



1 Work with your teacher. Look at the photograph in the reading passage. Describe what kinds of rides you would expect to find in an amusement park or fairground.





What to expect in the exam

- IELTS Reading Passages follow patterns of organisation like explanation, cause and effect, problem and solution, historical development and argument.
- To achieve a high score you need to learn to be familiar with and recognise how writers organise information as this helps you see the patterns of Reading Passages. See Ready for Reading on page 91.

Don't forget!

 If there is no title, look at the last question to get an idea of the content of the passage.

READING PASSAGE

You should spend about 20 minutes on Questions 1–13, which are based on the Reading Passage below.

Readers can join a unique experiment to discover what goes on in our brains and bodies at the fairground

Roger Highfield reports.

A For decades, thrill-seekers have happily queued to experience a few seconds of the adrenaline-spiking, intestine-twisting thrills of roller coaster and other funfair joy rides. Nowadays, people also spend hours living out the virtual excitement of computer games.



- B An experiment will soon lay bare the science of thrills and help to build the foundation of the next generation of funfair rides and sensational computer games. Brendan Walker, a self-proclaimed 'thrill engineer', is curating this extraordinary venture where people can become a guinea pig. Fairground: Thrill Laboratory, at the Science Museum's Dana Centre, will include three different rides over three weeks — the Booster, to measure the physiology of excitement and thrill; a ghost train, to measure fear and the tingle of anticipation; and Miami Trip, a gentler ride designed to explore pleasure.
- C One of the collaborators in the thrill lab is Prof Tom Rodden. Its impetus is the blurring of the boundary between the real and the digital worlds, he explained: 'Today, trainers count footsteps, wrist watches can measure heart rate, satellites can detect where we are and, all the while, computer games are being played in the streets not just the living room, and computer accessories such as joysticks are being replaced with real-world objects such as tennis racquets.'
- D Doctors already understand the broad effects of joy rides. As a roller coaster puts the body through weightlessness, high gravitational forces and acceleration, the brain struggles to make sense of conflicting and changing signals from the senses. There are effects on the vestibular system, located in the inner ear, that detects position and motion, and on the somatic nervous system, which controls voluntary systems in the body, such as heartbeat.
- E Added to the confusion of these signals are the messages from the eye, which may be different from those of the other systems. This can lead to peculiar effects such as the vection illusion (think of when you are stopped at a traffic light and the car next to you edges forward — you feel as though you are moving).
- F Overall the brain responds to an exhilarating ride by triggering the release of a potent cocktail of biochemicals to deal with the body's stress, including more adrenaline (epinephrine) and norepinephrine which can suppress pain and boost the glow of euphoria that follows. The result can be pleasure but can also be nausea. Military and Nasa researchers have studied the problem for half a century, calling it 'simulator sickness'.
- G But engineers and scientists have not figured out how to fool the senses at the same rate at the same time. They still don't know for sure who might get sick. Meanwhile, the latest rides are pushing the boundaries of endurance. The human body cannot take much more of a G-force than the latest rollercoasters, so we need to understand more about what distinguishes a spine-tingling thrill from a gutemptying fright to ensure the experience is memorable for the right reasons.
- H At the thrill lab, volunteers will be asked to try the fairground rides while hooked up to special equipment. This includes an accelerometer that measures the G-force their body is subjected to; a measure of blood oxygen levels; measures of skin conductance (sweating) and an ECG monitor that keeps track of their heart rate. In addition, a helmet-mounted video camera will film their expressions, from the first gasp to the last scream. As with astronauts and test pilots, information will be beamed in real time to a computer. And measurements will be displayed publicly. Aside from providing amusement for onlookers, participants can relive their terrifying experiences.
- I This study will help designers of amusement parks to squeeze more shrieks out of people by creating the illusion of imminent death, said Prof Rodden. Equally, the next generation of rides will sense when too many people feel nauseous and wind down accordingly. In short, they will be able to distinguish terror from titillation. This work will also help computer games to escape the boundaries of the Xbox and PlayStation. Steve Benford, of the mixed-reality lab at the University of Nottingham, believes that the thrill lab will help to design more immersive rides and games, 'real-time adaptive spaces'.

How to go about it

For Questions 1-6:

- Read the instructions carefully and check if you can use any letter once only or more than once. In this instance, you can use any letter more than once.
- Check if any of the information in the phrases looks as if it might fit together in the same paragraph.
- Check if any pieces of information will follow other information in the list.

Questions 1-6

The Reading Passage has nine paragraphs, A-I.

Which paragraph contains the following information? NB You may use any letter more than once.

- 1 the types of rides involved in the experiment
- 2 what happens chemically in the brain as a result of thrill rides
- 3 the fact that the volunteers will be filmed during the rides
- 4 the way the experiment will help computer game designers
- 5 the impact on the human auditory system
- 6 what the lab experiments will show members of the public

Questions 7–12

Do the following statements agree with the information given in the Reading Passage? Write:

TRUE	if the statement agrees with the information
FALSE	if the statement contradicts the information
NOT GIVEN	if there is no information on this

- 7 The excitement from computer games is different from that of thrill rides.
- 8 The brain has little difficulty processing information it receives during thrill rides.
- 9 Thrill rides have a greater impact on the heart than the eye.
- 10 The most recent thrill rides take the body close to its G-force limits.
- 11 The lab volunteers will consist of equal numbers of men and women.
- 12 Future rides will be able to adapt to people's reactions.

Question 13

Choose the correct letter A, B, C, or D.

Which of the following is the most suitable title for the Reading Passage?

A Roller coasters and their effects on the brain

- B What makes fairground rides so thrilling?
- C The equipment used to test the efficacy of thrill rides
- D How the brain copes with fear in response to thrill rides

2 Discuss with your teacher. Do you find funfair rides 'thrilling'? Why do you think people enjoy extreme rides?



