

1.3 I'm wide awake

READING Why do we sleep?

- 1 Work in pairs. Discuss the questions.
 - 1 About how many hours do you sleep per night?
 - 2 Would you prefer to sleep more or less, or do you sleep the right amount?
 - 3 Do you tend to wake up early and feel alert in the morning, or do you feel alert at night and stay up late?
- 2 Read the article. Which of the following are included?
 - 1 An explanation of what happens when a person is deprived of sleep
 - 2 Some reasons why people have difficulty sleeping
 - 3 A list of physical and emotional problems caused by working at night
 - 4 Descriptions of how to fight sleep and how to encourage it
 - 5 An explanation of some of the dangers of exhaustion
 - 6 Some famous people's bad experiences with being unable to sleep
- 3 Find a sentence in the article that either supports or contradicts each of these statements.
 - 1 Randy Gardner is the world-record holder for staying awake.
 - 2 Sleep deprivation causes people to lose touch with reality.
 - 3 The brain basically shuts off when we fall asleep.
 - 4 Experts say that a healthy adult should have a minimum of eight hours' sleep each night.
 - 5 Light can have a strong effect on the natural sleep cycle.
 - 6 Not getting enough sleep could shorten your life.
 - 7 It's impossible for anyone to function for more than a few days without getting a solid night's sleep.
 - 8 The only documented instances of sleep deprivation lasting more than two or three days are experiments carried out by scientists.
- 4 Work in pairs. Match the expressions from the article with the definitions (a-f).
 - 1 Gardner was **wide awake**.
 - 2 Gardner began to **nod off** uncontrollably.
 - 3 He needed to **sleep on it**.
 - 4 She **drifted off to sleep**.
 - 5 He **hadn't slept a wink**.
 - 6 He didn't **oversleep** in the mornings that followed.

a wait until the next day to make a decision
b gradually fall asleep
c had no sleep
d fall asleep when you don't mean to
e wake up later than you mean to
f completely alert

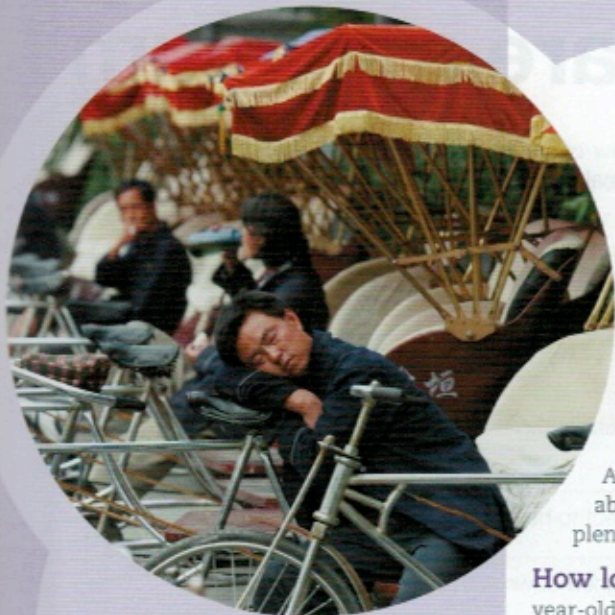
VOCABULARY The prefixes over- and under-

- 5 When attached to a verb or adjective, the prefix *over-* can be used to mean *more than necessary* and *under-* can mean *less than is necessary* or *not enough*. What's the meaning of these words from the article?
 - 1 Sleep is **undervalued** in the modern world as a means of staying healthy, happy and productive.
 - 2 The dangers of being too tired are often **underestimated**.
 - 3 Being **overworked** and exhausted slows brain function.
 - 4 But don't **overdo** it!
 - 5 Eleven- to seventeen-year-olds are probably **undersleeping** if they don't get an average of 8.5 to 9.5 hours a night.
- 6 Complete the sentences. Use words with *over-* and *under-*.
 - 1 We needed more staff in the office.
The office was _____.
 - 2 People use the word *awesome* far more than is necessary.
Awesome is _____.
 - 3 It's easy to spend too much money on luxuries.
It's easy to _____ on luxuries.
 - 4 My idea isn't developed enough.
My idea's _____.
 - 5 The bus was so crowded that it was unsafe.
The bus was _____.
 - 6 We estimated that 500 people would visit, but only 300 came.
We _____ the number of visitors.
 - 7 I'm surprised this restaurant isn't more highly rated.
This restaurant is _____!
 - 8 The price of the movie was too high.
The movie was _____.
- 7 Work in pairs. Discuss the questions.
 - 1 What places in your area are frequently overcrowded?
 - 2 Can you think of a product or resource that is underused?
 - 3 What products or services do you think are overpriced?
 - 4 Can you think of a book, film, restaurant, or something else that you feel is underrated?
 - 5 Can you think of a book, film, restaurant, or something else that you feel is overrated?

