, in other words, has not existed forever. It had a definite beginning. Before our universe came into existence there was nothing...no time, space, matter, energy ... nothing! The Big Bang created time, space and matter.

The Big Bang Theory is currently the most widely accepted hypothesis for the origin of the universe. However, <u>it</u> still leaves many questions unanswered. For instance, it doesn't explain *why* the big bang happened in the first place.

в) The Cyclical Universe Theory

The Cyclical Universe Theory addresses the question, "What caused the big bang?" The answer it gives is the collapse and expansion of a prior universe. According to the Cyclical Universe Theory, our universe began when another universe collapsed violently into a single point then exploded out again. Trillions of years from now, our own universe will stop expanding and begin to contract. Eventually, it will also collapse into a single point and explode out again giving rise to a new universe. Our universe is therefore just the latest in an endless series. Countless universes have preceded this universe and countless others will follow it. Space and time had no beginning. Cycles of expansion, contraction, collapse, and explosion have been going on forever.

STUDY SKILLS

Setting a purpose

Before you read a text, think what you already know about the topic. This will help you think what else you would like to learn about it.

Check these words

eternally, exist, startling discovery, expand, logically, explode, widely accepted, hypothesis, collapse, prior, trillion, endless, countless, expansion, contraction, infinite, motivation

c The Multiple Universe Theory

According to the Multiple Universe Theory, what we have been calling the universe is actually nothing like we thought! It is just a single bubble in an infinite number of universes. We are actually living in a multiverse consisting of trillions of universes. The multiverse has existed forever, and each universe in it is different.

The main motivation behind the Multiple Universe Theory is to provide an explanation as to why our universe seems to be so perfectly suited towards supporting life. For many people, this fact demands an explanation. They feel it is too much of a coincidence that the conditions in our universe just happen to be right to make life possible.

The Multiple Universe Theory states that there is nothing mysterious about this. There are trillions upon trillions of universes in the multiverse and therefore at least a few of <u>them</u> will have conditions that make life possible. We simply happen to be living in one of these universes.

Reading

Setting a purpose

What do you know about the origin of the universe? What would you like to know about it? Write down two questions.

Listen and read the text. Can you answer your questions?

Multiple Matching

- 3 Read the article again, then for questions 1-8, choose from theories A-C. The theories may be used more than once. Which theory/theories:
 - 1 say(s) space, time, and matter have existed forever with no beginning or end?
 - 2 do most physicists support?
 - 3 suggests a reason why our universe has the ideal conditions for supporting life? _
 - 4 says our universe came from an earlier universe?
 - 5 say only one universe exists at any one time?
 - 6 is supported by evidence we can see? _
 - 7 says our universe will eventually disappear?
 - 8 says our universe we are living in is unique?

Fill in: expanding, exploded, collapse, prior, infinite.

- 1 Astronomers have discovered that our universe has been ______ since it was formed.
- 2 Many universes may have existed ______ to the one we are living in.
- Our universe might actually be just one of a(n)
 ______number of other universes.
- 4 One day our universe may _____ and give rise to a new universe.
- 5 According to the Big Bang Theory, our universe ______into existence from a single point.

STUDY SKILLS

Avoid repetition

4

Writers use pronouns to avoid repeating the same nouns again and again. Identifying the nouns they refer to will help you understand the text better.

Identifying pronoun references

5 Cook at the underlined pronouns in the text. Decide which noun each one refers to.

Speaking & Writing Checking understanding

a) Write one question for each theory in the text.
 Write the answers on a separate piece of paper.

How did the universe start according to the Big Bang Theory?

b) COC Swap papers and answer your partner's questions. Check with your partner.

7 THINK Read the quotation. Imagine you were with Neil Armstrong. In three minutes write a few sentences describing your feelings at that specific moment. Tell your partner. Discuss.

QUOTATION

"It suddenly struck me that that tiny pea, pretty and blue, was the Earth. I put up my thumb and shut one eye, and my thumb blotted out the planet Earth. I didn't feel like a giant. I felt very, very small."

Neil Armstrong, U.S. astronaut

1.3 Human Biology

Vocabulary

Human anatomy

Listen and repeat.



Reading Identifying the author's purpose

STUDY SKILLS

Identifying the author's purpose

Authors write in order to inform, entertain, and persuade. Identifying the author's purpose helps us understand the text better.

2 Read the title then skim the text. What is the text about? What does the author want us to know about the topic?

Identifying main ideas

3 Find the main idea in each paragraph. Compare with your partner.

STUDY SKILLS

Identifying main ideas

Paragraphs are usually laid out so that each one contains a main idea. Identifying the main idea helps us to understand what the paragraph is about. The main idea is usually found in the first or the last sentence of the paragraph. These sentences are called topic sentences.

CAN WE PUT AN END TO AGING?

The results of a recent experiment to slow the effects of the aging process in mice amazed scientists in Boston, USA. The scientists increased the amount of an enzyme called telomerase in the cells of the mice. Telomerase is an important enzyme because it repairs DNA. With increased telomerase in their cells, the mice's fertility improved, their fur began to look healthier, even their brains worked better. The scientists were hoping simply to slow the aging process in mice but, much to their surprise, they actually reversed it! 2 Could we use the same process to stop humans from aging? It's possible, but it wouldn't be without risks. Scientists believe increasing the level of telomerase in human cells would put people at greater risk of cancer. What's more, it's unlikely that simply increasing telomerase would be enough to keep us young because hundreds of enzymes are involved in the aging process.

Although scientists don't yet know exactly how and why we age, they have several theories. One theory is that as time passes, our bodies become less efficient at removing toxins from our cells. One way to try to stop the aging process is to keep cells as clean as possible. Scientists in New York successfully used this technique to restore the livers of old

Check these words

aging process, enzyme, cell, repair, fertility, process, reverse, efficient, toxin, technique, restore, breed, ability, protein, youthful, combat, artificially, development, prevent, serving, compare, wrinkles, fantasy mice. The researchers bred special mice that did not lose their ability to remove damaged proteins from their livers. When these special mice were two years old, their livers were as healthy as the livers of ordinary one-month old mice. Although these special mice with youthful livers didn't live any longer than ordinary mice, scientists believe this study could eventually lead to ways of protecting humans from the diseases we get in old age.

• Of course, if scientists ever do succeed in developing drugs that combat the aging process we will need to ask ourselves whether it is right to use them. For instance, should we keep people young and healthy artificially when, already, there are far too many people on the planet?

What if you can't wait for these future developments though? Well, scientists may not yet be able to stop you from aging, but they do know a way you can keep yourself looking younger - tomatoes! Tomatoes contain a substance called lycopene which helps prevent one of the main causes of skin aging: sun damage. Researchers in the UK asked a group of people to eat a serving of cooked tomatoes every day for 12 weeks. They then compared their skin to the skin of people who hadn't eaten any tomatoes. The skin of the people who ate the tomatoes was much less likely to burn in the sun. Eating tomatoes also increases the levels of procollagen in your skin. Procollagen helps keep skin firm, so the more you have in your skin, the less likely you are to get wrinkles. So while living forever is still just a fantasy, nature has at least provided a way for us to keep looking as young as possible, for as long as possible!

Comprehension questions

Δ

Read the text and answer the questions.

- 1 What physical change did the Boston scientists see in the mice in their experiment?
- 2 What problem is there with performing the Boston procedure on people?
- 3 What builds up in our cells as we age?
- 4 What did the New York scientists achieve?
- 5 What global problem does the writer mention that could be affected by anti-aging treatments?
- 6 How does eating tomatoes help us achieve younger-looking skin?
- 7 Why might reversing the aging process one day become a reality?

Fill in: reversed, serving, combat, efficient, enzymes.

5

6

- Scientists are trying to find ways to ______ the aging process and keep people looking young.
- 2 Our bodies are more _____ at removing toxins from our cells when we are young, than when we are old.
- 3 Eating a daily _____ of cooked tomatoes
 can help protect your skin against sun damage.
- 4 Scientists haven't just slowed down the aging process in mice; they have ______ it.
- 5 Telomerase is just one of hundreds of ______ involved in the aging process.

Checking understanding

Read the text again and mark the sentences T (true) or F (false). Correct the false statements.

- 1 Telomerase is an enzyme that fixes damaged DNA.
- 2 There is no telomerase in human cells.
- 3 Scientists have bred mice that don't have proteins in their livers.
- 4 The diseases of old age may be the result of toxins building up in cells.
- 5 Lycopene increases your skin's sensitivity to the sun.

Speaking & Writing

- 7 **THINK** In three minutes, write four things that you learned from the text. Tell the class.
- 8 **THINK** How do you think your life today would be different if scientists had found a way to stop people from aging? In three minutes, write a few sentences. Tell the class. Discuss.

QUOTATION

"I think your whole life shows in your face and you should be proud of that." *Lauren Bacall, American actress*

Vocabulary Chemistry elements

CHEMISTRY

Elements

Match the chemical symbols (1-8) to the correct element (a-h).

