

**READING AND USE OF ENGLISH (1 hour 15 minutes)**

**Part 1**

For questions 1–8, read the text below and decide which answer (A, B, C or D) best fits each gap. There is an example at the beginning (0).

Mark your answers on the separate answer sheet.

**Example:**

0 A involves B means C intends D proposes

0	A	B	C	D
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Sunshine mirrors**

To many people, winter (0) ..... shorter days and long, dark nights. This (1) ..... used to be the case in Rjukan, a small town in Norway, which is surrounded by steep hills that cut it (2) ..... from direct sunlight for six months each year. But now, the town authorities have come up with a clever way of (3) ..... light into the town: giant mirrors situated on top of the hills and controlled by computers are programmed to follow the path of the sun and reflect beams of light into the town centre.

The idea was (4) ..... forward over 100 years ago, but it's only now that technological developments have made it possible. Many residents (5) .....to the proposal at first, largely because they thought it was a waste of money, but now there's a really positive (6) ..... to the mirrors in the town. People sit in the centre (7) ..... up the sunlight and say that it has really (8) ..... their quality of life.

- |   |             |             |                |             |
|---|-------------|-------------|----------------|-------------|
| 1 | A surely    | B obviously | C clearly      | D certainly |
| 2 | A off       | B out       | C away         | D apart     |
| 3 | A producing | B creating  | C getting      | D making    |
| 4 | A held      | B come      | C brought      | D put       |
| 5 | A objected  | B argued    | C disagreed    | D refused   |
| 6 | A feedback  | B response  | C answer       | D comment   |
| 7 | A sponging  | B absorbing | C soaking      | D mopping   |
| 8 | A inflated  | B enhanced  | C supplemented | D extended  |



Part 4

For questions 25-30, complete the second sentence so that it has a similar meaning to the first sentence, using the word given. Do not change the word given. You must use between two and five words, including the word given. Here is an example (0).

Example:

0 Prizes are given out when the school year finishes.

PLACE

Prize-giving ..... end of each school year.

The gap can be filled by the words 'takes place at the', so you write:

Example:

0 TAKES PLACE AT THE

Write only the missing words IN CAPITAL LETTERS on the separate answer sheet.

25 We went to the beach even though the weather was very wet.

FACT

We went to the beach despite ..... raining heavily.

26 It's too late to go to the cinema now.

POINT

There's ..... to the cinema now because it's so late.

27 It was obvious to everyone how excited Petra was.

HIDE

Petra ..... from anyone.

28 I can't use this pen because there's no ink left in it.

RUN

I can't use this pen because ..... ink.

29 The noise my little brother is making is too much for me to bear.

PUT

I ..... the noise my little brother is making any longer.

30 Well, in my opinion, this is the best phone you can buy.

FAR

Well, as ..... concerned, this is the best phone you can buy.

## Part 5

You are going to read an extract from a novel. For questions 31–36, choose the answer (A, B, C or D) which you think fits best according to the text.

Mark your answers on the separate answer sheet.

## Living with Gran

Rose Frost was just sixteen years old, and she was going to live with her grandmother, Daisy. Rose's family was separating for two years. Jeff, Rose's father, had an assignment overseas, and her mother Dahlia would be joining him, but Rose and her elder sister Amy were staying in England. Amy would spend the next year completing her final school courses, living under the guardianship of the college Head. It was her last year at school so it would have been unfair on Amy to move. To Amy's delight, she had been given the best room at the college, with its own kitchen and study area. The free access to the Internet and phone had also not gone unnoticed. Jeff and Dahlia would be keeping an eye on Amy, whether she liked it or not.

And so Rose was moving to her grandmother's house. It was only vague holiday memories that Rose recalled of her grandmother, and she had never known her grandfather. When Daisy had offered her granddaughter a place to stay, Rose's parents had not been enthused by the idea, but Daisy had insisted that it was no trouble and was relishing the chance to know her granddaughter again. Rose was not entirely sure what her parents' enmity was towards her grandma, but there had been a falling out some time through the years, resulting in summer holidays spent elsewhere instead of with the only other family member that Rose knew. Rose had been only ten years old when she last said goodbye but her memories had been happy ones.

line 37 Dahlia had indicated that living with Daisy would be interesting. Daisy was a social go-getter and had an uncanny knack of bringing people together. Within a week, Rose was to expect dinner invitations, coffee morning requests and shopping trips. The thought of it made Rose smile. Her grandmother was not the typical frail old lady figure, and from what Rose could gather, Daisy seemed to attend more social events than the Queen of England herself.

