

# IELTS Academic Reading Sample 133 - Arctic Haze

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You should spend about 20 minutes on Questions 22-27 which are based on IELTS Reading Passage 133 below :

## Arctic Haze

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In the 1950's, pilots traveling on weather reconnaissance flights in the Canadian high Arctic reported seeing bands of haze in the springtime in the Arctic region. It was during this time that the term "Arctic haze" was first used, referring to this smog of unknown origin. But it was not until 1972, that Dr. Glenn Shaw of the Geophysical Institute at the University of Alaska first put forth ideas of the nature and long-range origin of Arctic haze. The idea that the source was long range was very difficult for many to support. Each winter, cold, dense air settles over the Arctic. In the darkness, the Arctic seems to become more and more polluted by a buildup of mid-latitude emissions from fossil fuel combustion, smelting and other industrial processes. By late winter, the Arctic is covered by a layer of this haze the size of the continent of Africa. When the spring light arrives in the Arctic, there is a smog-like haze, which makes the region, at times, look like pollution over such cities as Los Angeles.

This polluted air is a well-known and well-characterized feature of the late winter Arctic environment. In the North American Arctic, episodes of brown or black snow have been traced to continental storm tracks that deliver gaseous and particulate-associated contaminants from Asian deserts and agricultural areas. It is now known that the contaminants originate largely from Europe and Asia.

Arctic haze has been studied most extensively in Point Barrow, Alaska, across the Canadian Arctic and in Svalbard (Norway). Evidence from ice cores drilled from the ice sheet of Greenland indicates that these haze particles were not always present in the Arctic, but began to appear only in the last century. The Arctic haze particles appear to be similar to smog particles observed in industrial areas farther south, consisting mostly of sulfates mixed with particles of carbon. It is believed the particles are formed when gaseous sulfur dioxide produced by burning sulfur-bearing coal is irradiated by sunlight and oxidized to sulfate, a process catalyzed by trace elements in the air. These sulfate particles or droplets of sulfuric acid quickly capture the carbon particles, which are also floating in the air. Pure sulfate particles or droplets are colourless, so it is believed the darkness of the haze is caused by the mixed-in carbon particles.

The impact of the haze on Arctic ecosystems, as well as the global environment, has not been adequately researched. The pollutants have only been studied in their aerosol form over the Arctic. However, little is known about what eventually happens to them. It is known that they are removed somehow. There is a good degree of likelihood that the contaminants end up in the ocean, likely into the North Atlantic, the Norwegian Sea and possibly the Bering Sea — all three very important fisheries.

Currently, the major issue among researchers is to understand the impact of Arctic haze on global climate

change. The contaminants absorb sunlight and, in turn, heat up the atmosphere. The global impact of this is currently unknown but the implications are quite powerful.

**Questions 22 – 27**

Complete the summary relating to Reading Passage "Arctic Haze" below.

Choose your answers from the box below the summary and write them in boxes **22 – 27** on your answer sheet.

**NB** There are more words than spaces, so you will not use them at all.

**Example**

**Answer**

..... that the origins of spring, arctic haze,  
first seen over the ice cap...

Theories

(eg) exp. \_\_\_\_\_ that the origins of spring, arctic haze, first seen over the ice cap in the 1950s, came from far away were at first not **(22)** \_\_\_\_\_. This haze is a smog formed in the dark, arctic winter by pollution delivered to the Arctic by storms **(23)** \_\_\_\_\_ in Europe and Asia. It is known to be a recent phenomenon as proof from **(24)** \_\_\_\_\_ shows it only starting to occur in the 20th Century. The smog consists of sulphates and carbon, the latter creating the **(25)** \_\_\_\_\_ of the haze. Due to lack of research, the final destination of the pollution is unknown but it probably ends up in the **(26)** \_\_\_\_\_ and therefore into the food chain. Scientists are presently more worried about the **(27)** \_\_\_\_\_ effect it has on climate change.

burning	terrible	ice cores	valid	certain
originating	sea	destroying	theories	unknown
agriculture	decided	bird life	dissipating	accepted
gases	darkness	air	density	

Answer:

22. Accepted    23. Originating    24. Ice cores    25. Darkness    26. Sea    27. Unknown



# IELTS Academic Reading Sample 134 - Children's Thinking

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You should spend about 20 minutes on Questions 28-40 which are based on Reading Passage 134 below

## CHILDREN'S THINKING

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One of the most eminent of psychologists, Clark Hull, claimed that the essence of reasoning lies in the putting together of two 'behaviour segments' in some novel way, never actually performed before, so as to reach a goal.

