

# IELTSFever Academic IELTS Reading Test 158

## Reading Passage 1

You should spend about 20 minutes on Questions 1-13, which are based on the IELTSFever Academic IELTS Reading Test 158 Reading Passage *Jumping spiders* below.

### Jumping spiders

*Peter Aldhons examines how Portia spiders catch their prey*

**{A}** For a stalking predator, the element of surprise is crucial. And for jumping spiders that sneak onto other spiders' webs to prey on their owners, it can be the difference between having lunch and becoming one. Now zoologists have discovered the secret of these spiders' tactics: creeping forward when their prey's web is vibrating.

**{B}** The fifteen known species of Portia jumping spiders are relatively small, with adults being about two centimeters long (that's smaller than the cap on most pens). They habitually stay in the webs of other spiders, and in an area of these webs that is as out-of-the-way as possible. Portia spiders live mostly in tropical forests, where the climate is hot and humid. They hunt a range of other spiders, some of which could easily turn the tables on them. 'They will attack something about twice their own size if they are really hungry,' says Stimson Wilcox of Binghamton University in New York State. Wilcox and his colleague, Kristen Gentile of the University of Canterbury in Christchurch, New Zealand, wanted to find out how Portia spiders keep the upper hand.

**{C}** All jumping spiders have large eyes that look like binocular lenses, and they function pretty much the same way. Most jumping spiders locate their prey visually, and then jump and capture from one centimeter to over ten centimeters away. Only a few species of jumping spiders invade the webs of other spiders, and the Portia spider is among them. Jumping spiders, including Portia spiders, prey on insects and other arthropods by stalking. Sometimes the spiders lure their victims by vibrating the web to mimic the struggles of a trapped insect. But many web-weaving spiders appear to be wise to these tricks, so stalking is often a better strategy. Sometimes, the researchers found, Portia spiders take advantage of the vibrations created in the web by a gentle breeze. But if necessary, they will make their own vibrations.

**{D}** The researchers allowed various prey spiders to spin webs in the laboratory and then introduced Portia spiders. To simulate the shaking effect of a breeze the zoologists used either a model aircraft propeller or attached a tiny magnet to the centre of the web which could be vibrated by applying a varying electrical field. The researchers noticed that the stalking Portia spiders moved more when the webs were shaking than when they were still and they were more likely to capture their prey during tests in which the webs were periodically shaken than in

those where the webs were undisturbed. If the spiders were placed onto unoccupied webs, they would make no attempt to change their movements.

**{E}** It is the Portia spider's tactic of making its victims' webs shake that has most intrigued the researchers. They noticed that the spiders would sometimes shake their quarry's web violently, then creep forwards up to five millimeters before the vibrations died down. 'They'd make a big pluck with one of their hind legs,' says Wilcox. These things were much more powerful than the gentler vibrations Portia spiders use to mimic a trapped insect, and the researchers were initially surprised that the prey spiders did not respond to them in any way. But they have since discovered that the violent twanging produces a pattern of vibrations that match those caused by a twig falling onto the web.

**{F}** Other predators make use of natural 'smokescreens' or disguise to hide from their prey: lions hunting at night, for example, move in on their prey when clouds obscure the moon. 'But this is the first example of an animal making its own smokescreen that we know of,' says Wilcox. 'Portia spiders are clearly intelligent and they often learn from their prey as they are trying to capture it. They do this by making different signals on the web of their prey until the prey spider makes a movement.'

In general, Portia spiders adjust their stalking strategy according to their prey and what the prey is doing. Thus, Portia spiders use trial-and-error learning in stalking. Sometimes they will even take an indirect route to reach a prey spider they can see from a distance. This can sometimes take one to two hours following a predetermined route. When it does this, the Portia spider is actually solving problems and thinking ahead about its actions.'

