

You are going to read part of an article about a pilot. 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.

## Flying high

*line 5* Barrington Irving is very good at rising above obstacles. Literally. Raised in Miami's inner city, surrounded by crime, poverty and failing schools, he beat the odds to become the youngest person ever to fly solo around the world. He built a plane himself, made his historic flight, graduated with excellent marks from an aeronautical science programme, and founded a dynamic educational non-profit-making organisation. Then he turned 28.

His message for kids: 'The only thing that separates you from chief executives in corner offices or scientists in labs is determination, hard work, and a passion for what you want to achieve. The only person who can stop you from doing something great is you. Even if no one believes in your dream, you have to pursue it.' The secret, he believes, is having a dream in the first place, and that starts with powerful learning experiences that inspire kids to pursue careers – particularly in science, technology, engineering, and mathematics.

The moment of inspiration for Irving came at the age of 15 while he was working in his parents' bookstore. One of their customers, a Jamaican-born professional pilot, asked Irving if he'd ever thought about becoming a pilot. 'I told him I didn't think I was smart enough; but the next day he gave me the chance to sit in the cockpit of the commercial airplane he flew, and just like that I was hooked. There are probably millions of kids out there like me who find science and exploration amazing, but lack the confidence or opportunity to take the next step.'

To follow his dream, Irving turned down a full football scholarship to the University of Florida. He washed airplanes to earn money for flight school and increased his flying skills by practising at home on a \$40 flight simulator video game. Then another dream took hold: flying solo around the world. He faced more than 50 rejections for sponsorship before convincing several manufacturers to donate individual aircraft components. He took off with no weather radar, no de-icing system, and just \$30 in his pocket. 'I like to do things people say I can't do.'

After 97 days, 26 stops and dozens of thunderstorms, monsoons, snowstorms and sandstorms, he touched down to a roaring crowd in Miami. 'Stepping from the plane, it wasn't all the fanfare that changed my life. It was seeing so many young people watching and listening. I had no money, but I was determined to give back with my time, knowledge and experience.' He's been doing it ever since. Irving's non-profit-making organisation, Experience Aviation, aims to boost the numbers of youth in aviation and other science- and maths-related careers. Kids attend summer- and after-school programmes tackling hands-on robotics projects, flight simulator challenges and field trips to major industries and corporations. In his Build and Soar programme, 60 students from failing schools built an airplane from scratch in just ten weeks and then watched Irving pilot it into the clouds.

*line 39* 'We want to create a one-of-a-kind opportunity for students to take ownership and accomplish something amazing,' he notes. 'Meaningful, real-world learning experiences fire up the neurons in kids' minds. If you don't do that, you've lost them. Purposeful, inspiring activities increase the chance they'll stay on that learning and career path. We've had one young lady receive a full scholarship to Duke University to study mathematics, and several young men are now pilots, engineers, and aircraft mechanics.' Perhaps Irving's most compelling educational tool is the example his own life provides. After landing his record-breaking flight at age 23, he smiled out at the airfield crowd and said, 'Everyone told me what I couldn't do. They said I was too young, that I didn't have enough money, experience, strength, or knowledge. They told me it would take forever and I'd never come home. Well ... guess what?'

- 31 Why does the writer say 'Then he turned 28' in line 5?
- A to explain why Irving was ready for a change in his lifestyle
  - B to emphasise how much Irving had achieved in his life so far
  - C to show why Irving's organisation had become so successful
  - D to justify the enthusiasm Irving demonstrated through his actions
- 32 According to Irving, what is the most important requirement for success?
- A having friends who believe you will eventually succeed
  - B having something specific that you want to accomplish
  - C having plenty of opportunities to study different subjects
  - D having contacts in organisations who can share their knowledge
- 33 What does Irving say about what happened in his parents' bookshop?
- A He realised immediately how lucky he was.
  - B He felt too embarrassed to refuse the offer.
  - C He was initially doubtful about his own abilities.
  - D He understood that his efforts would be rewarded.
- 34 What do we learn about Irving in the fourth paragraph?
- A Once he knew how to fly he took on a further challenge.
  - B He chose to get by on as low a budget as possible.
  - C He was eventually given just enough money to keep going.
  - D The most useful flying tips he picked up were from a game he bought.
- 35 Why did Irving set up his non-profit-making organisation?
- A He wanted to help improve the schools in his area.
  - B He hoped to avoid becoming a celebrity pilot.
  - C He thought he could teach people more than the flight schools could.
  - D He saw there was widespread interest in what he was doing.
- 36 What does 'compelling' mean in line 39?
- A exciting and demanding
  - B interesting and amusing
  - C powerful and effective
  - D clear and simple

You are going to read an article about robot shops. 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.

## The robot shop

Like most ideas that seem absolutely revolutionary, the concept behind the robot shop is actually very simple. In fact, it has already been around for many years in the form of vending machines selling bars of chocolate or drinks. This idea has been further developed to create the first robot shop, which may eventually change the future of shopping.

The prototype robot shop in a suburb of London looks like a giant vending machine. **37** The display on the right is refrigerated and holds items such as milk, yoghurt and cheese, while the display on the left has an impressive selection of biscuits, coffee, cakes and crisps. It does not have the variety of conventional shops, but it can cope with a late-night request for bread or painkillers.

A central console is what allows you to actually do your shopping. You key in the code numbers of the goods you want, which are displayed just underneath each item in the window, and a huge robot arm reaches out and picks up each item, bringing it over to the console inside the shop.