Two followers of Clark Hull, Howard and Tracey Kendler, devised a test for children that was explicitly based on Clark Hull's principles. The children were given the task of learning to operate a machine so as to get a toy. In order to succeed they had to go through a two-stage sequence. The children were trained on each stage separately. The stages consisted merely of pressing the correct one of two buttons to get a marble; and of inserting the marble into a small hole to release the toy.

The Kendlers found that the children could learn the separate bits readily enough. Given the task of getting a marble by pressing the button they could get the marble; given the task of getting a toy when a marble was handed to them, they could use the marble. (All they had to do was put it in a hole.) But they did not for the most part 'integrate', to use the Kendlers' terminology. They did not press the button to get the marble and then proceed without further help to use the marble to get the toy. So the Kendlers concluded that they were incapable of deductive reasoning.

The mystery at first appears to deepen when we learn, from another psychologist, Michael Cole, and his colleagues, that adults in an African culture apparently cannot do the Kendlers' task either. But it lessens, on the other hand, when we learn that a task was devised which was strictly analogous to the Kendlers' one but much easier for the African males to handle.

Instead of the button-pressing machine, Cole used a locked box and two differently coloured match-boxes, one of which contained a key that would open the box. Notice that there are still two behaviour segments — 'open the right match-box to get the key' and 'use the key to open the box' - so the task seems formally to be the same. But psychologically it is quite different. Now the subject is dealing not with a strange machine but with familiar meaningful objects; and it is clear to him what he is meant to do. It then turns out that the difficulty

of 'integration' is greatly reduced.

Recent work by Simon Hewson is of great interest here for it shows that, for young children, too, the difficulty lies not in the inferential processes which the task demands, but in certain perplexing features of the apparatus and the procedure. When these are changed in ways which do not at all affect the inferential nature of the problem, then five-year-old children solve the problem as well as college students did in the Kendlers' own experiments.

Hewson made two crucial changes. First, he replaced the button-pressing mechanism in the side panels by drawers in these panels which the child could open and shut. This took away the mystery from the first stage of training. Then he helped the child to understand that there was no 'magic' about the specific marble which, during the second stage of training, the experimenter handed to him so that he could pop it in the hole and get the reward.

A child understands nothing, after all, about how a marble put into a hole can open a little door. How is he to know that any other marble of similar size will do just as well? Yet he must assume that if he is to solve the problem. Hewson made the functional equivalence of different marbles clear by playing a 'swapping game' with the children. The two modifications together produced a jump in success rates from 30 per cent to 90 per cent for five-year-olds and from 35 per cent to 72.5 per cent for four-year-olds. For three-year olds, for reasons that are still in need of clarification, no improvement — rather a slight drop in performance - resulted from the change.

We may conclude, then, that children experience very real difficulty when faced with the Kendler apparatus; but this difficulty cannot be taken as proof that they are incapable of deductive reasoning.

### Questions 28-35

Classify the following descriptions as a referring....

Clark Hull    **CH**

Howard and Tracy Kendler    **HTK**

Micheal Cole and colleagues    **MC**

Write the appropriate letters in boxes 28-35 on your answer sheet. *NB* You may use any answer more than once.

28).....is cited as famous in the field of psychology.

- 29) .....demonstrated that the two-stage experiment involving button-pressing and inserting a marble into a hole poses problems for certain adults as well as children.
- 30) .....devised an experiment that investigated deductive reasoning without the use of any marbles.
- 31) .....appears to have proved that a change in the apparatus dramatically improves the performance of children of certain ages.
- 32) .....used a machine to measure inductive reasoning that replaced button-pressing with drawer-opening.
- 33) .....experimented with things that the subjects might have been expected to encounter in everyday life, rather than with a machine.
- 34) .....compared the performance of five-year-olds with college students, using the same apparatus with both sets of subjects.
- 35) .....is cited as having demonstrated that earlier experiments into children's ability to reason deductively may have led to the wrong conclusions.

#### **Questions 36-40**

Do the following statements agree with the information given in Reading Passage 3? In boxes 36-40 on your answer sheet write :

- YES**            if the statement agrees with the information
- NO**             if the statement contradicts the information
- NOT GIVEN** if there is no information on this in the passage

36 Howard and Tracey Kendler studied under Clark Hull.

37 The Kendlers trained their subjects separately in the two stages of their experiment, but not in how to integrate the two actions.

38 Michael Cole and his colleagues demonstrated that adult performance on inductive reasoning tasks depends on features of the apparatus and procedure.

39 All Hewson's experiments used marbles of the same size.

40 Hewson's modifications resulted in a higher success rate for children of all ages.

**Answer:**

28 CH

29 MC

30 MC

31 SH

32 SH

33 MC

34 HTK

35 SH

36 NOT GIVEN

37 YES

38 YES

39 YES

40 NO

# IELTS Academic Reading Sample 135 - Tornadoes

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You should spend about 20 minutes on Questions 1-3 which are based on Reading Passage 135 below.