### Questions 1-9

*The Reading Passage has six paragraphs labelled A-F.*

*Which paragraph contains the following information?*

*Write the correct letter A-F in your answer sheet.*

**NB You may use any letter more than once.**

- (1). the reaction of the Portia spider's prey to strong web vibrations
- (2). a description of how the researchers set up their experiment
- (3). a comparison between Portia spiders and another animal species
- (4). an explanation of how the researchers mimicked natural conditions
- (5). a comparison between Portia spiders and their prey
- (6). the reason why concealment is important to Portia spiders
- (7). a description of the Portia spider's habitat

- (8). the number of species of Portia spiders
- (9). an example of the Portia spider's cleverness

### Questions 10-13

Choose the correct letter, A, B, C or D and write in your answer sheet.

**Question 10)** In their laboratory experiments, the researchers found that the Portia spiders moved most when the web was

- (A) vibrating.
- (B) motionless.
- (C) undisturbed.
- (D) unoccupied.

**Question 11)** What discovery did the researchers make about Portia spiders?

- (A) They make very strong vibrations with one leg.
- (B) They move 5 mm at a time on a still web.
- (C) They move slowly when vibrations stop.
- (D) They use energetic vibrations to mimic a trapped insect.

**Question 12)** Portia spiders are the only known animal to

- (A) use the weather to disguise themselves.
- (B) mimic other prey-eating animals.
- (C) create their own smokescreen.
- (D) stalk using 'trial and error'.

**Question 13)** The Portia spider demonstrates 'thinking ahead' when it

- (A) chooses prey that is a short distance away.
- (B) takes a longer route to reach its prey.
- (C) reaches its prey in a short time.
- (D) solves the problem of locating its prey.

## Reading Passage 2

*You should spend about 20 minutes on Questions 14-26, which are based on the IELTSFever Academic IELTS Reading Test 158 Reading Passage Less Television, Less Violence and Aggression below.*

### Less Television- Less Violence and Aggression

Cutting back on television, videos, and video games reduces acts of aggression among schoolchildren, according to a study by Dr. Thomas Robinson and others from the Stanford University School of Medicine. The study, published in the January 2001 issue of the Archives of Pediatric and Adolescent Medicine, found that third- and fourth-grade students who took part in a curriculum to reduce their TV, video, and video game use engaged in fewer acts of verbal and physical aggression than their peers. The study took place in two similar San Jose, California, elementary schools. Students in one school underwent an 18-lesson, 6-month program designed to limit their media usage, while the others did not. Both groups of students had similar reports of aggressive behaviour at the beginning of the study. After the six-month program, however, the two groups had very real differences. The students who cut back on their TV time engaged in six fewer acts of verbal aggression per hour and rated 2.4 percent fewer of their classmates as aggressive after the program. Physical acts of violence, parental reports of aggressive behaviour, and perceptions of a mean and scary world also decreased, but the authors suggest further study to solidify these results.

Although many studies have shown that children who watch a lot of TV are more likely to act violently, this report further verifies that television, videos, and video games actually cause the violent behaviour, and it is among the first to evaluate a solution to the problem. Teachers at the intervention school included the program in their existing curriculum. Early lessons encouraged students to keep track of and report on the time they spent watching TV or videos, or playing Video games, to motivate them to limit those activities on their own. The initial lessons were followed by TV-Turnoff, an organisation that encourages less TV viewing. For ten days, students were challenged to go without television, videos, or video games. After that, teachers encouraged the students to stay within a media allowance of seven hours per week. Almost all students participated in the Turnoff, and most stayed under their budget for the following weeks. Additional lessons encouraged children to use their time more selectively, and many of the final lessons had students themselves advocate reducing screen activities.

This study is by no means the first to find a link between television and violence. Virtually all of 3,500 research studies on the subject in the past 40 years have shown the same relationship, according to the American Academy of Pediatrics. Among the most noteworthy studies is Dr. Leonard D. Eron's, which found that exposure to television violence in childhood is the strongest predictor of aggressive behaviour later in life—stronger even than violent behaviour as children. The more violent television the subjects watched at age eight, the more serious was their aggressive behaviour even 22 years later. Another study by Dr. Brandon S. Centerwall found that murder rates climb after the introduction of television. In the United States and Canada, murder rates doubled 10 to 15 years after the introduction of television, after the first TV generation grew up.

