IELTS Reading Practice Test 13

Reading Passage One

A Hearing impairment or other auditory function deficit in young children can have a major impact on their development of speech and communication, resulting in a detrimental effect on their ability to learn at school. This is likely to have major consequences for the individual and the population as a whole. The New Zealand Ministry of Health has found from research carried out over two decades that 6-10% of children in that country are affected by hearing loss.

B A preliminary study in New Zealand has shown that classroom noise presents a major concern for teachers and pupils. Modern teaching practices, the organisation of desks in the classroom, poor classroom acoustics, and mechanical means of ventilation such as air-conditioning units all contribute to the number of children unable to comprehend the teacher's voice. Education researchers Nelson and Soli have also suggested that recent trends in learning often involve collaborative interaction of multiple minds and tools as much as individual possession of information. This all amounts to heightened activity and noise levels, which have the potential to be particularly serious for children experiencing auditory function deficit. Noise in classrooms can only exacerbate their difficulty in comprehending and processing verbal communication with other children and instructions from the teacher.

C Children with auditory function deficit are potentially failing to learn to their maximum potential because of noise levels generated in classrooms. The effects of noise on the ability of children to learn effectively in typical classroom environments are now the subject of increasing concern. The International Institute of Noise Control Engineering (I-INCE), on the advice of the World Health Organization, has established an international working party, which includes New Zealand, to evaluate noise and reverberation control for school rooms.

D While the detrimental effects of noise in classroom situations are not limited to children experiencing disability, those with a disability that affects their processing of speech and verbal communication could be extremely vulnerable. The auditory function deficits in question include hearing impairment, autistic spectrum disorders (ASD) and attention deficit disorders (ADD/ADHD).

E Autism is considered a neurological and genetic life-long disorder that causes discrepancies in the way information is processed. This disorder is characterised by interlinking problems with social imagination, social communication and social interaction. According to Janzen, this affects the ability to understand and relate in typical ways to people, understand events and objects in the environment, and understand or respond to sensory stimuli. Autism does not allow learning or thinking in the same ways as in children who are developing normally.

Autistic spectrum disorders often result in major difficulties in comprehending verbal information and speech processing. Those experiencing these disorders often find sounds such as crowd noise and the noise generated by machinery painful and distressing. This is difficult to scientifically quantify as such extra-sensory stimuli vary greatly from one autistic individual to another. But a child who finds any type of noise in their classroom or learning space intrusive is likely to be adversely affected in their ability to process information.

F The attention deficit disorders are indicative of neurological and genetic disorders and are characterised by difficulties with sustaining attention, effort and persistence, organisation skills and disinhibition. Children experiencing these disorders find it difficult to screen out unimportant information, and focus on everything in the environment rather than attending to a single activity. Background noise in the classroom becomes a major distraction, which can affect their ability to concentrate.

G Children experiencing an auditory function deficit can often find speech and communication very difficult to isolate and process when set against high levels of background noise. These levels come from outside activities that penetrate the classroom structure, from teaching activities, and other noise generated inside, which can be exacerbated by room reverberation. Strategies are needed to obtain the optimum classroom construction and perhaps a change in classroom culture and methods of teaching. In particular, the effects of noisy classrooms and activities on those experiencing disabilities in the form of auditory function deficit need thorough investigation. It is probable that many undiagnosed children exist in the education system with 'invisible' disabilities. Their needs are less likely to be met than those of children with known disabilities.

H The New Zealand Government has developed a New Zealand Disability Strategy and has embarked on a wide-ranging consultation process. The strategy recognises that people experiencing disability face significant barriers in achieving a full quality of life in areas such as attitude, education, employment and access to services. Objective 3 of the New Zealand Disability Strategy is to 'Provide the Best Education for Disabled People' by improving education so that all children, youth learners and adult learners will have equal opportunities to learn and develop within their already existing local school. For a successful education, the learning environment is vitally significant, so any effort to improve this is likely to be of great benefit to all children, but especially to those with auditory function disabilities.

I A number of countries are already in the process of formulating their own standards for the control and reduction of classroom noise. New Zealand will probably follow their example. The literature to date on noise in school rooms appears to focus on the effects on schoolchildren in general, their teachers and the hearing impaired. Only limited attention appears to have been given to those students experiencing the other disabilities involving auditory function deficit. It is imperative that the needs of these children are taken into account in the setting of appropriate international standards to be promulgated in future.

Questions 1-6
Reading Passage 1 has nine sections, A-I. Which section contains the following information?
Write the correct letter, A-I, in boxes 1-6 on your answer sheet.