SPEAKING Talking about things we need

- 8 **21st CENTURY OUTCOMES**

Sleep is a necessity for a healthy, happy life. Make a list of other human necessities.
- 9 In small groups, compare your lists. Then try to agree on the five most important necessities for daily life.



Why do we sleep?

Adults spend, on average, a third of their lives asleep. But ask the question above, and you'll find that there isn't a clear or simple answer. But there are plenty of other interesting questions ... and answers.

HE NEEDED TO SLEEP ON IT

Albert Einstein, probably one of the greatest minds of all times, is said to have required ten hours' sleep each night. The reason is likely to be that he did a lot of problem-solving while sleeping. Research has found that as we sleep, our minds are able to continue working, and as a result, it's possible to fall asleep with a problem and wake up with a solution.

SHE DRIFTED OFF TO SLEEP

In 2005, Ellen MacArthur broke the world record for the fastest solo round-the-world sailing boat voyage. As part of her training, a sleep expert trained MacArthur to take ten half-hour naps each day, resulting in a total of five hours' sleep in every twenty-four. Judging by her successes, this approach appears to have worked well for MacArthur.

HE HADN'T SLEPT A WINK

The 2001 TV game show *Touch the Truck* featured twenty contestants competing to win a brand new pick-up truck. The set-up was simple. Each person put one hand on the truck. They weren't allowed to lean on it or to sit down at all, but were allowed a ten-minute break every two hours and a fifteen-minute break every six hours. The winner was the person who could keep a hand on the truck for the longest period of time. That was Jerry Middleton, who stayed awake for 81 hours, 43 minutes and 31 seconds without letting go of the truck.

How long can a human go without sleeping? In 1965, seventeen-year-old Randy Gardner of San Diego, California stayed awake for 264 hours and 24 minutes – just over eleven days – breaking the then world record of 260 hours. Gardner's record has been broken several times since, though not by much, and it remains the best-documented sleep-deprivation experiment ever conducted. 5

What happens when you stay awake for eleven days? On the first day of the experiment, Gardner was wide awake and ready to go at six in the morning. By day two, however, his thinking showed signs of becoming less clear. When asked to identify simple objects by feeling them with his hands, he found it difficult. By day three, he had become unusually moody. On day four, he began to hallucinate, imagining that he was a famous American football player. Nights were difficult, as Gardner began to nod off uncontrollably. His friends kept him awake by driving him around in the car and playing pinball and basketball with him. As the days passed, Gardner's speech became less clear, he felt dizzy, his vision was blurred and his memory began to fail. He also continued to hallucinate. 10

Amazingly, after Gardner finally fell asleep he slept for only fourteen hours and forty minutes and awoke refreshed and alert and he didn't oversleep in the mornings that followed. 15

How much sleep do we need? Sleep is undervalued in the modern world as a means of staying healthy, happy and productive. But there's no 'magic number' of hours you need to sleep each night. According to the Sleep Foundation, people who are eighteen and older usually need between seven and nine hours per night, and eleven-to-seventeen-year-olds are probably undersleeping if they don't get an average of 8.5 to 9.5 hours. Younger kids need more sleep, and infants the most – fourteen to fifteen hours daily – to stay healthy. 20

What tricks do people use to try to stay awake? One of the most common tricks for staying awake is drinking coffee, tea or soft drinks that contain caffeine, a naturally-occurring chemical found in the leaves, seeds, nuts and/or berries of various plants. It stimulates the brain, makes us feel more alert and even helps us think more quickly. Other techniques include getting up and moving around regularly, listening to lively music, splashing cold water on your face, and pulling on the bottom part of your ears. Soldiers have been kept awake – and focused – by wearing special goggles that shine a light the colour of sunrise into their eyes, keeping their brains in 'wake-up' mode. But don't overdo it! Eventually, mind and body need a rest. 25

Can sleep deprivation cause any problems? The dangers of being too tired are often underestimated. Tiredness has been a factor in big disasters, such as the Chernobyl nuclear accident in 1986, and in countless road accidents all over the world every day. Being overworked and exhausted slows brain function, negatively affects judgement, contributes to depression and makes you forgetful. And there are physical problems, too. Chronic sleep deprivation can increase the risk of heart disease and other serious health problems. 30

Why do we sleep? The best answer may be 'Because we're tired'. 35