Dahlia and Rose had had a 'talk' prior to the move. Rose was sensible and very mature for her age. She'd accepted the need for healthy eating, keeping fit and getting enough sleep. But this time Rose had insisted on one thing: she wanted her independence. Living with Daisy would be fulfilling all her needs. But Rose wanted to play music loud if she wanted, and to invite friends over or go out without having to ask permission every time. Surely she could be trusted to do these small things now? She didn't want to be nagged about homework or staying out late, and most of all, she didn't want to be dragged around by her grandmother. Daisy had understood. Rose's mother had duly provided her with a new touch-screen mobile phone complete with video camera – for emergencies only, Dahlia had insisted. Rose had been ecstatic. They had all agreed that from now on, it would be about trust. Her grandmother would trust her to act mature and make grown-up decisions, and Rose would trust Daisy not to be overbearing. If either of them went too far over the line, they would renegotiate.

Rose had never been a wild child. Her precious few school friends had all been inclined the same way, too, so school reports had always been good and exam results exemplary. This had worked in her favour. In five weeks' time, Rose would begin the arduous task of starting at a new school, meeting new friends, forming bonds and basically beginning her life again. It was her fourth senior school in five years, so she felt like a veteran at it now. At least she knew this was the last time as she would be starting her final two years at school. For Rose it was a new moment in time, a new glass shard in the mosaic that was her life.

line 74  
line 75

- 31 In the first paragraph the writer suggests that Rose and Amy's parents
- A seldom took Rose's wishes into account.
  - B wanted to ensure that Amy was behaving well.
  - C were keen that Rose's studies should not be disrupted.
  - D hoped Amy would appreciate the facilities her accommodation offered.
- 32 What did Rose remember about her grandmother, Daisy?
- A the holiday times when she got to see Daisy
  - B the arguments Daisy used to have with Rose's parents
  - C the summer holidays Rose enjoyed with her grandparents
  - D the holiday trips Daisy went on with Rose and her family
- 33 Why are the words 'uncanny knack' used in line 37?
- A to suggest that Daisy made long-lasting friendships
  - B to emphasise that an ability was extraordinary
  - C to show how excited Daisy was to see Rose
  - D to explain some unusual behaviour
- 34 Rose discussed the move with her mother because Rose hoped to
- A reach a compromise.
  - B win an argument.
  - C make a complaint.
  - D get some advice.
- 35 What is meant by 'This had worked in her favour' in lines 74 and 75?
- A Rose was popular because she was a good student.
  - B Rose preferred studying to going out with her friends.
  - C Rose's parents usually let her do whatever she wanted.
  - D Rose's previous behaviour affected her parents' decision.
- 36 How did Rose feel about going to another new school?
- A eager to get to know a new group of people
  - B concerned that she wouldn't be able to cope
  - C relieved that she wouldn't have to do it again
  - D pleased to have the chance to make a fresh start

## Part 6

You are going to read about some little robots that can assemble themselves. Six sentences have been removed from the article. Choose from the sentences **A–G** the one which fits each gap (**37–42**). There is one extra sentence which you do not need to use.

Mark your answers on the separate answer sheet.

## Self-assembling robot

*A new robot can build itself and walk away without human intervention.*

In some science fiction films, 'transformer' robots can disguise themselves as ordinary everyday objects and then change shape to turn back into robots again. Scientists have built the world's first working robot that can transform itself in this way.

Alien robots that so often feature in science fiction movies hide their true nature by, for example, taking on the form of vehicles. **37**  Instead, it disguises itself – for now, at least – as a flat, nondescript object. Video footage from the research laboratory shows a circuit board mounted with batteries and sandwiched between paper and plastic. Without human intervention, this contraption is able to unfold itself into a small working machine and then walk away.

**38**  Their flat-pack robot uses special chemicals called 'shape memory polymers' which contract like muscles when they are heated. The robot takes about four minutes to assemble itself from scratch and once this process is complete, it can walk at a speed of around 5 cm per second.

The team used computer design tools to create the robot from three layers. **39**  A layer of paper provides protection for the flexible electronic circuit underneath and a layer of pre-stretched plastic covers the working parts. Mechanisms that allow the robot's legs to move into position contain tiny circuits, which heat up on command. These mechanisms are programmed to ensure that the limbs unfold at specific angles. To work out where

the folds need to go, the scientists used computer software inspired by origami, the Japanese art of folding paper into different shapes.

The robot has a built-in timer and starts to fold itself into shape 10 seconds after its batteries have been fitted. **40**  For example, an environmental sensor, sensitive to temperature or pressure, could set the process in motion instead. Around four minutes after assembly, the robot's folding mechanisms cool down enough to set hard and the robot's microcontroller sends signals to the legs to make it walk.

