Reading and Use of English• Part 6

You are going to read an article about a schoolboy who has come up with a clever invention. 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**.

Young Inventor

Schoolboy Tim Freeman has come up with a clever idea to improve the efficiency of school buses.

Tim Freeman was just twelve years old when he came up with a revolutionary idea that would make school buses more energy efficient. This would not only save money, but also help the environment. Five years later, the schoolboy finally saw his dream come true.

It all began when Tim did a short summer course on aerodynamics, the study of the movement of air around objects. **37** He realised that the perfect candidate was his school bus. It had a very square front which meant it did not use petrol efficiently, only travelling 3km per litre, compared to a private car that can average about 8.5km per litre. He decided it was high time the vehicle was improved.

After thinking about it for a while, Tim came up with the idea of attaching a large piece of strong transparent plastic to the front of the vehicle, covering the windscreen. It would help redirect the flow of air around the bus and thus make it move forwards more easily. **38** At least, that was the theory.

While his science teachers loved the idea, Tim needed to find enough money to build a model and test it. **39** Helped by his older sister Alice, he managed to obtain a grant from an organisation that helps young people develop new ideas.

Over the next year, Tim used the money to build a small-scale model of his invention. He did tests on it by attaching it to a mini toy school bus and seeing how it performed in a little wind tunnel he built in his garage. **40** Because of this he knew he now needed to step it up and create a life-sized version that could be put to the test on a real bus.

By the time Tim was fifteen, he had set up a team of young engineers like himself, and been helped by his sister and his local community to obtain another grant to develop his idea further. While Tim and his team were able to build the initial versions, they soon realised that they needed some expert help to really get going. **41** The person who volunteered was the one who had inspired Tim to start thinking about the project in the first place. She had taught him on the summer course when he was twelve. Along with two of her engineering students she worked with Tim through the summer to finally help him realise his dream.

The final version of Tim's invention looks rather different from his original idea. Instead of a transparent piece of plastic that covers the windscreen of the bus, it is a smooth ramp-shaped 'hat' that gets fixed to the roof of the bus. **42** In tests done on virtual and real roads it has helped increase the efficiency of school bus fuel use by 10-20%. Maybe this ingenious device will eventually help other buses and even cars become more fuel-efficient!

LIVEWORKSHEETS

A So they began writing to local universities to see if anyone would provide the advice and knowledge they needed.

B This made it clear to them that the design would have to be changed.

C This prompted him to look for a way to use what he had learned.

D The data from these were good and his idea was looking promising.

E He knew that was the only way to see if his design really worked.

F This design provides the same benefits but costs less to manufacture and install.

G In this way, the bus would become more energy efficient.

LIVEWORKSHEETS

Reading and Use of English • Part 7

You are going to read an article about four teenagers who went to different summer camps. For questions **43 – 52**, choose from the teenagers (**A – D**). The teenagers may be chosen more than once.

Mark your answers **on the separate answer sheet**.

Which teenager

felt relieved they were kept so busy? **43** ☐

was pleased to have achieved something hard but worthwhile? **44** ☐

found that observing other people's work encouraged them? **45** ☐

helped to produce something that proved popular? **46** ☐

got through an activity very promptly? **47** ☐

says the main location for their activities particularly appealed to them? **48** ☐

stresses how much opportunity they had to use new knowledge? **49** ☐

was unwilling to complain about a lack of variety? **50** ☐

mentions everyone being obliged to complete certain chores daily? **51** ☐

appreciated coming across something interesting by chance? **52** ☐

LIVEWORKSHEETS

Teenage Summer Camps

A Adam – Nature Camp

We helped on a nature reserve for a week. We did different things every day, but I did get a bit fed up because we had cheese sandwiches every lunchtime. I kept quiet about it though because I didn't want to seem awkward. I was starving by twelve every day anyway, and it really was good fun, although we worked incredibly hard. One day, the schedule was changed at the last minute, and instead of our planned activity, we all helped the staff finish cutting the reeds by the lake. That was the toughest day – and also the best. They actually needed our help, we weren't just being kept occupied. Every day, we took it in turns to cook, in teams of five. When it was our team's turn, we made a simple dinner of pasta and salad for everyone. Judging by the fact that there was none left, we didn't do too badly!

B Sarah – Culture Camp

Every morning we had the same breakfast, and then cleaned up the camp. Nobody could opt out and it was only when it was all completely tidy that we could head off for the day. The first time we went into the city, we were split into teams and given lists of things to spot, like statues, squares and other landmarks. With some help from the local residents, it wasn't too demanding – my team found almost all of the items on our list and came second. We also got to know our way around, so I thought it was a clever idea. I'd been worried I might miss my parents, but there was something going on nearly every minute and I hardly got time to think about them. We went to different museums and galleries in and around the city every day, and in the evenings we cooked or went out for pizzas. It was a great chance to learn about another country and its history.

C Oliver – Language Camp

We stayed with families who had kids our own age, and because they were on a mid-term break they came with us on all the trips. So apart from when we were actually in a language class, we were spending time with our new friends. It was a great way to practise the language we had been working on in the classroom. We also had to do a quiz on the last day – we were put into teams and given clues to help us find places around the town. Our team finished early, so we waited for everyone else in a café in the main square. While we were there, a film crew arrived and started filming! I can't wait to see it when it comes out – we were sitting outside, so we might even be in it!

D Malika – Theatre Camp

We stayed in a youth centre in the suburbs, and went into the centre of town by bus every day. It was a good way to see a bit of the city, and it didn't take long to get to the theatre where we had our classes. I loved the atmosphere in the old building, and we could wander around during our breaks and watch rehearsals. The actors we saw were brilliant, and it was inspiring to watch them before we went back into our own classes. The emphasis was definitely on having fun, but we still learned a great deal and I'm looking forward to putting it all into practice at my school drama club next term! The food at the centre could have been better, but I don't think anyone minded much.

LIVEWORKSHEETS