Centerwall tested this pattern in South Africa, where television broadcasts were banned until 1975. Murder rates in South Africa remained relatively steady from the mid-1940s through the mid-1970s. By 1987, however, the murder rate had increased 130 percent from its 1974 level. The murder rates in the United States and Canada had levelled off in the meantime. Centerwall's study implies that the medium of television, not just the content, promotes violence and the current study by Dr. Robinson supports that conclusion. The Turnoff did not specifically target violent television, nor did the following allowance period. Reducing television in general reduces aggressive behaviour. Even television that is not "violent" is more violent than real life and may lead viewers to believe that violence is funny, inconsequential, and a viable solution to problems. Also, watching television of any content robs us of the time to interact with real people. Watching too much TV may inhibit the skills and patience we need to get along with others without resorting to aggression. TV, as a medium, promotes aggression and violence. The best solution is to turn it off.

### Questions 14-20

Complete the summary using words from the box below. Write your answers in boxes 14-20 on your Answer Sheet.

parents	violently	less TV	classmates	number of hours
teachers	watched TV		nonviolent programs	avoided TV
six months	scared	eighteen days	time of day	favourite programs

A study that was published in January 2001 found that when children **14**..... less, they behaved less **15**..... . Students in a California elementary school participated in the study, which lasted **16**..... . By the end of the study, the children's behaviour had changed. For example, the children's **17**..... reported that the children were acting less violently than before. During the study, the children kept a record of the **18**..... they watched TV. Then, for ten days, they **19**..... Near the end of the study, the students began to suggest watching **20**..... .

Questions 21-24

*Do the following statements agree with the information in Reading Passage 2? In boxes 21- 24 write*

TRUE	if the statement is True
FALSE	if the statement is false
NOT GIVEN	If the information is not given in the passage

- (21). Only one study has found a connection between TV and violent behaviour.
- (22). There were more murders in Canada after people began watching TV.
- (23). The United States has more violence on TV than other countries.
- (24). TV was introduced in South Africa in the 1940s.

Questions 25 and 26

*For each question, choose the correct letter A-D and write it in boxes 25 and 26 on your Answer Sheet.*

**Question 25.** According to the passage,

- (A) only children are affected by violence on TV.
- (B) only violent TV programs cause violent behaviour.
- (C) children who watch too much TV get poor grades in school.
- (D) watching a lot of TV may keep us from learning important social skills.

**Question 26.** The authors of this passage believe that some violent TV programs are funny.

- (A) some violent TV programs are funny
- (B) the best plan is to stop watching TV completely.
- (C) it's better to watch TV with other people than on your own.
- (D) seven hours a week of TV watching is acceptable

### Reading Passage 3

*You should spend about 20 minutes on Questions 27-40, which are based on the IELTSFever Academic IELTS Reading Test 158 Reading Passage Collecting Ant Specimens below.*

#### Collecting Ant Specimens

Collecting ants can be as simple as picking up stray ones and placing them in a glass jar, or as complicated as completing an exhaustive survey of all species present in an area and estimating their relative abundances. The exact method used will depend on the final purpose of the collections. For taxonomy, or classification, long series, from a single nest, which contain all castes (workers, including majors and minors, and, if present, queens and males) are desirable, to allow the determination of variation within species. For ecological studies, the most important factor is collecting identifiable samples of as many of the different species present as possible. Unfortunately, these methods are not always compatible. The taxonomist sometimes overlooks whole species in favour of those groups currently under study, while the ecologist often collects only a limited number of specimens of each species, thus reducing their value for taxonomic investigations.