An electronic display shows you the total you have to pay. **38** Unlike supermarkets, in robot shops you can only collect the goods after you've paid. When the robot arm finds the things you want, it drops them into a hatch and you reach inside to take them out. If this happened before you paid, you could easily walk off with the goods without having paid for them.

The system couldn't yet be described as entirely efficient. There's a lot of room for improvement. The robot arm represents one of the biggest problems. **39** The arm has to be very accurate in order to pick up the item it has reached for, carry it to the hatch and safely drop it into it.

The difficulty of judging customer attitudes is another reason why the robot shop has to be tested. Customers are still cautious about doing most of their shopping in a robot shop, but this is only to be expected; every new invention has been regarded with some suspicion at first. **40**

The manufacturers of robot shops suggest that the small shopkeeper in inner-city areas represents their biggest potential client. **41** People in the area value the convenience of being able to pop out virtually all hours of the day and night for some item they have forgotten or suddenly feel like buying. Small shopkeepers are likely to invest in robot shop equipment, rather than employ part-time staff to work twenty-four hours a day.

The question is whether customers will prefer the impersonal service of a robot shop to the conventional type of shopping where there's human contact. **42** Machines do not take lunch breaks, they hardly ever make mistakes and they are never rude to customers. Isn't this the sort of efficiency people want from a shop these days?

- A** Not least of which are concerns about mechanical failure, especially when they occur in the middle of the night.
- B** The first thing you notice are the two large display windows which are absolutely packed with goods.
- C** The real question is whether, over the three-month testing period, enough people will overcome their doubts and start shopping here in significant numbers.
- D** For security reasons, you have to do this before the robot arm starts gathering your goods.

- E** Many shops like these only survive because they stay open late, or even around the clock in some cases.
- F** Experience with similar mechanised service equipment, such as cash dispensers, suggest that there are considerable advantages for both customers and shop owners.
- G** The challenge is to create a piece of machinery which will be delicate enough to pick up eggs but at the same time strong enough to pick up bottles of mineral water and baked-bean cans.

You are going to read part of an article in which four people talk about the sports lessons they had at school. For questions 43–52 choose from the people (A–D). The people may be chosen more than once.

Mark your answers on the separate answer sheet.

### Which person

thinks sports encourage cooperation?	43 <input type="text"/>
believes that experience of losing is important?	44 <input type="text"/>
thinks one benefit of sports is learning to concentrate?	45 <input type="text"/>
compares academic subjects to sports?	46 <input type="text"/>
believes the Olympic spirit is essential today?	47 <input type="text"/>
thinks sports help non-academic pupils?	48 <input type="text"/>
thinks sports can teach objectivity and justice?	49 <input type="text"/>
thinks schools should teach unusual sports?	50 <input type="text"/>
thinks diet and health should be taught with sports?	51 <input type="text"/>
thinks sports can make some children feel uncomfortable?	52 <input type="text"/>

## Sports at school

### A Diane Townson

Looking back, I did enjoy sports lessons at school, even though I think most schools in those days assumed sports were basically for boys, and girls weren't encouraged to do well at sports. That attitude really annoys me, because the whole point of sports at school is to help kids develop the right attitudes, and it doesn't matter really how good you are. If you can't run as fast as an Olympic athlete, that doesn't matter – what matters is that you run as fast as you can. Schools are highly competitive environments and sports can teach children the importance of teamwork. To do well in almost everything else at school, like maths or history, you are rewarded for individual effort, but sports are about working together towards a common goal. Sports at school give children who are not high achievers a chance to excel at something.

### B Colin Campbell

My own memories of sports lessons at school aren't particularly good, but that's mainly because of the type of school I went to. It was very unusual by British standards, with old-fashioned ways of teaching, and the headteacher didn't really think sports mattered at all. The school rarely organised sports events and never invested in sports equipment. There was very little emphasis on the importance of eating sensibly and the benefits of keeping fit and exercising properly. I believe that issues like obesity, anorexia, nutritional value of food, etc. should be included in sports lessons at school. Children should be encouraged to take part in competitive sports. Being competitive is part of human nature, and doing sports can provide an excellent outlet for this aggressiveness. Winning at sports can build up your self-esteem and confidence. On the other hand, since you can't expect to win every time, sports can also teach you how to be humble and realistic.

### C Roger Dias

There are obvious benefits in having good sports classes at school. Children stay fit and learn the importance of fair play. Schools can introduce children to sports they would never otherwise have the opportunity of doing. For instance, I grew up in a big city, and we hardly ever travelled to the countryside as a family. At school we had a climbing wall in the gym, and we learnt rock climbing in sports class. When I moved to Europe, I took up rock climbing and was surprised by how good I was at it. Schools should offer a wide range of sports from the most popular ones, like football and basketball, to the less popular ones, like table tennis and climbing. Unfortunately, sports are often regarded as a sort of optional extra by certain schools and this is also reflected in the children's attitude to them.

### D Helen Smith

The main point about sports is that they encourage peaceful competition. I think that's the basis of the Olympic spirit of Classical Greece, which nowadays is more important than ever before. Sports can teach you how to discipline yourself, how to remain focused on what you're doing and how to apply yourself to achieving a goal. I don't think sports are really about the sort of aggression and rage that you see sometimes in football matches, for instance. I certainly think teachers should discourage any form of aggression during sports classes. On top of that, we need to be more sensitive towards the feelings of children who are not fit or good at sports. Taking part in a sports lesson can be a major source of embarrassment and a traumatic experience for less athletic children.