1	0	a	nitrogen
2	С	b	gold
3	Fe	С	oxygen
4	Ν	d	carbon
5	Na	е	hydrogen
6	Ag	f	sodium
7	Au	g	silver
8	Н	h	iron

Reading

Using prior knowledge

STUDY SKILLS

Using prior knowledge

Before you read a text, think what you know about the topic. This will help you read the text more easily.

2 What do you know about oxygen? Which of the sentences below are true?

1 Oxygen powers our bodies.

- 2 Oxygen is toxic in large amounts.
- 3 The first life forms needed oxygen to survive.
- 4 Oxygen is the main product of photosynthesis.
- 5 Animals were smaller in the past because of oxygen.
- 6 The amount of oxygen in the atmosphere has been constant through time.

Take a deep breath... Surprising Facts about OXYGEN

They say too much of anything is bad for you. Believe it or not, that's true of the oxygen that powers our bodies. If we breathed air that was more than 75% oxygen, we could die within days. Our lungs couldn't cope. Our bodies are used to air that's 21% oxygen – and even that's harmful over a lifetime. The body makes use of around 98% of the oxygen it takes in and the rest 5 transforms into free radicals – molecules that attack and damage our cells over time. Oxygen, then, is actually toxic in large doses. But after 3-4 billion years of evolution of life on Earth, shouldn't our bodies be better at processing oxygen? To try to answer that question, it's important to understand that oxygen wasn't always present in the atmosphere. Because of this, scientists believe that the 10 first life forms on the planet were anaerobic; they were able to survive without oxygen. It was only after plants established themselves that oxygen appeared in the atmosphere. This appearance of oxygen in the Earth's atmosphere some 2.2 billion years ago is known as the Great Oxidation Event.

Plants, unlike animals, don't need oxygen, but produce it through 15 photosynthesis - the process by which they convert sunlight, water, and carbon dioxide into energy. Because oxygen is a by-product of photosynthesis, it took more than a billion years for enough of it to build up in the atmosphere and give rise to animal life.

Fossil evidence suggests animals first appeared about 700 million years ago, 20 in the oceans. The first animal life forms had extremely thin bodies in relation to their size. Scientists believe this allowed them to make maximum use of the low amounts of oxygen present in the ocean. Around 500 million years ago, atmospheric oxygen levels were high enough to enable animals to venture out of the ocean and onto land. 25

The amount of oxygen in our atmosphere has not increased steadily. In fact, 300 million years ago, oxygen was actually more abundant in the air than it is now, making up 50% of it. As a result, animals were much bigger than they are today. There were insects, for example, which measured more than 2.5 feet from the tip of one wing to another. Scientists recently bred dragonflies 30 this size in 50%-oxygen environments. They say the dragonflies were able to grow so big because in oxygen-rich atmospheres, insects don't need the

large breathing systems which normally limit the size of their bodies. By 240 million years ago, though, oxygen 35 levels had fallen to just 12% of the air.

If it's surprising that the amount of oxygen in the atmosphere has varied during animal evolution, it's perhaps even more surprising to learn that the planet is more dependent on oxygen produced in the 40 oceans than on land. Scientists estimate that sea algae replace around 90% of the oxygen in the biosphere. So, today's most complex life forms not only originated in an environment in which they now cannot breathe – the ocean – they rely on it for their survival! 45

Check these words

power, cope, free radical, molecule, toxic, dose, evolution, establish oneself, photosynthesis, process, convert, by-product, give rise to, fossil evidence, venture, steadily, abundant, wing, breed, dependent, sea algae, biosphere, rely on



STUDY SKILLS

Multiple choice

Read through the text once to get a general idea what the text is about. Read the questions and possible answers and underline the key words. Read the text again. Find the parts of the text that contain the answer to each question. Look for paraphrases.

Multiple Choice

- 3 Read the article on oxygen in the atmosphere. For questions 1-5, choose the correct answers (A, B, C, or D). Justify your answers.
 - 1 Air that is mainly oxygen is
 - A low in free radicals.
 - B useful to the body.
 - C dangerous to humans.
 - D bad for evolution.
 - 2 Oxygen is
 - A 50% of the atmosphere.
 - B necessary in order for life to exist.
 - C the result of atmospheric chemistry.
 - D unnecessary for plants.
 - 3 According to the article, animals
 - A couldn't have evolved without plants.
 - B took a long time to get big in size.
 - C were anaerobic at first.
 - D needed large breathing systems in the past.
 - 4 The dragonfly experiment suggests
 - A large creatures need less oxygen.
 - B insects develop more quickly in high oxygen environments.
 - C low levels of oxygen will result in large creatures.
 - D insects fly more easily in high-oxygen environments.
 - 5 Without sea algae
 - A there would be no oxygen in the atmosphere.
 - B animals would stop evolving.
 - C all life in the oceans would die.
 - D all life on Earth would be in danger.

- **4** Fill in: carbon, large, support, breathe, sea, grow, make, animal.
 - 1
 ______air
 5
 ______life

 2
 ______use of
 6
 ______big

 3
 ______doses
 7
 ______algae

 4
 dioxide
 8
 evolution
 - Use words from the *Check these words* box in their correct form to complete the sentences.

5

6

- 1 Our lungs can't _____ with too much oxygen.
- 2 In the past, insects had bigger _____ than they do today.
- 3 Oxygen is _____ in large doses because it produces free radicals.
- 4 Scientists think that animals first _____ onto land about 500 million years ago.

Checking understanding

- Correct the statements. Compare with your partner.
 - 1 Life on Earth arose in an oxygen-rich environment.
 - 2 Our bodies process oxygen with 100% effectiveness.
 - 3 The appearance of photosynthesis in plants is known as the Great Oxidation Event.
 - 4 Evidence suggests animal life appeared on land and in the oceans at about the same time.
 - 5 Land animals depend on land plants for most of their oxygen.

Speaking & Writing

- 7 Or Tell your partner five things you have learned from the text.
- 8 **THINK** What was the author's purpose in writing this article? Write a few sentences. Justify your answer. Tell the class. Discuss.

QUOTATION

"Life is not measured by the number of breaths we take, but by the moments that take our breath away!"

Anonymous

1.5 Writing Skills

Essay Writing

For-&-Against Essays

For-and-against essays are formal pieces of writing in which we discuss the advantages and disadvantages of a specific topic. They normally consist of:

- an **introduction** in which we present the topic.
- a main body in which we present the points for and the points against, in separate paragraphs, supporting the arguments with justifications/examples.
- a conclusion in which we present a balanced summary of the topic or our opinion.

We link our ideas with appropriate **linking words/phrases**.

to list points: In the first place, To start with, Secondly, Thirdly, In addition to this, Furthermore, Moreover, Besides, etc.

to introduce/list/(dis)advantages:

The first/main (dis)advantage of ..., One/Another (dis)advantage of ..., One point of view in favor of/ against ...

to introduce justifications/results: for example/instance, for this reason, because, as, since, as a result, etc. to show contrast: On the other hand, However, still, but, Although, Even though, Despite/In spite of (the fact that), etc.

to conclude: In conclusion, All in all, All things considered, Taking everything into account, etc. Read the rubric then read the model essay. Complete the table with points for/against and their justifications.

You have had a class discussion about "designer babies". Your teacher has now asked you to write an **essay** presenting the arguments **for** and **against** parents being able to choose desirable traits for their children (200-250 words).

the future, genetic engineering may allow us to choose desirable characteristics for our children. If such technology becomes available, should parents be allowed to custom design their children?

There are some arguments in favor of allowing technology to "design" babies. First of all, by using genetic engineering we can prevent genetic diseases. This would mean healthy children, saving parents from the emotional strain of looking after an ill child. Secondly, being able to enhance the looks and intelligence of a baby would result in smarter, more beautiful people.

However, there are also some arguments against "designing babies." To start with, it is likely that the technology needed to produce "designer babies" will be very expensive. As a result, only the rich will be able to afford to give their children desirable characteristics. This could lead to even greater imbalances between the rich and the poor. Furthermore, many people believe that no one has the right to change an unborn human as every unborn child should have the right to remain genetically unmodified.

After all, there is no guarantee that the parents will like the final outcome.

In conclusion, it appears that being able to create smarter, healthier, better-looking human beings may have its advantages. However, I believe if this technology is not available to everyone, it will introduce a whole new set of social problems.

Justifications
Justifications

STUDY SKILLS

Topic/Supporting sentences

Main body paragraphs should begin with topic sentences. A topic sentence introduces or summarizes the main idea of the paragraph.

The topic sentence is followed by supporting sentences which provide justifications/examples, and details and/or reasons, to support the topic sentence.

2 Underline the topic sentences in the main body paragraphs in the model essay. Replace them with the topic sentences below.

- a On the other hand, there are disadvantages to developing the technology to "design" babies.
- b There are a number of advantages to "designing" babies.

3 a) Choose the appropriate topic sentences for the two paragraphs below.

- a There are many advantages to solar energy.
- b On the other hand, there are a number of arguments against cosmetic surgery.

1 One of the main arguments is its lack of toxic emissions. Burning fossil fuels for energy emits carbon dioxide into the air, which is a major cause of global warming.

