

- 1.2 Skim read the passage below. Find nine of the cohesive devices from the table in 1.1.

Aesop's fable 'The crow and the pitcher' more fact than fiction

New research indicates that rooks, members of the crow family, are able to solve complex problems using tools.

In Aesop's fictional fable 'The crow and the pitcher', a thirsty crow uses stones to raise the level of water in a jug to quench its thirst. A recent study demonstrates that rooks, birds belonging to the *corvid* (or crow) family, are in fact able to solve complex problems using tools and can easily master the same technique used in the story.

Christopher Bird of the University of Cambridge, who led the study, highlighted the importance of the findings, stating: 'Corvids are remarkably intelligent, and in many ways rival the great apes in their physical intelligence and ability to solve problems. The only other animal known to complete a similar task is the orang-utan. This is remarkable considering their brain is so different to the great apes. Although it has been speculated in folklore, empirical tests are needed to examine the extent of their intelligence and how they solve problems.'

In their first experiment, the researchers varied the height of the water in a tube and the four rooks, which were the subject of the research, used stones to raise the water level to reach a worm floating on top. The clever birds proved very adept and were highly successful, regardless of the starting level of the water or the number of the stones needed. Two of the birds were successful on their first attempt in raising the water to the correct height whilst the other two birds needed a second try.

In addition to the speed with which they completed the task, the birds were also highly accurate in their ability, adding the exact number of stones needed to reach the worm. Furthermore, rather than attempting to reach the worm after each stone was dropped in, they apparently estimated the number needed from the outset, and waited until the appropriate water level was reached before dipping their beaks into the tube.



In the second experiment, the rooks were presented with stones that varied in size. Here, the rooks selected larger stones over smaller ones (though they didn't do this straight away). The scientists speculate that the birds quickly realised that the larger stones displaced more water, and they were thus able to obtain the reward more quickly than by using small stones.

According to the team, in the final experiment, the rooks recognised that sawdust could not be manipulated in the same manner as water. Therefore, when presented with the choice between a tube half-filled with either sawdust or water, rooks dropped the pebbles into the tube containing water and not the sawdust.

Despite the fact that the study clearly demonstrates the flexible nature of tool use in rooks, they are not believed to use tools in the wild. 'Wild tool use appears to be dependent on motivation,' remarked Bird. 'Rooks do not use tools in the wild because they do not need to, not because they can't. They have access to other food that can be acquired without using tools.' As Bird noted, that fits nicely with Aesop's maxim, demonstrated by the crow: 'Necessity is the mother of invention.'

● Reading skills

1.3 Read the passage again and complete sentences 1–6 with endings A–H.

- 1 A new study has actually
- 2 The intelligence of birds has been suggested in stories, but
- 3 Half of the birds in the experiment were immediately successful; however,
- 4 The birds promptly realised the advantage of using big stones, and so
- 5 The research showed rooks can use tools with ease, though
- 6 The rooks worked out the properties of different materials and as a result,

- A others needed several attempts.
- B experts think that they don't do this in their natural habitat.
- C they achieved their goal sooner.
- D confirmed a fictional account.
- E helped us to understand a mysterious event.
- F only scientific studies can prove this.
- G they were able to protect themselves.
- H consistently rejected one particular type.

1.4 Find synonyms in the passage for the cohesive devices that are underlined in questions 1–6.

2 Identifying theories and opinions

Many academic texts contain the theories or views of different people or experts. Direct quotations are easily recognised by quotation marks, but a person's views or ideas can also be referred to indirectly.

In this extract from the Reading passage, the verbs *highlighted* and *stated* are both used to draw attention to the words of Christopher Bird.

Christopher Bird of the University of Cambridge, who led the study, highlighted the importance of the findings, stating: 'Corvids are remarkably intelligent, and in many ways rival the great apes in their physical intelligence and ability to solve problems.'

Bird's views could also be expressed indirectly.

2.1 Which verb in this sentence tells us that this is Bird's view and not the writer's?

Christopher Bird of the University of Cambridge, who led the study, believes that Corvids are remarkably intelligent, and in many ways rival the great apes in their physical intelligence and ability to solve problems.



Study Tip There are several ways of linking ideas in a text. Look at the following examples: *the findings*; *This is remarkable ...*; *Here, the rooks ...*

Remember, it is important to study all aspects of language when preparing for the IELTS exam. As you read through longer, complex passages, try to be aware of how the ideas are connected. This can also help improve your writing.