## Tornadoes

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Tornadoes are one of the most severe types of weather phenomena. While many people fear tornadoes and their destructive power, few people understand their real causes and effects, nor are they aware of how to protect themselves from their devastating force.

Tornadoes, violently rotating columns of air, occur when a change in wind direction, coupled with an increase in wind speed, results in a spinning effect in the lower atmosphere. These whirling movements, which may not be visible to the naked eye, are exacerbated when the rotating air column shifts from a horizontal to a vertical position. As the revolving cloud draws in the warm air that surrounds it at ground level, its spinning motion begins to accelerate, thereby creating a funnel that extends from the cloud above it to the ground below. In this way, tornadoes become pendent from low pressure storm clouds.

When a tornado comes into contact with the ground, it produces a strong upward draft known as a vortex, a spiraling column of wind that can reach speeds in excess of 200 miles per hour. Traveling across the landscape, the tornado wreaks a path of concentrated destruction. It is not uncommon for these twisters to lift heavy objects, like cars or large animals, and throw them several miles. Houses that succumb to the force of the tornado seem to explode as the low air pressure inside the vortex collides with the normal air pressure inside the buildings.

Tornadoes can occur at any time of the year, but are typically most frequent during the summer months. Equally, tornadoes can happen at any time during the day, but usually occur between 3:00 in the afternoon and 9:00 in the evening. While these fierce funnels occur in many parts of the world, they are most common in the United States. On average, there are 1,200 tornadoes per year in this vast nation, causing 70 fatalities and 1,500 injuries.

Although taking myriad shapes and sizes, tornadoes are generally categorized as weak, strong, or violent. The majority of all tornadoes are classified as weak, meaning that their duration is less than 10 minutes and they have a speed under 110 miles per hour. Comprising approximately 10 percent of all twisters, strong tornadoes

may last for more than 20 minutes and reach speeds up to 205 miles per hour. Violent tornadoes are the rarest, occurring less than one percent of the time. While uncommon, tornadoes in this classification are the most devastating, lasting more than one hour and resulting in the greatest loss of life. Even though only violent tornadoes can completely destroy a well-built, solidly-constructed home, weaker ones can also cause great damage.

Owing to the powerful and destructive nature of these winds, there are, perhaps not surprisingly, a number of myths and misconceptions surrounding them. For instance, many people mistakenly believe that tornadoes never occur over rivers, lakes, and oceans; yet, waterspouts, tornadoes that form over bodies of water, often move onshore and cause extensive damage to coastal areas. In addition, tornadoes can accompany hurricanes and tropical storms as they move to land. Another common myth about tornadoes is that damage to built structures, like houses and office buildings, can be avoided if windows are opened prior to the impact of the storm. Based on the misunderstanding that open windows might equalize the pressure inside the structure and minimize the damage to it, this action can instead result in fatal injury.

Because of the profound effects that tornadoes have on communities and their inhabitants, safety measures are of paramount importance during adverse weather conditions. Drivers often attempt to outrun tornadoes in their cars, but it is extremely unsafe to do so. Automobiles offer very little protection when twisters strike, so drivers should abandon their vehicles and seek safe shelter. Mobile homes afford little shelter, so residents of these homes should go to an underground floor of the sturdiest nearby building. In the case of a building having no underground area, a person should go to the lowest floor of the building and place him or herself under a piece of heavy furniture. If no building is available, a person caught in a tornado should lie prostrate in a nearby ditch or other depressed area of land and cover his or her head.

**Question 1:**

All of the following key facts about tornadoes are mentioned in the passage EXCEPT

- A. the number of deaths from tornadoes
- B. the time of day when tornadoes usually take place
- C. the time of year when tornadoes are most common
- D. the average wind speed of most tornadoes

**Question 2:**

Which of the following best explains the term waterspouts?

- A. Tornadoes that move away from coastal areas
- B. Tornadoes that occur over oceans, rivers, and lakes

- C. Tornadoes that occur onshore
- D. Tornadoes that accompany tropical storms and hurricanes.

**Question 3:**

What is the safest place to be when a tornado strikes?

- A. an abandoned vehicle
- B. mobile homes
- C. the basement of a building
- D. under a piece of sturdy furniture

**ANSWERS**

- 1) D
- 2) B
- 3) C

# IELTS Academic Reading Sample 136 - Green Wave Washes Over Mainstream Shopping

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You should spend about 20 minutes on Questions 1-13 which are based on Reading Passage 40 below.

## Green Wave Washes Over Mainstream Shopping

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Research in Britain has shown that green consumers' continue to flourish as a significant group amongst shoppers. This suggests that politicians who claim environmentalism is yesterday's issue may be seriously misjudging the public mood.