2 For instance, a patient risks developing complications that can sometimes be fatal. The risk of surgery of any kind is greater than most people realize, such as severe allergic reaction to medication.

b) $\bigcirc \bigcirc \bigcirc$ Write a topic sentence for this paragraph. Compare with another student.

Firstly, over 20 billion disposable diapers end up in landfills every year. They do not degrade well in landfills, as they need to be exposed to oxygen and sunlight to decompose. It takes hundreds of years for decomposition to be completed. 4 Read the paragraphs. Which one(s) contain a topic sentence and supporting sentences related to it? Which one(s) contain a topic sentence but the supporting sentences are not fully related to it?

There are some good arguments against poor countries investing in tsunami warning systems. To begin with, such systems are expensive. For this reason, many people argue that tsunamis happen so rarely the cost of implementing a warning system is not justified and the money is better spent fighting poverty.

> Nevertheless, there are certain drawbacks to getting a PhD. For instance, research is absolutely essential to technological advancement. For this reason, it is important that governments keep subsidizing universities.

Experimenting on animals to gain scientific insight into human diseases has many disadvantages. Firstly, animals do not have the same physiology as humans. This means the test results are almost always meaningless for humans.

5 Use the prompts below to complete the paragraph. Use appropriate linkers.

Topic sentence: However, there are also some arguments in favor of following a vegetarian diet.

- meat consumption/linked to several cancers/ avoid these health risks
- reduce factory farming/cruel to animals/poor quality of life and short lifespan

Writing Skills

- Choose the correct linker. Compare with your partner.
 - Besides,/Despite knowledge of mathematics is important in practically every area of our lives.
 - 2 Even though/Nevertheless many mothers wish to breastfeed their babies, they are often unable to do so for various reasons beyond their control.
 - 3 In conclusion,/Since, it is factories which create the most environmental pollution, not individuals.
 - 4 Taking everything into account,/For instance, many people argue that transporting produce halfway around the world simply so people can eat strawberries in winter is a luxury the world can not afford.
 - 5 Secondly,/Especially rich nations create more pollution per person than poor nations. What is more/However, the rapid industrialization of poor nations around the world means they will soon catch up.
 - 6 Such as/To sum up, it is a relatively simple matter to recycle newspapers, magazines, and other paper waste.
 - 7 It is argued/One reason that maintaining the existence of zoos is important is that zoos contribute to the conservation of endangered species.
 - 8 In the first place,/While access to the Internet gives people access to information and information is power.

Your Turn

a) Read the rubric and answer the questions.

You have had a class discussion about space exploration. Your teacher has now asked you to write an **essay** presenting the arguments **for** and **against** exploring space (200-250 words).

- 1 What are you going to write?
- 2 Who is going to read it?
- 3 What should your piece of writing be about?

b) Which of the following points are *pros* and which are *cons*?

- 1 may result in the discovery of a planet that can support life
- 2 very expensive and requires public funding
- 3 has already resulted in many indirect scientific achievements and there may be more
- 4 the distances in space are enormous

c) Match the justifications below (a-d) to the *pros/cons* in Ex. 7b (1-4).

- a this money could be better spent on reducing poverty or fighting hunger and disease
- b we can only ever explore a tiny part of the universe

give humans somewhere to go if a disaster threatens to destroy life on Earth

space exploration research led to the development of computers and lasers

- 8 Use the ideas from Ex. 7, and your own ideas, to write your essay. Follow the plan. Use the phrases from the *Useful language* box.
 - Para 1 state topic
 - Para 2 points for & justifications
 - Para 3 points against & justifications
 - Para 4 summarize points (& express opinion)

Useful language

It seems that ...

с

d

- There are arguments in favor of ...
- There are a number of points in favor of ...
- One advantage is that ...
- Firstly, ...
- Secondly, ...
- On the other hand, there are arguments against ...
- There are arguments against the ..., however.
- All in all, it seems that ...
- I think/I believe/To me ...

7

Progress Check

2

3

Vocabulary

1

Choose the correct word.

1	The poison cyar and humans. A radical		e is highly toxic		to animals toxin
_				C	IOXIII
2	There ares A endless		,	С	countless
3	Physicists do not	kr	now whether	the	universe is
	or not. A countless	В	infinite	С	contiguous
4	Carbon dioxid	е	is a	c	of cellular
	respiration.				
	A deviation	В	by-product	С	biosphere
5	Many people the	ese	e days spend	a f	ortune
	attempting to		the signs of c	agir	ng.
	A collapse	В	expand	С	combat
6	Geologists belie	ve	the Earth's _		is broken
	up into pieces.				
	A axis	В	crust	С	globe
7	Life expectancy				
	increasedf				
	A steadily	В	eternally	С	artificially
8	Scientists believ	е	an asteroid		_ with the
	Earth 65 million	'	Ū	~	
					triggered
9	Mice very		,	nale	e can have
	5-10 litters per y A breed		ır. exist	C	restore
		-		•	
10	Their results hav				
	A abundant	D	uccepted	C	reversed
				10x	2=20 points

Fill in the correct word: biosphere, fertility, venture, rely (on), motivation, prior, technique, hypothesis, free radicals, stationary 1 The Earth's plates are not , they move slowly around the planet. 2 The large Hadron Collider was invented to test the _____ of the Big Bang Theory. 3 Telomerase is an enzyme that can increase the _____ of mice. 4 Some scientists believe in the existence of another universe to this one. 5 Some scientists believe damage our cells and cause aging. 6 Researchers are developing a _____ for the early detection of Alzheimer's disease. 7 The first creatures to _____ onto land from the sea did so about 500 million years ago. 8 Many people like the idea of exercise, but lack the _____ to actually do any. 9 All life on Earth exists in the . 10 Math skills _____ logic as well as language to represent large numbers. 10x2=20 points Listening \bigcirc Listen and mark the sentences 7 (true) or F (false).

- In June, China was hit by some of its most severe natural disasters in recent years.
- 2 Affected regions were mostly hit by floods and droughts.
- 3 The Yangtze River experienced high rainfall along its entire length.
- 4 Damage to farmland alone caused over 8 billion US dollars worth of economic losses.
- 5 Most of the affected areas are in isolated regions of the country.

5x4=20 points

Progress Check

Reading

4 Read the text and mark the sentences T (true) or F (false).

In September 2010, after a decade of observation, astronomers announced the discovery of a planet with the greatest recognized potential for harboring life. The planet, named Gliese 581g, is 20 light years from Earth. It orbits a red dwarf star in the Libra Constellation.

Gliese 581g is the right size, and just the right distance from its star to harbor life. Unfortunately, current technologies don't allow scientists to study the atmosphere of Gliese 581g for chemical signs of life. But astronomers expect many more life-friendly planets to be discovered soon. If any of the planets cross the face of their parent star, relative to our line of sight, then scientists will be able to gather atmospheric data from them.

The detection of Gliese 581g after such a short period of searching and at such close proximity to

Earth, leads astronomers to believe the proportion of stars in the universe with potentiallyhabitable planets may be greater than ten percent. If this is indeed the case, this would mean there are potentially billions of Earth-like planets in the Milky Way alone!

1 Astronomers discovered Gliese 581g in 2010.

- 2 Gliese 581g is situated in the Libra Constellation.
- 3 Chemical analysis of Gliese 581g's atmosphere has been conducted.
- 4 Gliese 581g does not cross the face of its red dwarf star relative to our line of sight.
- 5 Astronomers think most stars in the universe have potentially-habitable planets orbiting them.

Writing

Read the rubric. Match the points (1-4) to their justifications (a-d). Write your essay.

You have had a class discussion on anti-aging research. Your teacher has asked you to write an **essay** presenting the arguments **for** and **against** the public funding of anti-aging research (200-250 words).

Pros/Cons

5

- 1 world is already overpopulated
- 2 it is likely that such research will help us understand the causes of many diseases
- 3 we have a moral obligation to make everyone's lives better
- 4 diverts funds away from more urgent problems

Justifications

- a may save millions of lives and lots of money in the long run
- b people living longer would just put more pressure on the environment
- c the money could be spent on providing clean water and food for the poor
- d we already do everything we can to extend people's lives when they are sick, so why not in this way

20 points TOTAL: 100 points

1	CHECK YOUR PROGRESS
	CIIECK /een
•	talk about natural disasters
-	talk about the universe and celestial bodies
	 talk about organs inside the human body
	identify chemical elements
	 identify the author's purpose
	avoid repetition
•	 identify the main idea in a paragraph
	predict content using prior knowledge
	write a for-and-against essay
	GOOD ✓ VERY GOOD ✓ ✓ EXCELLENT ✓ ✓

Some – Any – No & Their Compounds

Some, **any**, and **no** are used with uncountable nouns and plural countable nouns.

We need **some** eggs and **some** butter.

- We use **some and its compounds** (somebody, someone, something, somewhere, etc.) in the affirmative. She needs **some** time.
- We also use some and its compounds in questions for offers or requests.
 Would you like some cake?

Can I have **some** milk with my coffee, please?