1 an account of a national policy initiative
2 a description of a global team effort
3 a hypothesis as to one reason behind the growth in classroom noise
4 a demand for suitable worldwide regulations
5 a list of medical conditions which place some children more at risk from noise than others
6 the estimated proportion of children in New Zealand with auditory problems

Questions 7-10
Answer the questions below. Choose **NO MORE THAN TWO WORDS AND/OR A NUMBER** from the passage.

7 For what period of time has hearing loss in schoolchildren been studied in New Zealand?
8 In addition to machinery noise, what other type of noise can upset children with autism?
9 What term is used to describe the hearing problems of schoolchildren which have not been diagnosed?
10 What part of the New Zealand Disability Strategy aims to give schoolchildren equal opportunity?

Questions 11 and 12
Choose TWO letters, A-F. Write the correct letters in boxes 11 and 12 on your answer sheet.

The list below includes factors contributing to classroom noise.
Which **TWO** are mentioned by the writer of the passage?

A current teaching methods
B echoing corridors
C cooling systems
D large class sizes
E loud-voiced teachers
F playground games

Question 13
Choose the correct letter, A, B, C or D. Write the correct letter in box 13 on your answer sheet.

What is the writer's overall purpose in writing this article?
A to compare different methods of dealing with auditory problems
B to provide solutions for overly noisy learning environments
C to increase awareness of the situation of children with auditory problems
D to promote New Zealand as a model for other countries to follow

Venus in Transit

A On 8 June 2004, more than half the population of the world were treated to a rare astronomical event. For over six hours, the planet Venus steadily inched its way over the surface of the Sun. This 'transit' of Venus was the first since 6 December 1882. On that occasion, the American astronomer Professor Simon Newcomb led a party to South Africa to observe the event. They were based at a girls' school, where – it is alleged – the combined forces of three schoolmistresses outperformed the professionals with the accuracy of their observations.

B For centuries, transits of Venus have drawn explorers and astronomers alike to the four corners of the globe. And you can put it all down to the extraordinary polymath Edmond Halley. In November 1677, Halley observed a transit of the innermost planet, Mercury, from the desolate island of St Helena in the South Pacific. He realised that, from different latitudes, the passage of the planet across the Sun's disc would appear to differ. By timing the transit from two widely-separated locations, teams of astronomers could calculate the parallax angle – the apparent difference in position of an astronomical body due to a difference in the observer's position. Calculating this angle would allow astronomers to measure what was then the ultimate goal: the distance of the Earth from the Sun. This distance is known as the 'astronomical unit' or AU.

C Halley was aware that the AU was one of the most fundamental of all astronomical measurements. Johannes Kepler, in the early 17th century, had shown that the distances of the

planets from the Sun governed their orbital speeds, which were easily measurable. But no-one had found a way to calculate accurate distances to the planets from the Earth. The goal was to measure the AU; then, knowing the orbital speeds of all the other planets round the Sun, the scale of the Solar System would fall into place. However, Halley realised that Mercury was so far away that its parallax angle would be very difficult to determine. As Venus was closer to the Earth, its parallax angle would be larger, and Halley worked out that by using Venus it would be possible to measure the Sun's distance to 1 part in 500. But there was a problem: transits of Venus, unlike those of Mercury, are rare, occurring in pairs roughly eight years apart every hundred or so years. Nevertheless, he accurately predicted that Venus would cross the face of the Sun in both 1761 and 1769 – though he didn't survive to see either.

D Inspired by Halley's suggestion of a way to pin down the scale of the Solar System, teams of British and French astronomers set out on expeditions to places as diverse as India and Siberia. But things weren't helped by Britain and France being at war. The person who deserves most sympathy is the French astronomer Guillaume Le Gentil. He was thwarted by the fact that the British were besieging his observation site at Pondicherry in India. Fleeing on a French warship crossing the Indian Ocean, Le Gentil saw a wonderful transit – but the ship's pitching and rolling ruled out any attempt at making accurate observations. Undaunted, he remained south of the equator, keeping himself busy by studying the islands of Mauritius and Madagascar before setting off to observe the next transit in the Philippines. Ironically after travelling nearly 50,000 kilometres, his view was clouded out at the last moment, a very dispiriting experience.

E While the early transit timings were as precise as instruments would allow, the measurements were dogged by the 'black drop' effect. When Venus begins to cross the Sun's disc, it looks smeared not circular – which makes it difficult to establish timings. This is due to diffraction of light. The second problem is that Venus exhibits a halo of light when it is seen just outside the Sun's disc. While this showed astronomers that Venus was surrounded by a thick layer of gases refracting sunlight around it, both effects made it impossible to obtain accurate timings.

