

# Exercises of Student's Book

## Lessons 1 and 2

Before you begin

1 Look at the pictures. Do you know what happens in our brains when we sleep? What do you think are the health benefits of sleep? Do you think that enough sleep makes you active during the day?

Answers:

Students' own answers.

2 Read the words in the box. Which words refer to parts of the body? Which words are associated with sleep? Check the meaning of any words you don't know in the Activity Book glossary or in a dictionary.

brainwave eyelids heartbeat immune system muscle REM soundly

Answers:

parts of the body: immune system, eyelids, muscle

associated with sleep: REM, heartbeat brainwave, soundly.

3 Read and listen to the following article about sleep. Check your answers to exercise 1.

Answers:

The brain sorts and stores information and replaces chemicals. It also tells the muscles to relax and the heart to beat more slowly.

Suggested answer:



In the second photograph, a person is taking part in an experiment to monitor the brain during sleep.

## Comprehension

4 Read and listen to the article again. Match the stages of sleep with the events that happen.

1 Stage 1 (b) This stage lasts for the shortest time.

2 Stage 2 (c) This stage lasts for the longest time.

3 Stages 3 and 4 (a) At this stage, we sleep most soundly.

4 Stage 5 (d) This is when we usually have most of our dreams.

#### Grammar

5 Work in pairs. In the article on page 6, find one sentence with each of the following grammatical structures. Then, in your notebook, write your own sentences for each of the six items and tell them to your partner.

Possible answers:

1 Stage 1 is when we begin to fall asleep.

2 We might have some dreams in this stage, which makes up about 15% to 23% of a young adult's sleeping time.

3 Scientists have already identified five sleep stages by studying brainwaves.

4 Sleep is an essential part of life.

5 Although our body is resting, our eyes are moving very quickly



beneath our eyelids during this stage.

6 Scientists claim that sleep is the time when information is sorted and stored by the brain.

6 Complete the following dialogue with the correct verb forms from the box.

Let's go were asked was done Have/found out/yet must be were given Why don't we do might have continued

Faisal: Kareem, I'm reading about the importance of sleep. Did you know that an experiment (1) was done to show that our brain continues to think while we are sleeping?

Kareem: Really? Who did the experiment?

Faisal: I'm not sure! It (2) must be a group of scientists. Two groups of people (3) were asked some questions in a test, but they did not answer them immediately. Both groups (4) were given a test on the questions after only one group had a short sleep.

Kareem: (5) Have you found out about the result of the experiment yet?

Faisal: Yes! The group who slept for a short time after hearing the test questions knew the answer more quickly.

Kareem: So their brains (6) might have continued thinking about the problem while they were sleeping.

Faisal: That's right! (7) Let's go and ask our science teacher if this is true.

Kareem: Good idea! (8) Why don't we also do more research on this



#### topic?

## 7 Speaking

Work in pairs and answer the following questions.

1 What are the advantages of waking up early? What are the disadvantages of oversleeping? Do some research to find scientific arguments?

Suggested answer:

Waking up early makes the person more productive, more energetic, more optimistic, more intelligent, a better problemsolver, a better planner, etc. However, oversleeping causes sleepiness during the day, tiredness, low energy, memory problems, depression, headache, heart disease and many other problems and illnesses.

2 How many hours a day do you sleep? Do you think it is healthy for you to sleep over this period? Why / Why not?

Suggested answer:

Students should be getting between 7 and 8 hours of sleep per night.

3 How could you improve your sleeping habits?

Suggested answer:

Having a consistent routine before going to bed may help improve your sleeping habits.



## **Research box**

What is the normal heart rate for a healthy adult, in a normal resting state?

For adults, 95% of normal people have a resting heart rate between 60 and 100 beats per minute.