- We use **any and its compounds** (*anyone, anything,* etc.) in questions. *Has anyone called*?
- Not any is used in negative sentences. There isn't any fruit in the basket.
- Any and its compounds can also be used with negative words such as without, never, rarely. I have never met anyone like him.
- When any and its compounds are used in affirmative sentences, there is a difference in meaning. You can say anything you want to the journalist. (it doesn't matter what)
 Anyone can take part in the competition. (it doesn't matter who)
- No and its compounds are used instead of not any in negative sentences.

They don't have **any** money./They have **no** money. They didn't buy **anything**./They bought **nothing**./ There wasn't **anybody** in the room./There was **nobody** in the room.

Note: We use a singular verb with compounds of some, any and no. There is someone in the room.

Every – Each

- **Every** is used with singular countable nouns. It refers to a group of people or things and means "all, everyone, everything," etc.
 - *Every* student has a library card. (everyone)
- Each is used with singular countable nouns. It refers to the members of a group separately. Each visitor was given a day pass. (each visitor separately)
- Every one and each (one) can be followed by of. We normally use each when we talk about two people or things. We use every when we talk about three or more people or things.

She owns two apartments and she decorated **each** (one) of them beautifully.

Paul has written many novels. **Every one of them** has been a best seller.

A few/few – A little/little

A few and few are used with plural countable nouns. A little and little are used with uncountable nouns.

 A few means "not many, but enough." We have a few apples. We can make an apple pie. Few means "hardly any, almost none" and can be used with very for emphasis. There were (very) few visitors in the museum.

- A little means "not much, but enough." It's a little cold – would you like me to close the window?
- Little means "hardly any, almost none" and can be used with very for emphasis. We have (very) little time left. We must hurry up.

A lot of/Lots of – Much – Many

- A lot of/Lots of are used with both plural countable and uncountable nouns. They are normally used in affirmative sentences. There are a lot/lots of opportunities for young graduates. The of is omitted when a lot/lots are not followed by a noun. There's lots/a lot going on in town today.
- Much and many are usually used in negative sentences or questions. Much is used with uncountable nouns and many is used with plural countable nouns. There aren't many books on the shelf. Did you spend much money at the mall?

Practice

Choose the correct item.

1	1 Is there cherry pie left?		
	A some B any	С	no
2	2 Does know where Alex is?		
	A someone B no one	С	anyone
3	3 people attended the weddi	ng.	
	A Much B A lot of	С	Little
4	4 They go to Italy on vacation	_ y	ear.
	A every B each	С	some
5	5 was happy with their exam	n re	sults.
	A Anybody B Some	С	Everyone
6	6 Very people went to the po	irty.	
	A few B little	С	many
7	7 She had a glass of orange juice	in	hand.
	A every B each	С	any
8	8 Sue speaks French.		
	A a few B few	С	a little
9	9 Was there traffic on the roo	ads	?
	A much B many	С	lots
10	0 You can take you like.		
	A something B nothing	С	anything
11	 There are chocolates in the 	bc	ox.
	A little B no	С	any
12	2 I've seen all of Brad Pitt's mov	vies	and I like
	of them.		

A every B each one C every one

Conditionals/Wishes

Conditionals: type 0/1

 Type 0 conditionals are used to express a general truth or a scientific fact. In this type of conditional we can use when instead of if.

IF-CLAUSE	MAIN CLAUSE		
If/When + simple present → simple present			
If/When polluted water is not filtered, it is dangerous			

It/ When polluted **water** is not filtered, it **is** dangerous for our health.

• Type 1 conditionals are used to express a real or very probable situation in the present or future.

IF-CLAUSE	MAIN CLAUSE
If + simple present -	→ simple future, imperative, can/must/may, etc. + bare infinitive
If she does well at the interview, she will get the job.	

- When the hypothesis comes before the main clause, we separate the two parts with a comma. When the main clause comes before the if-clause, then we do not use a comma to separate them.
- Note: With type 1 conditionals we can use unless + affirmative verb (= if + negative verb). She will not speak to him unless he apologizes. (If he doesn't apologize, she will not speak to him.)

Conditionals: type 2 & 3

• Type 2 conditionals (unreal present) are used to express imaginary situations which are contrary to facts in the present and therefore, are unlikely to happen in the present or the future. We can use either were or was for 1st and 3rd person singular in the if-clause. We can also use the structure *If I were you*, ... to give advice.

IF-CLAUSE	-CLAUSE MAIN CLAUSE	
If + simple past/ _ past progressive	→ would/could/might + bare infinitive	
If I had a good voice, I would become a singer. If Paul was not working today, we could go to the beach. If I were you, I would stay in tonight.		

 Type 3 conditionals (unreal past) are used to express imaginary situations which are contrary to facts in the past. They are also used to express regrets or criticism.

IF-CLAUSE	MAIN CLAUSE
If + past perfect/ _ past perfect progressive	would/could/might + bare perfect infinitive
	111 1.1

If I **had studied** harder, I **would have passed** the exams. If he **hadn't been studying** that hard, he **wouldn't have passed** his exams.

• **Conditionals** are usually introduced by **if**. Other expressions are: unless (= if not), providing, provided (that), as long as, on condition (that), but for + *-ing* form/noun, otherwise, or else, what if, supposing, even if, only if.

Unless she starts studying harder, she's going to fail her exams.

Get up now or else you'll miss your appointment.

- Note: When only if begins a sentence, the subject and the verb of the main clause are inverted. Only if you are dressed formally, will you be allowed in.
- When the if-clause precedes the main clause, we separate the two clauses with a comma.
 If you are feeling tired, you must rest.
 BUT You must rest if you are feeling tired.
- In conditionals type 2 in formal English we normally use were instead of was after "if" for all persons.
 If he were/was here, things would have been different.
- We do not normally use will, would, or should in ifclauses.

If you stay up late, you can get into trouble. (NOT: if you will stay) However will, would, or should can be used in if-clauses to make a request or express annoyance, doubt, uncertainty, or insistence. If she should need help, ask her to call me. (doubt/

uncertainty – I doubt that she will need help.)

If you will stop arguing, we will find a solution. (request – Please stop arguing.)

Omission of "if"

If can be omitted in if-clauses. In this case **should** (cond. type 1), **were** (cond. type 2), and **had** (cond. type 3) come before the subject.

If he **should** do well on the exam, he will apply to college. → **Should** he pass the exam, he will apply to college.

If I **had known**, I would have told you. → **Had** I known, I would have told you.

Wishes

• We can use wish/if only to express a wish.

VERB FORM		USE
+ simple past/past progressive	I wish I was not working right now. (but I am) If only I were going to the concert tonight. (but I'm not)	to say that we would like something to be different about a present situation
+ past perfect	I wish I had studied harder. (but I didn't) If only I hadn't been so foolish. (but I was)	to express regret about something which happened or didn't happen in the past
+ subject + would + bare inf.	I wish you wouldn't be so rude to your sister. If only you would stop arguing.	 to express: a polite imperative a desire for a situation or person's behavior to change

- Note: If only is used in exactly the same way as I wish but it is more emphatic or more dramatic.
- We can use were instead of was after "wish" and "if only."

I wish I was/were young again.

Practice

- Put the verbs in parentheses into the correct tense.
 - 1 If I were you, I ______ (eat) less chocolate and more fruit.
 - 2 She ______ (not/go) to the dentist tomorrow if she can

(not/go) to the dentist tomorrow it she can cancel her appointment.

- 3 Nicole will lose weight if she _____ (exercise).
- 4 We will leave without her if she ______ (arrive) late.
- 5 I wish I _____ (have) more time to cook a better meal.
- 6 If he were scared, he ______ (call) us to go over to his house.

7 She wouldn't have missed the play if she _______ (leave) on time.
8 If you leave metal out in the rain, it _______ (rust).
9 If I _______ (be) you, I'd keep quiet about the accident.
10 Angelina won't come if she _______ (hot/get) a ride from her mom.
11 Kevin ______ (read) a book if there is nothing good on TV.
12 When you mix black and white, you ______ (get) gray.

2 Put the verbs in parentheses into the correct tense.

- 1 A: The weather is nice today.
 - B: If it continues like this, we _____

_____ **(go)** to the beach.

- 2 A: She went to the supermarket.
 - B: If she buys tomatoes, I _____

_____ (make) my secret tomato sauce.

- 3 A: Mark's suggestions are rather unclear!
 - B: If he _____ (be) here with us, we would be able to ask him to clear it up.
- 4 A: I'm sorry, but my parents came over on Saturday morning.
 - B: If they _____ (not/come), we would have gone to the countryside.
- 5 A: I forgot my books at school!
 - B: If I lend you mine, _____
 - _____ (you/help) me with my homework?
- 6 A: I played the lottery yesterday, but I didn't win anything.
 - B: If you had won, what _____

_____ (you/do) with the money?

- 7 A: My tooth hurts!
 - B: If it still hurts in the morning, I _____

_____ (call) the dentist.

- 8 A: Jennifer left her house an hour ago.
 - B: If she _____ (get) here soon, tell her to come to my office.