The scientists were pleased to discover that the energy stored in just one AA battery was enough to allow the robot to unfold itself and move away. **41**  That could have a major impact on its further development.

The invention could even pave the way for flat-packed machines for use in space. Dozens of robotic satellites could be sandwiched closely together so that they could be sent up to space and then assemble themselves remotely once they get there. They could take images, collect data and more. **42**  They could be used in hazardous environments on Earth, for example to deal with problems in mines deep underground so that people do not have to put themselves at risk.

- |   |   |
|---|---|
| <b>A</b> The scientists involved in the project have been dreaming of achieving this for many years.                        | <b>E</b> And those are not the only options.  |
| <b>B</b> That would allow the robot to move in any direction.   | <b>F</b> The scientists say they could easily modify this so that the process is triggered by something else. |
| <b>C</b> The little robot has yet to reach that level of technical trickery.  | <b>G</b> Each is different and has a particular function.   |
| <b>D</b> They also claim that the equipment needed to manufacture the robot on a larger scale would cost relatively little. |   |

Part 7

You are going to read an article about learning foreign languages. For questions 43–52, choose from the sections (A–D). The sections may be chosen more than once.

Mark your answers on the separate answer sheet.

**In which section does the writer**

- |   |    |                      |
|---|----|----------------------|
| explain why a particular achievement is beneficial?       | 43 | <input type="text"/> |
| say language learners tend to be treated sympathetically? | 44 | <input type="text"/> |
| claim that something has failed to be proven?             | 45 | <input type="text"/> |
| point out what people need in order not to give up?       | 46 | <input type="text"/> |
| encourage people to use language creatively?              | 47 | <input type="text"/> |
| say people will become accustomed to something?           | 48 | <input type="text"/> |
| say learners need to be determined to reach their goal?   | 49 | <input type="text"/> |
| mention characteristics that enhance learning ability?    | 50 | <input type="text"/> |
| assure people that something is unnecessary?              | 51 | <input type="text"/> |
| admit that a suggestion is unconventional?                | 52 | <input type="text"/> |

# How to learn a language

**A**

This might sound obvious, but if you don't have a good reason to learn a language, you're less likely to stick with it over the long run. Wanting to impress people with your language skills is not a very good reason; wanting to get to know a person in his or her own language is another matter entirely. And once you've decided on a language, it's crucial to commit. I say to myself: 'OK, I want to learn this and I'm therefore going to do as much as I can in this language.' I try to think my everyday thoughts in it, even speak out loud to myself in that language. It might sound really weird, but doing that is a great way to practise if you're not able to use it all the time. It can keep new words and phrases fresh in your mind and build up your confidence for the next time you speak with someone.

**B**

Being able to have a simple conversation is a huge reward in itself. Reaching milestones like that early on is very motivating. You don't have to go abroad; you can meet people who speak the language in your own country and practise with them. Having a partner, such as a friend or relative, on your language adventure will push both of you to always try just a little bit harder. I've learned several languages together with my brother. If he realises that I'm doing more than he is, he'll try and outdo me – and the other way round. We sometimes practise by writing and recording songs – you could try that. Think of some fun ways to practise your new language: write a poem or even draw a comic strip.

**C**

The idea that children are inherently better learners than adults is turning out to be a myth, and new research cannot find a direct link between age and the ability to learn. However, it may still be worth trying to learn the way kids do because they certainly are fast learners. The key to learning as quickly as a child may be to simply take on certain childlike attitudes, for instance, lack of self-consciousness and willingness to make mistakes. This means being ready to put yourself in potentially embarrassing situations, which can be scary, but it's the only way to develop and improve. No matter how much you learn, you won't ever speak a language without putting yourself out there: talk to strangers in the language, ask for directions, order food, try to tell a joke. The more often you do this, the better your language skills will become.

**D**

Just as you must learn to look before you can draw, you must learn to listen before you can speak. Every language sounds strange the first time you hear it, but the more you expose yourself to it, the more familiar it will be. Believe me, we're able to pronounce anything, it's just we're not used to doing it. Pronunciation is as much physical as mental, and different languages make different demands on your tongue, lips and throat. One way to improve is to really look at someone while they're saying words that use that sound, and then to try to imitate them. You can try to imitate a native speaker, or watch foreign-language films on TV. And it's good to remember you're not going to annoy people by speaking their language poorly. Most people will be patient and encouraging, and glad that you're trying to communicate with them.