F But astronomers laboured hard to analyse the results of these expeditions to observe Venus transits. Johann Franz Encke, Director of the Berlin Observatory, finally determined a value for the AU based on all these parallax measurements: 153,340,000 km. Reasonably accurate for the time, that is quite close to today's value of 149,597,870 km, determined by radar, which has now superseded transits and all other methods in accuracy. The AU is a cosmic measuring rod, and the basis of how we scale the Universe today. The parallax principle can be extended to measure the distances to the stars. If we look at a star in January – when Earth is at one point in its orbit – it will seem to be in a different position from where it appears six months later. Knowing the width of Earth's orbit, the parallax shift lets astronomers calculate the distance.

G June 2004's transit of Venus was thus more of an astronomical spectacle than a scientifically important event. But such transits have paved the way for what might prove to be one of the most vital breakthroughs in the cosmos – detecting Earth-sized planets orbiting other stars.

Questions 14-17
Reading Passage 2 has seven paragraphs, A-G. Which paragraph contains the following information?

14 examples of different ways in which the parallax principle has been applied
15 a description of an event which prevented a transit observation

16 a statement about potential future discoveries leading on from transit observations
17 a description of physical states connected with Venus which early astronomical instruments failed to overcome

Questions 18-21
Look at the following statements (Questions 18-21) and the list of people below. Match each statement with the correct person, A, B, C or D. Write the correct letter, A, B, C or D, in boxes 18-21 on your answer sheet.

18 He calculated the distance of the Sun from the Earth based on observations of Venus with a fair degree of accuracy.
19 He understood that the distance of the Sun from the Earth could be worked out by comparing observations of a transit.
20 He realised that the time taken by a planet to go round the Sun depends on its distance from the Sun.
21 He witnessed a Venus transit but was unable to make any calculations.

List of People

A Edmond Halley
B Johannes Kepler
C Guillaume Le Gentil
D Johann Franz Encke

Questions 22-26
Do the following statements agree with the information given in Reading Passage 2? In boxes 22-26 on your answer sheet, 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

22 Halley observed one transit of the planet Venus.
23 Le Gentil managed to observe a second Venus transit.
24 The shape of Venus appears distorted when it starts to pass in front of the Sun.
25 Early astronomers suspected that the atmosphere on Venus was toxic.
26 The parallax principle allows astronomers to work out how far away distant stars are from the Earth.

A Neuroscientist Reveals How To Think Differently

In the last decade a revolution has occurred in the way that scientists think about the brain. We now know that the decisions humans make can be traced to the firing patterns of neurons in specific parts of the brain. These discoveries have led to the field known as neuroeconomics, which studies the brain's secrets to success in an economic environment that demands innovation and being able to do things differently from competitors. A brain that can do this is an iconoclastic one. Briefly, an iconoclast is a person who does something that others say can't be done.

This definition implies that iconoclasts are different from other people, but more precisely, it is their

brains that are different in three distinct ways: perception, fear response, and social intelligence. Each of these three functions utilizes a different circuit in the brain. Naysayers might suggest that the brain is irrelevant, that thinking in an original, even revolutionary, way is more a matter of personality than brain function. But the field of neuroeconomics was born out of the realization that the physical workings of the brain place limitations on the way we make decisions. By understanding these constraints, we begin to understand why some people march to a different drumbeat.

The first thing to realize is that the brain suffers from limited resources. It has a fixed energy budget, about the same as a 40 watt light bulb, so it has evolved to work as efficiently as possible. This is where most people are impeded from being an iconoclast. For example, when confronted with information streaming from the eyes, the brain will interpret this information in the quickest way possible. Thus it will draw on both past experience and any other source of information, such as what other people say, to make sense of what it is seeing. This happens all the time. The brain takes shortcuts that work so well we are hardly ever aware of them. We think our perceptions of the world are real, but they are only biological and electrical rumblings. Perception is not simply a product of what your eyes or ears transmit to your brain. More than the physical reality of photons or sound waves, perception is a product of the brain.