Complete the sentences using conditionals type 2 or 3, as in the example. 1 If I knew you were coming over, I would have cooked dinner. 2 If the plane were delayed, _____. 3 If the dentist was available, _____. 4 If Aaron hadn't spoken, _____. 5 If Steve had been on time, . 6 If you start exercising, _____. Put the verbs in parentheses into the correct tense. 1 If only I (not/break) my leg skiing yesterday! 2 | wish you _____ (be) here with me now. 3 I feel sick. If only I 7 (not/eat) that second bowl of ice cream. 4 I can't remember all the ingredients. I wish I _____ (write) down the recipe. 5 | wish | _____ (remember) to buy milk. Now I have to go out again. 6 If only Phil _____ (stop) playing that awful music. 7 Meling wishes she (not/forget) her mom's birthday. wishes 8 Sofia wishes she (think) of the answer sooner. Rewrite the following sentences to express either an unreal situation in the present, a regret about a past event, or a desire for a situation or someone's behavior to change. 1 I don't know how to cook. I wish I knew how to cook. (unreal situation in the present)

- 2 Bobby spends all his time on the Internet.
- 3 James forgot to tell me about the exam.
- 4 My brother annoys me all the time!
- 5 I can't swim.

5

3

- 6 I lost my wallet yesterday.
- 7 I don't have a car.
- 8 I overslept this morning.

- Write sentences, as in the example.
 - 1 You want to study law in Italy, but you don't speak Italian.

I wish I knew how to speak Italian. If could speak Italian, I would study law in Italy.

- 2 You wanted to surprise your family with dinner, but you overcooked the chicken.
- 3 You wanted to take dance lessons, but you didn't sign up for the class in time.
- 4 You wanted to go on vacation, but you didn't save enough money.
- 5 You can't go up the Eiffel Tower because you are afraid of heights.
- 6 You want to see a movie, but have nobody to go with.

Complete the second sentence so that it means the same as the first. Use the word in bold. Use two to five words.

1 I don't think it would be a good idea to lie to your parents.

If I _____

were

_____ lie to your parents.

2 Vince would like to go to New York if he had some time off work.

Vince ____

____ off work to go to New York.

3 It's a shame you broke your leg. You would have come skiing with us.

broken lf _____

> your leg, you would have come skiing with us.

4 There was a snowstorm and that's why the flight was delayed.

If there hadn't been a snowstorm, would left on time.

5 It's a shame that I missed the play. I would have really enjoyed it.

|

wish

play. I would have really enjoyed it.

the

Passive Voice

The Passive

Form: We form the passive with the verb to be in the appropriate tense and the past participle of the main verb.

Read the table:

	ACTIVE	PASSIVE
Simple Present	Mary makes tea.	Tea is made by Mary.
Present Progressive	Mary is making tea.	Tea is being made by Mary.
Simple Past	Mary made tea.	Tea was made by Mary.
Past Progressive	Mary was making tea.	Tea was being made by Mary.
Present Perfect	Mary has made tea.	Tea has been made by Mary.
Past Perfect	Mary had made tea.	Tea had been made by Mary.
Simple Future	Mary will make tea.	Tea will be made by Mary.
Future Perfect	Mary will have made tea.	Tea will have been made by Mary.
Infinitive	Mary has to make tea.	Tea has to be made by Mary.
Modal Verbs	Mary may make tea.	Tea may be made by Mary.

We use the **passive**:

 when the person/people doing the action is/are unknown, unimportant, or obvious from the context. The food was cooked. (We don't know who cooked it.) The shirt is being washed. (It's unimportant who is washing it.)

The criminal has been arrested. (It's obvious that the police arrested the criminal.)

- when the action itself is more important than the person/people doing it, as in news headlines, newspaper articles, formal notices, advertisements, instructions, processes, etc. Trespassers will be prosecuted.
- when we want to avoid taking responsibility for an action or when we refer to an unpleasant event and we do not want to say who or what is to blame. Hundreds of people were injured in the train crash.
- to emphasize the agent. The flowers were sent by the President himself.
- to make statements more formal or polite.
 My bag has been ruined. (More polite than saying "You've ruined my bag.")

Changing from the active to the passive:

- The object of the active sentence becomes the subject in the passive sentence.
- The active verb remains in the same tense but changes into the passive form.
- The subject of the active sentence becomes the agent, and is either introduced with the preposition by or is omitted.



- Only transitive verbs (verbs that take an object) can be changed into the passive.
 Active: *Paul swims every day.* (intransitive verb; no passive form).
- Note: Some transitive verbs (have, exist, seem, fit, suit, resemble, lack, etc.) cannot be changed into the passive. This color suits you. (NOT: This color is suited by you.)
- We can use the verb **to get** instead of the verb **to be** in everyday speech when we talk about things that happen by accident or unexpectedly. *He got hit by a truck.*

By + the agent is used to say who or what carries out an action. With + instrument/material/ingredient is used to say what the agent used. This photograph was taken by my brother. It was taken with a digital camera.

- The agent can be **omitted** when the subject is **they**, **he**, **someone/somebody**, **people**, **one**, etc. **Active:** *People have discovered the truth.* **Passive:** *The truth has been discovered.*
- The agent is **not omitted** when it is a **specific** or **important person** or when it is **essential** to the meaning of the sentence.
 - The novel was written by Graham Greene.
- With verbs which can take two objects, such as bring, tell, send, show, teach, promise, buy, sell, read, offer, give, lend, etc., we can form two different passive sentences.

Philip will **send** Sarah a gift. (active) Sarah will be sent a gift. (passive, more usual) A gift will be sent to Sarah by Philip. (passive, less usual)

- In passive questions with who, whom, or which we do not omit by. Who gave you this book? Who were you given this book by?
- Hear, help, make, and see are followed by a toinfinitive in the passive.

She made me lie. \rightarrow I was made to lie.

Note: Hear, see, and watch can be followed by a present participle in the active and passive. We saw her stealing. → She was seen stealing.

Practice

1

Complete the exchanges using the *passive voice*.

- 1 A: The soundtrack for this movie is great.
 - B: Yes! It _____ (write) by Ennio Morricone.
- 2 A: Didn't you bring your guitar with you today?
 B: No, it _____ (repair) at the moment.
- 3 A: Have you seen Braveheart?
 - B: Of course. It ______ (direct) by my favorite actor, Mel Gibson.
- 4 A: _____ (their new album/ release) yet?
 - B: No, it's due out next month.
- 5 A: When is the movie coming out?
- 6 A: Did you hear what happened to Max?
 - B: Yes, he ______ (just/injure) in a car accident.
- 7 A: Isn't King Arthur a great movie?
 - B: Fantastic. Did you know it ______ (shoot) entirely in Ireland?
- 8 A: Why is the movie theater closed?
 - B: It _____ (repaint) at the moment.
- 9 A: Why didn't Jane come to the party last night?
 - B: I don't think she _____ (invite), actually.
- 10 A: Could you send the tickets to my house? B: Yes, they _____
 - (deliver) by courier tomorrow.
- 11 A: Where's your DVD player?B: Oh, it _____
 - (still not/fix).
- 12 A: Do you remember who starred in *Gangs* of *New York*?
 - B: Yes. Daniel Day-Lewis. He _____ (award) an Oscar for the leading role.



The Shakespeare Globe Trust 0) was founded (found) in 1970 by Sam Wanamaker and **1**) (dedicate) to the experience and international understanding of Shakespeare in performance. The Globe Trust wanted to celebrate the playwright's work and decided to construct a new theater in London in his name. In 1993, the construction of the Globe Theater began and it (complete) by 1997. Today, Shakespeare's 2) Globe Theater 3) (commit) to the enjoyment and exploration of Shakespeare and his contemporaries in performance. It **4**) (make up) of three sections: The Globe Theater where plays **5**) (perform), Globe Education which helps students understand Shakespeare's scripts in relation to the stage for which they were written, and Shakespeare's Globe Exhibition which 6) (create) to inform the public about Shakespeare and his contemporaries who worked in theater. Over the last few years, Shakespeare's Globe 7) _____ (visit) by around 750,000 people per year. It is a great project, but more money 8) (need) to complete the program.

3 Rewrite the newspaper headlines as complete sentences, as in the example.



4 Read the text and put the verbs in parentheses into the correct passive form.

A press conference 1) (hold) this morning at the Regency Hotel by actor Ken Briggs' agent. It 2) (announce) that the actor would not be starring in the sequel to Revenge. Specific reasons 3) (not/give) but it seems that Briggs 4) (not/choose) by Paramount Pictures who are looking to replace him with a new face. The company's decision may be a breach of contract and some sources say that negotiations are taking place between the two parties at the moment. It 5) _(not/know) who is going to replace him and Paramount Pictures may have to deal with disappointed fans. A second press conference 6) _(hold) tomorrow morning and Briggs' agent said that an interview 7) (give) by the actor over the coming days.