A report from Mintel, the market research organisation, says that despite recession and financial pressures, more people than ever want to buy environmentally friendly products and a 'green wave' has swept through consumerism, taking in people previously untouched by environmental concerns. The recently published report also predicts that the process will repeat itself with 'ethical' concerns, involving issues such as fair trade with the Third World and the social record of businesses. Companies will have to be more honest and open in response to this mood.

Mintel's survey, based on nearly 1,000 consumers, found that the proportion who look for green products and are prepared to pay more for them has climbed from 53 per cent in 1990 to around 60 per cent in 1994. On average, they will pay 13 per cent more for such products, although this percentage is higher among women, managerial and professional groups and those aged 35 to 44.

Between 1990 and 1994 the proportion of consumers claiming to be unaware of or unconcerned about green issues fell from 18 to 10 per cent but the number of green spenders among older people and manual workers has risen substantially. Regions such as Scotland have also caught up with the south of England in their environmental concerns. According to Mintel, the image of green consumerism as associated in the past with the more eccentric members of society has virtually disappeared. The consumer research manager for Mintel, Angela Hughes, said it had become firmly established as a mainstream market. She explained that as far as the average person is concerned environmentalism has not gone off the boil'. In fact, it has spread across a much wider range of consumer groups, ages and occupations.

Mintel's 1994 survey found that 13 per cent of consumers are 'very dark green', nearly always buying environmentally friendly products, 28 per cent are 'dark green', trying 'as far as possible' to buy such products, and 21 per cent are 'pale green' - tending to buy green products if they see them. Another 26 per cent are 'armchair greens'; they said they care about environmental issues but their concern does not affect their spending habits. Only 10 per cent say they do not care about green issues.

Four in ten people are 'ethical spenders', buying goods which do not, for example, involve dealings with oppressive regimes. This figure is the same as in 1990, although the number of 'armchair ethicals' has risen

from 28 to 35 per cent and only 22 per cent say they are unconcerned now, against 30 per cent in 1990. Hughes claims that in the twenty-first century, consumers will be encouraged to think more about the entire history of the products and services they buy, including the policies of the companies that provide them and that this will require a greater degree of honesty with consumers.

Among green consumers, animal testing is the top issue - 48 per cent said they would be deterred from buying a product if it had been tested on animals - followed by concerns regarding irresponsible selling, the ozone layer, river and sea pollution, forest destruction, recycling and factory farming. However, concern for specific issues is lower than in 1990, suggesting that many consumers feel that Government and business have taken on the environmental agenda.

### Questions 1-6

Do the following statements agree with the claims of the writer of Reading Passage 40?

In boxes 1-6 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

- 1 The research findings report commercial rather than political trends.
- 2 Being financially better off has made shoppers more sensitive to buying 'green'.
- 3 The majority of shoppers are prepared to pay more for the benefit of the environment according to the research findings.
- 4 Consumers' green shopping habits are influenced by Mintel's findings.
- 5 Mintel have limited their investigation to professional and managerial groups.
- 6 Mintel undertakes market surveys on an annual basis.

### Questions 7-9

Choose the appropriate letters **A-D** and write them in boxes 7-9 on your answer sheet.

7 Politicians may have 'misjudged the public mood' because ...

- A they are pre-occupied with the recession and financial problems.
- B there is more widespread interest in the environment agenda than they anticipated.
- C consumer spending has increased significantly as a result of 'green' pressure.
- D shoppers are displeased with government policies on a range of issues.

8 What is Mintel?

- A an environmentalist group
- B a business survey organisation
- C an academic research team
- D a political organisation

9 A consumer expressing concern for environmental issues without actively supporting such principles is.....

- A an 'ethical spender'.
- B a 'very dark green' spender.
- C an 'armchair green'.
- D a 'pale green' spender.

**Questions 10-13**

Complete the summary using words from the box below. Write your answers in boxes 10-13 on your answer sheet. **NB** There are more answers than spaces, so you will not use them all.

The Mintel report suggests that in future companies will be forced to practise greater ..... **(10)** ..... in their dealings because of the increased awareness amongst..... **(11)** ..... of ethical issues. This prediction is supported by the growth in the number of ..... **(12)** ..... identified in the most recent survey published. As a consequence, it is felt that companies will have to think more carefully about their ..... **(13)** ..... environmental research armchair ethicals honesty and openness environmentalists ethical spenders consumers politicians political beliefs social awareness financial constraints social record.

**Answer:**

- 1. YES
- 2. NO
- 3. YES
- 4. NOT GIVEN
- 5. NO
- 6. NOT GIVEN
- 7. B
- 8. B
- 9. C
- 10. honesty and openness
- 11. consumers
- 12. armchair ethicals
- 13. social record