To collect as wide a range of species as possible, several methods must be used. These include hand collecting, using baits to attract the ants, ground litter sampling, and the use of pitfall traps. Hand collecting consists of searching for ants everywhere they are likely to occur. This includes on the ground, under rocks, logs or other objects on the ground, in rotten wood on the ground or on trees, in vegetation, on tree trunks and under bark. When possible, collections should be

made from nests or foraging columns and at least 20 to 25 individuals collected. This will ensure that all individuals are of the same species, and so increase their value for detailed studies. Since some species are largely nocturnal, collecting should not be confined to daytime. Specimens are collected using an aspirator (often called a pooter), forceps, a fine, moistened paint brush, or fingers, if the ants are known not to sting. Individual insects are placed in plastic or glass tubes (1.5-3-0 ml capacity for small ants, 5-8 ml for larger ants) containing 75% to 95% ethanol. Plastic tubes with secure tops are better than glass because they are lighter, and do not break as easily if mishandled.

Baits can be used to attract and concentrate foragers. This often increases the number of individuals collected and attracts species that are otherwise elusive. Sugars and meats or oils will attract different species and a range should be utilised. These baits can be placed either on the ground or on the trunks of trees or large shrubs. When placed on the ground, baits should be situated on small paper cards or other flat, light-coloured surfaces, or in test tubes or vials. This makes it easier to spot ants and to capture them before they can escape into the surrounding leaf litter.

Many ants are small and forage primarily in the layer of leaves and other debris on the ground. Collecting these species by hand can be difficult. One of the most successful ways to collect them is to gather the leaf litter in which they are foraging and extract the ants from it. This is most commonly done by placing leaf litter on a screen over a large funnel, often under some heat. As the leaf litter dries from above, ants (and other animals) move downward and eventually fall out the bottom and are collected in alcohol placed below the funnel. This method works especially well in rain forests and marshy areas. A method of improving the catch when using a funnel is to sift the leaf litter through a coarse screen before placing it above the funnel. This will concentrate the litter and remove larger leaves and twigs. It will also allow more litter to be sampled when using a limited number of funnels.

The pitfall trap is another commonly used tool for collecting ants. A pitfall trap can be any small container placed in the ground with the top level with the surrounding surface and filled with a preservative. Ants are collected when they fall into the trap while foraging. The diameter of the traps can vary from about 18 mm to 10 cm and the number used can vary from a few to several hundred. The size of the traps used is influenced largely by personal preference (although larger sizes are generally better), while the number will be determined by the study being undertaken. The preservative used is usually ethylene glycol or propylene glycol, as alcohol will evaporate quickly and the traps will dry out. One advantage of pitfall traps is that they can be used to collect over a period of time with minimal maintenance and intervention. One disadvantage is that some species are not collected as they either avoid the traps or do not commonly encounter them while foraging.

## Questions 27-30

*Do the following statements agree with the information given in Reading Passage 3?*

*In boxes 27-30 on your answer sheet, write*



TRUE	if the statement is True
FALSE	if the statement is false
NOT GIVEN	If the information is not given in the passage

(27) Taxonomic research involves comparing members of one group of ants.

(28) New species of ant are frequently identified by taxonomists.

(29) Range is the key criterion for ecological collections.

(30) A single collection of ants can generally be used for both taxonomic and ecological purposes.

### Questions 31-36

*Classify the following statements as referring to*

- (A) hand collecting
- (B) using bait
- (C) sampling ground litter
- (D) using a pitfall trap

*Write the correct letter, A, B, C or D, in boxes 31-36 on your answer sheet.*

(31) It is preferable to take specimens from groups of ants.

(32) It is particularly effective for wet habitats.

(33) It is a good method for species which are hard to find.

(34) Little time and effort is required.

(35) Separate containers are used for individual specimens.

(36) Non-alcoholic preservatives should be used.

Questions 37-40

Label the diagram below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes 37-40 on your answer sheet.