5 Answer the questions using the words below.

- 1 A: Has the soundtrack been recorded yet?
 - B: Yes, the CDs/deliver/tomorrow. Yes, the CDs will be delivered tomorrow.
- 2 A: Has the role been accepted yet?
 - B: Yes, the role/accept/Jake Hans.
- 3 A: Do you think there will be lots of fans?B: Sure! All seats/fill/opening night.
- 4 A: Has the set been prepared yet?B: No, the location/not choose/yet.
- 5 A: Have the costumes been delivered? B: No/they/make/at the moment.
- 6 A: Will all the actors be at the party?B: Well/all invitations/send/last Friday.
- 7 A: Is the movie based on a book?B: No/it/base/TV series.
- 8 A: Were the actors interviewed by a journalist?B: No/they/interview/TV presenter.

- **Fill in** by **or** with.
 - 1 The movie was a ____ Ken Loach. directed b ____ talent.
 - 2 The DVDs are a ____ plastic. made b ____ Sony.
 - 3 The package a _____ a knife. was opened b _____ Mrs. Harris.
 - 4 The set was a _____Jean. made b _____scrap metal.
 - 5 The movie was a ____ Warner. paid for b ____ company money.
- 7 Change the question from the *passive* into the *active*.
 - 1 Who was Jurassic Park directed by?
 - 2 Why hasn't the set been finished yet?
 - 3 Who will be chosen for the main role?
 - 4 When will the play be performed?
 - 5 Where will the movie be shot?
 - 6 Who will the star be replaced by?
 - 7 Why was the movie theater closed down?
 - 8 Who was the soundtrack composed by?
 - 9 How much was the actor paid?
 - 10 When will the movie be released?

8 Change into the passive.

Warner Movies is shooting a sequel to Zombies in the Nordfold Woods area. Jason Delore is playing the main role, but many locals are playing minor roles in the movie. The movie has created hundreds of shortterm jobs and local companies are providing services for the cast and crew. Warner Movies says they will release the movie soon.

Reported Speech

Reported Speech

Direct speech is the exact words someone said. We use quotation marks in direct speech.

Reported speech is the exact meaning of what someone said, but not the exact words. We do not use quotation marks in reported speech. The word **that** can either be used or omitted after the introductory verb (**say**, **tell**, etc.).

Say – Tell

- say + no personal object She said (that) she was very happy.
- say + to + personal object She said to me (that) she was very happy.
- tell + personal object She told me (that) she was very happy.
- we use say + to-infinitive but never say about. We use tell sb, speak/talk about instead. Ann said to wake her up at 3:00. He told them/spoke/talked about the meeting.

SAY hello, good morning/afternoon, etc., something/ nothing, so, a prayer, a few words, no more, for certain/sure, etc.
 TELL the truth, a lie, a story, a secret, a joke, the time, the difference, one from another, somebody one's name, somebody the way, somebody so, someone's fortune, etc.
 A question, a favor, the price, about somebody,

ASK the time, around, for something/somebody, etc.

Reported Statements

- In reported speech, personal/possessive pronouns and possessive adjectives change according to the meaning of the sentence. *Helen said*, "I'm having a party." (direct statement) *Helen said* (that) she was having a party. (reported statement)
- We can report someone's words either a long time after they were said (reporting the past) or a short time after they were said (up-to-date reporting).

Up-to-date reporting

The tenses can either change or remain the same in reported speech.

Direct speech: Stella said, "I've ordered pizza." Reported speech: Stella said (that) she has/had ordered

pizza.

Reporting the past

The introductory verb is in the simple past and the tenses change as follows:

DIRECT SPEECH	REPORTED SPEECH		
Simple Present → Simple Past			
"I want to learn Japanese," she said.	She said (that) she wanted to learn Japanese.		
Present Progressive -	Past Progressive		
"We are watching a movie," they said.	They said (that) they were watching a movie.		
Present Perfect → Past Perfect			
"I have brushed my teeth," she said.	She said (that) she had brushed her teeth.		
Simple Past –	Simple Past → Simple Past or Past Perfect		
"I mowed the lawn," she She said (that) she mowed , said.			
Past Progressive → Past Progressive or Past Perfect Progressive			
"He was playing the piano," she said.	She said (that) he was playing/had been playing the piano.		
$Will \to Would$			
"I will meet you at 7:00," she said.	She said (that) she would meet me at 7:00.		

• Certain words and time expressions change according to the meaning as follows:

now	\rightarrow	then, immediately
today	\rightarrow	that day
yesterday	\rightarrow	the day before, the previous day
tomorrow	\rightarrow	the next/following day
this week	\rightarrow	that week
last week	\rightarrow	the week before, the previous week
next week	\rightarrow	the week after, the following week
ago	\rightarrow	before
here	\rightarrow	there
this, these	\rightarrow	that, those
come	\rightarrow	go

Tenses do not change in reported speech when:

- the reporting verb (said, told, etc.) is in the present, future, or present perfect. "I can't speak French," he says. → He says (that) he can't speak French.
- the speaker expresses general truths, permanent states or conditions. "The sun sets in the west," Mr. Thom said. Mr. Thom said that the sun sets in the west.
- the reported sentence deals with conditionals type 2/ type 3, wishes, or unreal past. "I wish I was a movie star," he said. → He said he wished he was a movie star.
- the speaker is reporting sth immediately after it was said. "The view is breathtaking," he said. → He said that the view is breathtaking.

Reported Questions

- Reported questions are usually introduced with the verbs ask, inquire, wonder, or the expression want to know.
- When the direct question begins with a question word (who, where, how, when, what, etc.), the reported question is introduced with the same question word.

"Where are you from?" she asked. (direct question) She asked me where I was from. (reported question)

 When the direct question begins with an auxiliary (be, do, have) or a modal verb (can, may, etc.), then the reported question is introduced with if or whether. He asked, "Do you want a ride to school?" (direct question)

He **asked** me **if/whether** I **wanted** a ride to school. (reported question)

 In reported questions, the verb is in the affirmative. The question mark and words/expressions such as please, well, oh, etc. are omitted. The verb tenses, pronouns, and time expressions change as in statements.

"Could you give me a hand, please?" he asked. (direct question)

He asked me whether I could give him a hand. (reported question)

Indirect questions

 Indirect questions are used to ask for advice or information. They are introduced with: Could you tell me ...?, Do you know ...?, I wonder ..., I want to know ..., I doubt ..., etc. and the verb is in the affirmative. If the indirect question starts with I want to know ..., I wonder ... or I doubt ..., the question mark is omitted.
 Direct question

Where *is* the library? Indirect question Do you know where the library *is*?

Reported Commands/Requests/Suggestions

Reported commands/requests/suggestions are introduced with a special introductory verb (advise, ask, beg, suggest, etc.) followed by a to-infinitive, an -ing form, or a that-clause depending on the introductory verb.
 "Be careful," he said to me. → He advised me to be careful. (command)
 "Please stop talking," he said to me. → He asked me to stop talking. (suggestion)
 "Please, please don't go," he said to me. → He begged me not to go. (request)
 "Let's watch a movie," he said. → He suggested watching a movie. (suggestion)
 "You'd better take an aspirin," he said. → He suggested that I (should) take an aspirin. (suggestion)

Reported Orders

To report orders or instructions, we use the verbs order or tell + sb + (not) to-infinitive.
 "Be patient!" she said to me. (direct order) She told me to be patient. (reported order)
 "Don't go!" he said to her. (direct order) He ordered her not to go. (reported order)

Modal Verbs in Reported Speech

Note how the following modal verbs change in reported speech when the reported sentence is out of date. will/shall → would, can → could (present reference)/ would be able to (future reference), may → might/could, shall → should (asking for advice)/would (asking for information)/offer (expressing offers), must → must/had to (obligation) (*must remains the same when it expresses possibility or deduction). Would, could, used to, mustn't, should, might, ought to, and had better remain unchanged in reported speech.

DIRECT SPEECH	REPORTED SPEECH
	• He said (that) he would
remember you."	always remember me.
He said, "I can't see	He said (that) he couldn't
you."	see me. (present)
He said, "We can visit you soon."	 He said (that) they would be able to visit me soon.
you soon.	(future)
He said, "It may rain." –	 He said (that) it might
ne sala, n may ram.	rain.
He said, "What time	 He asked what time we
shall we call her?"	would call her.
	(information)
He said, "Shall I buy this =	 He asked (me) if he
car?"	should buy that car.
	(advice)
He said, "Shall I give =	He offered to give me a
you a hand?"	hand. (offer)
	 He said (that) I had to
him a reply."	<i>send him a reply.</i> (obligation)
He said, "She must be	 He said (that) she must
upset."	<i>be upset.</i> (deduction)
He said, "She had better =	 He said (that) she had
be nice to me."	better be nice to him.
He said, "They should =	 He said (that) they should
give me a receipt."	give him a receipt.