Perception is central to iconoclasm. Iconoclasts see things differently to other people. Their brains do not fall into efficiency pitfalls as much as the average person's brain. Iconoclasts, either because they were born that way or through learning, have found ways to work around the perceptual shortcuts that plague most people. Perception is not something that is hardwired into the brain. It is a learned process, which is both a curse and an opportunity for change. The brain faces the fundamental problem of interpreting physical stimuli from the senses. Everything the brain sees, hears, or touches has multiple interpretations. The one that is ultimately chosen is simply the brain's best theory. In technical terms, these conjectures have their basis in the statistical likelihood of one interpretation over another and are heavily influenced by past experience and, importantly for potential iconoclasts, what other people say.

The best way to see things differently to other people is to bombard the brain with things it has never encountered before. Novelty releases the perceptual process from the chains of past experience and forces the brain to make new judgments. Successful iconoclasts have an extraordinary willingness to be exposed to what is fresh and different. Observation of iconoclasts shows that they embrace novelty while most people avoid things that are different.

The problem with novelty, however, is that it tends to trigger the brain's fear system. Fear is a major impediment to thinking like an iconoclast and stops the average person in his tracks. There are many types of fear, but the two that inhibit iconoclastic thinking and people generally find difficult to deal with are fear of uncertainty and fear of public ridicule. These may seem like trivial phobias. But fear of public speaking, which everyone must do from time to time, afflicts one-third of the population. This makes it too common to be considered a mental disorder. It is simply a common variant of human nature, one which iconoclasts do not let inhibit their reactions.

Finally, to be successful iconoclasts, individuals must sell their ideas to other people. This is where social intelligence comes in. Social intelligence is the ability to understand and manage people in a business setting. In the last decade there has been an explosion of knowledge about the social brain and how the brain works when groups coordinate decision making. Neuroscience has revealed which brain circuits are responsible for functions like understanding what other people

think, empathy, fairness, and social identity. These brain regions play key roles in whether people convince others of their ideas. Perception is important in social cognition too. The perception of someone's enthusiasm, or reputation, can make or break a deal. Understanding how perception becomes intertwined with social decision making shows why successful iconoclasts are so rare.

Iconoclasts create new opportunities in every area from artistic expression to technology to business. They supply creativity and innovation not easily accomplished by committees. Rules aren't important to them. Iconoclasts face alienation and failure, but can also be a major asset to any organization. It is crucial for success in any field to understand how the iconoclastic mind works.

Questions 27-31
Choose the correct letter, A, B, C or D.

27 Neuroeconomics is a field of study which seeks to
A cause a change in how scientists understand brain chemistry.
B understand how good decisions are made in the brain.
C understand how the brain is linked to achievement in competitive fields.
D trace the specific firing patterns of neurons in different areas of the brain.

28 According to the writer, iconoclasts are distinctive because
A they create unusual brain circuits
B their brains function differently
C their personalities are distinctive
D they make decisions easily

29 According to the writer, the brain works efficiently because
A it uses the eyes quickly
B it interprets data logically
C it generates its own energy
D it relies on previous events

30 The writer says that perception is
A a combination of photons and sound waves
B a reliable product of what your senses transmit
C a result of brain processes
D a process we are usually conscious of

31 According to the writer, an iconoclastic thinker
A centralises perceptual thinking in one part of the brain
B avoids cognitive traps
C has a brain that is hardwired for learning
D has more opportunities than the average person

Questions 32-37
Do the following statements agree with the claims of the writer in Reading Passage 3?
In boxes 32-37 on your answer sheet, write

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer
NOT GIVEN if it is impossible to say what the writer thinks about this

32 Exposure to different events forces the brain to think differently.
33 Iconoclasts are unusually receptive to new experiences.
34 Most people are too shy to try different things.
35 If you think in an iconoclastic way, you can easily overcome fear.
36 When concern about embarrassment matters less, other fears become irrelevant.
37 Fear of public speaking is a psychological illness.

Questions 38-40
Complete each sentence with the correct ending, A-E, below.

38 Thinking like a successful iconoclast is demanding because it
39 The concept of the social brain is useful to iconoclasts because it
40 Iconoclasts are generally an asset because their way of thinking

A requires both perceptual and social intelligence skills.
B focuses on how groups decide on an action.
C works in many fields, both artistic and scientific.
D leaves one open to criticism and rejection.
E involves understanding how organisations manage people.

Answers

1. H
2. C
3. B
4. I
5. D
6. A
7. two decades
8. crowd (noise)
9. invisible (disabilities)
10. objective 3
11. A
12. C
13. C
14. F
15. D
16. G
17. E
18. D
19. A
20. B

21. C
22. false
23. false
24. true
25. not given
26. true
27. C
28. B
29. D
30. C
31. B
32. yes
33. yes
34. not given
35. no
36. not given
37. no
38. A
39. B
40. C