SPECIAL INTRODUCTORY VERBS		
Introductory verb	Direct Speech	Reported Speech
agree + to-inf	"Yes, I'll call	
demand	you." "Show me	me. ▶ He demanded to be
offer	everything!"	shown everything.He offered to help
Ollei	like me to help	me.
promise	you?″ ″I′II be nicer to ■	He promised to be
refuse	Jenny." "No, I won't 🛛 🗖	nicer to Jenny. He refused to join
101030	join you."	me.
threaten		He threatened to
	music or I'll call the police."	call the police if I didn't turn down
claim	"I saw her	the music. He claimed to have
ciaim	crying."	seen her crying.
advise + sb + to-inf		He advised me to
to-Int	drink some water."	drink some water.
allow	"You can wear my jacket."	 He allowed me to wear his jacket.
ask	"Please close 🛛 💻	He asked me to
beg	the door." "Please, please =	close the door. He begged me to
	listen to me."	listen to him.
command	"March!"	 He commanded me to march.
encourage	"Go ahead, = open the door."	He encouraged me to open the door.
forbid	"You mustn't 🛛 🗖	• He forbade me to
instruct	park here." "Press the	<i>park</i> there. He <i>instructed me to</i>
	button and wait	press the button
	for the message to appear."	and wait for the message to appear.
invite sb	"Would you like 💻	He invited me to go
	to come to my party?"	to his party.
order	"Stop shouting =	He ordered me to
	immediately."	stop shouting immediately.
permit	"You may go = now."	He permitted me to go.
remind	"Don't forget to	He reminded me to
	take the keys with you."	take the keys with me.
urge	"Eat your	He urged me to eat
warn	food." "Don't go out in =	my food. ▶ He warned me not
	this rain."	to go out in that
want	"I'd like you to 🗖	rain. He wanted me to
	be quiet."	be quiet.

Introductory verb	Direct Speech	Reported Speech
accuse sb of + ing form apologize for	sandwich." "I'm sorry I = disappointed	 He accused me of eating his sandwich. He apologized for disappointing me.
admit (to)	you." "Yes, I broke = the vase."	 He admitted (to) breaking/having broken the vase.
boast about/of complain to sb about/of deny	"I am taller than you." "I have a headache." "No, I didn't use your card."	 He boasted about being taller than me. He complained of having a headache. He denied using/ having used my
insist on	"You must take care of yourself."	card. He insisted on me/ my taking care of myself.
suggest	"Let's cook dinner."	He suggested cooking dinner.
agree + that- clause	"Yes, that is a gorgeous dress."	 He agreed that it was a gorgeous dress.
boast		 He boasted that he was a great painter.
claim		He claimed that he
complain	everything." "You always lie = to me."	knew everything. He complained that I always lied to him.
deny	<i>"I've never met</i> = her. <i>"</i>	
exclaim	"lt's splendid!"	• He exclaimed that
explain	"It's not difficult = at all."	it was splendid. He explained that it was not difficult at all.
inform sb	"You will be given a test."	He informed me that I would be given a test.
promise	"I won't do this = again."	
suggest	"You ought to find out more about this."	 He suggested that I find out more about that.
explain to sb + how	"This is how you write it."	• He explained to me how to write it.

Introductory verb	Direct Speech		Reported Speech
wonder where/what/ why/how + clause (when the subject of the introductory verb is not the same as the subject in	He asked himself, "How could Sally win the award?" He asked himself, "Where is Paul?" He asked himself,		He wondered how Sally could have won the award. He wondered where Paul was. He wondered why she was so upset.
the reported question) wonder + whether +	"Why is she so upset?" He asked himself, "Shall I	-	He wondered whether he should
clause wonder where/what/ how + to-inf	go home?" He asked himself, "Where shall I	-	go home. He wondered where to go.
(when the subject of the infinitive is the same as the subject of the	go?" He asked himself, "What should I tell them?"	-	He wondered what to tell them.
verḃ)	He asked himself, "How can I stop this?"	-	He wondered how to stop that.

Reporting Conversations or Dialogues

Everyday conversations and dialogues are a mixture of statements, commands, and questions. To report these we use: and, as, adding that, and he/she added that, explaining that, because, but, since, so, and then he/she went on to say, while, then etc. or the introductory verb in the present participle form. Exclamations such as: Ohl, Ouchl, Oh nol etc. are omitted in reported speech.

DIRECT SPEECH	REPORTED SPEECH
Shall we go to the park?" he said.	 He said that it was a great day and suggested going to the park. She said that she couldn't eat it because it was too salty.
<i>"Let's call Brian," he said. "I want to find out what happened."</i>	 He suggested that they should call Brian, explaining that he wanted to find out what happened.

Exclamations – "Yes/No" short answers – Question tags

 Exclamations are replaced in reported speech with exclaim, thank, wish, say, cry out in pain etc., give an exclamation of surprise/horror/disgust/delight etc. The exclamation mark becomes a period. Exclamatory words such as Oh!, Eek!, Wow!, Oh!, Oh dear!, Well! etc. are omitted in reported speech. "Aggh!" she said at the sight of blood. → She gave an exclamation of horror at the sight of blood.

- Yes/No short answers are expressed in reported speech with subject + appropriate auxiliary verb or subject + appropriate introductory verb. "Will you forgive me?" he asked. "No," she said. ⇒ He asked her if she would forgive him but she said she wouldn't. or He asked her if she would forgive him but she refused.
- Question tags are omitted in reported speech. An appropriate introductory verb can be used if we want to retain their effect. "She is out shopping, isn't she?" he said.
 → He wondered if she was out shopping.

Practice

a) Fill in the blanks with say or tell in the correct tense.

"I ran into Tom the other day at the internet café," 1) _____ Grant. "He 2) ____ me that he had found a really interesting job in London and I 3) _____ him I was delighted for him." "I am happy to hear it too," 4) _____ Lara. "Did he 5) _____ you when he was leaving?" asked Kate. "Yes, he 6) _____ he would be leaving next Sunday," said Grant. "He also 7) _____ that he was having a party on Saturday night and he 8) _____ me to ask you to come."

b) Fill in the blanks with say or tell in the correct tense.

"Hey, Mark," 1) _____ Jerry. "Brian 2) _____ me that he saw you at the career seminar at school the other day. How was it?" " It was really interesting, Jerry, too bad you missed it, "3) _____ Mark. "Everyone there 4) _____ that it was the best one they've been to so far." "Please, 5) _____ no more; I'm already upset I missed it," 6) _____ Jerry. "Brian also 7) _____ me that you 8) _____ something about going skating Friday." "Oh yes. I forgot to 9) _____ you. I'm thinking of booking the skating rink for my birthday. Just 10) _____ for sure if you're coming so I know how many to book for. OK?"

2 Turn the following statements into *reported speech*.

- 1 "He doesn't know the latest news," she said.
- 2 "I can store 32GB of music on this," said Troy.
- 3 "We have been using this software for a year," said Nick.
- 4 "I've always loved photography," said Jane.
- 5 "He will copy the CD for me," Orla told May.
- 6 "I am considering a career in show business," Ken told his dad.
- 7 "I downloaded the program for you," said Owen.
- 8 "I can't get this device to work," said Fran.
- 9 "You mustn't press this button," said Bob.
- 10 "I was playing video games all night," said Steven.

3 Turn the following questions into *reported speech*.

- 1 "Where is Dad?" Mary asked.
- 2 "Can you help me lift the piano?" Ted asked me.
- 3 "How long have you been working here?" she asked me.
- 4 "Did you finish typing the reports?" the boss asked Julie.
- 5 "What time will she arrive?" Ben asked.

Rewrite the orders in *reported speech*.

- 1 "Don't forget to recharge the battery," David told Jude.
- 2 "Remember to bring my MP3 player back," Elizabeth said to me.
- 3 "Be quiet!" she told him.
- 4 "Turn your computer on," said the teacher.
- 5 "Don't tell anyone what I said," Kate told Nora.

5 Match the speech bubbles a-d to the sentences 1-4. Then, complete the sentences using *reported speech*, as in the example.



Relative clauses

Relative clauses begin with a relative pronoun or a relative adverb.

We use:

- who(m)/that to refer to people. The girl who/that lives next door to Jan is my cousin.
- which/that to refer to things. The store which/that has just opened in Wendover Street is lovely.
- whose with people, animals, and objects to show possession.

She's the girl **whose** father is a pilot. That's the car **whose** interior was destroyed by fire.

Who, which, and that can be omitted when they are the object of the relative clause.

You met a woman. She's my aunt Mary.

The woman (who) you met is my aunt Mary.

Who, which, or that is not omitted when it is the subject of a relative clause.

A girl lives next door. She's a famous actress.

The girl **who** lives next door is a famous actress.

Relative Adverbs

We use:

- when/that to refer to a time. That was the year (when/that) we got married.
- where to refer to a place. The restaurant where we had dinner yesterday is very expensive.
- why to give a reason. The reason (why) she was late is still unclear.

Restrictive – Nonrestrictive clauses

- A restrictive relative clause gives necessary information which is essential to the meaning of the main clause. We do not put it in commas. It is introduced with who, whom, whose, which, or that. The bank which was burglarized last week has reopened. (Which bank? The one which was burglarized last week.)
- A nonrestrictive relative clause gives extra information which is not essential to the meaning of the main clause. We put it in commas. It is introduced with who, whom, whose, or which, not that.

Cate Blanchett, who stars in "The Lord of the Rings," is a great actress. (The relative clause adds information about Cate Blanchett. If we omit it, the meaning of the main clause does not change.)

 In nonrestrictive clauses we can use which to stand for the main clause. She has to wake up at 6 every day which she doesn't like. ("which" refers to the fact that she has to wake up at 6:00.)

Relative Pronouns

OF TH C	OF THE VERB IE RELATIVE LAUSE t be omitted)	OBJECT OF THE VERB OF THE RELATIVE CLAUSE (can be omitted)	POSSESSION (cannot be omitted)
used for people	who/that That's the girl who is a famous actress.	who/whom/ that The man (who/ whom/that) you spoke to is my brother.	whose That's the boy whose father is a pilot.
used for things/ animals	which/that I heard a song which/ that was written by Justin Timberlake.	which/that The book (which/that) you borrowed is mine.	of which/ whose That's the book of which/whose (the) first page is missing.

- Whom, which, and whose can be used in expressions of quantity with of (some of, many of, half of, etc.). She got a lot of job offers. Most of them were from investment banks. She got a lot of job offers, most of which were from investment banks.
- That can be used instead of who, whom, or which but it is never used after commas or prepositions. She's the girl who/that plays the piano very well. The person to whom you were speaking is my brother. ("that" is not possible)

Practice

down.

- Fill in the relative pronoun, adding commas where necessary. Write *R* for restrictive, *NR* for nonrestrictive, and whether the relative clause can be omitted or not.
 - 1 The university *where* he studies has an excellent reputation. R NR 2 My computer teacher _____ name is Mr. Lynch is very nice. 3 This MP3 player _____ I got for my birthday is very expensive. 4 The students _____ designed the device won an award. 5 The apartment _____ he lives has all the modern conveniences. 6 Bill Gates _____ owns Microsoft is a very rich man. 7 The software program _____I bought is very sophisticated. 8 My neighbor _____ is a scientist earns a lot of money. 9 The store _____ I bought my digital camera has closed

- 2 Fill in: who, which, where, when, why.
 - Martin is a DJ _____ plays music at weddings.
 - 2 The Eiffel Tower, _____ is in Paris, is a popular tourist attraction.
 - 3 That's the dog _____ barks all night long.
 - 4 I saw the play _____ you recommended.
 - 5 The little boy _____ you tutor passed his exam.
 - 6 The bookstore _____ I shop has closed down.
 - 7 That day _____ you called I was away on vacation.
 - 8 That's the reason _____ she didn't come to the party.
 - 9 That was the year _____ I got married.

3 Combine the sentences using relatives.

- 1 That's the man. He installed my phone. That's the man who installed my phone.
- 2 Greg's new digital camera doesn't work. It cost him a fortune.
- 3 Here's an ad for the laptop. I think I'll buy it.
- 4 This is the laptop. I bought it from a friend.
- 5 I'm reading *The Time Machine*. It was written by H.G. Wells.
- 6 My friend bought a new MP3 player. It stores up to 64GB of music.
- 7 This is Mr. Key. He's my Physics teacher.
- 8 The CD-ROM was delivered today. I ordered it weeks ago.
- 9 That's the town. I was born there.

- Complete the second sentence so that it means the same as the first. Use the word in bold. Use up to five words.
 - Mr. Jackson sold eighty laptops last month.
 by Eighty laptops _____

______ last month.
2 Who sent the text message?
sent Who ________
by?
3 My friend Julie lives nearby.
who Julie, _______ nearby.
4 They delivered the DVDs on time.

4 They delivered the DVDs on time. delivered The DVDs _____

_____ on time.

5 We ate at a very nice restaurant last night. where The restaurant _____

_____ last night was very nice.

6 "No, I won't speak to her," he said. to He _____

_____to her.

7 "No, I didn't cheat on the test," this student said. **denied** The student _____

_____ on the test.

8 Mike's digital camera can store up to 600 photographs. He just bought it.

which Mike's digital camera, ______, can store up to

600 photographs.

9 They will announce the winner of the competition next week.

announced The winner of the competition ____

_____next week.

10 Students can log in if they have a password. who Students _____

_____can log in.

11	My	dad	has	α	large	collection	of	stamps.
Many of them are foreign.								

which My dad has a large collection of stamps, _____

foreign.

Language Review

1.1 Forces of Nature

tornado

drought

blizzard

flood

earthquake

1

1

2

3

4

5

6

7

8

Match the natural phenomena to the newspaper headlines.

- A No rain in sight for Lubbock, Texas
 - tsunami wildfire hailstorm
 - C Ice balls the size of golf balls destroy local crops
 - D More than 18,000 acres of forest consumed in flames
 - E Massive waves hit Indonesian coastlines
 - F Widespread destruction after river breaks banks
 - G Funnel cloud touches down in Albany
 - H Buildings collapse as the earth still shakes in Turkey

2 Match the two columns.

1	awe-inspiring	A pressure
2	volcanic	B drop
3	lightning	C plates
4	tectonic	D eruption
5	built-up	E strike
6	sudden	F power

3 Choose the correct preposition.

- According on/to seismologists, the Pacific Plate moves about
 2 inches per year.
- 2 The aircraft was struck by lightning and it crashed **to/in** an open field.
- 3 Environmentalists wonder if Japan will move **away from/ apart** nuclear energy following the 2011 earthquake.
- 4 The Himalayas were formed when tectonic plates pushed **to/against** each other.
- 5 A tsunami is a series of destructive waves that result **from/** of an earthquake.
- 6 What happens when a tectonic plate slides **under/apart** another tectonic plate?
- 7 Tectonic plates that slide **past/back** each other in opposite directions create faults.
- 8 The Earth's atmosphere is separated into/for five layers.

- Fill in: destruction, deviation, axis, shortening, seismologists.
 - _____ monitor the earth's seismic movements and project where an earthquake is likely to take place.
 - 2 The president flew in to examine the _____ caused by the hurricane.
 - 3 The earth rotates on its _____ once every twenty-four hours.
 - 4 Changes in the color of tree leaves are caused by cooler temperature and the _____ of daylight hours.
 - 5 The earth's axis moved 10 inches. This _____ made our days shorter by 1.8 microseconds.

1.2 The Universe

1

Choose the correct answer.

1 Mars is the fourth ____ from the sun.

a planet b galaxy

2 English astronomer Edmund Halley observed a bright ____ with a long tail traveling around the sun.

a meteor b comet

- 3 The Milky Way is the ____ that contains our Solar System.a galaxy b moon
- 4 A ____ does not follow an orbit around the sun.
 - a comet b meteor
- 5 <u>are also called minor</u> planets and move between the orbits of Mars and Jupiter.
 - a Asteroids b Constellations

Language Review

- **2** Fill in: celestial, natural, startling, infinite, entire.
 - 1 The moon and the sun are _____ bodies located outside the earth's atmosphere.
 - 2 The Planck telescope was able to capture the first image of the _____ universe.
 - 3 There is a(n) _____ number of stars in the universe. No one knows how many there really are.
 - 4 The moon is a _____ satellite that orbits Earth.
 - 5 Scientists have made ______ discoveries about the age and the evolution of our universe.

3 Choose the correct word.

- 1 Scientists cannot **tell/ask/say** for certain how the universe was formed.
- 2 Could the entire universe have **come/gotten/ become** into existence from nothing?
- 3 Space exploration has given pay/rise/ creation to technologies that will make space tourism possible.
- 4 The day-night cycle will **continue/last/go** on forever.
- 5 Earth's distance to the sun has **made**/ **done**/had life possible.
- 6 Scientists are **addressing/doing/wondering** the question "what happened before the Big Bang?"
- **4** Fill in: over, of, around, after, about.
 - 1 The planets move _____ the sun.
 - 2 Space exploration in the United States of America has extended _____years.
 - 3 The planet Mars was named ______ a Roman god.
 - 4 Most people wonder _____ the origins of life on Earth.
 - 5 Our solar system consists _____ eight planets.

- 5 Fill in: expansion, contraction, collapse, explosion, coincidence, motivation, constellation, discovery.
 - 1 Cold weather causes the _____ of metal.
 - 2 Orion is a _____ made up of stars and is in the shape of a hunter.
 - 3 The ______ of the universe takes place as galaxies move further apart.
 - 4 It's no _____ that the conditions on Earth are suitable for human survival.
 - 5 Large stars _____ at the end of their life-time, often forming black holes.
 - 6 The main _____ behind space exploration is to discover other life forms.
 - 7 The recent _____ that Uranus has a bright spot in its atmosphere has intrigued scientists.
 - 8 Big Bang theorists believe that life on Earth began following a massive ______.

1.3 Human Biology

1

Match the words to their definitions.



- A the organ where the digestion of food takes place
- B the tube which takes food to the stomach
- C the frame of bones which support a human body
- D the organ in your chest that sends the blood around your body
- E thin tubes that carry blood to the heart from the other parts of the body
- F two organs in the chest which help people breathe
- G two organs in the body which take away waste matter from the blood
- H a piece of tissue inside your body connecting two bones used when you make a movement.