

Exercise 3: [IELTS Reading: Short answer questions] Read the text and answer the questions.

Do dolphins have conversations?

A Researchers have recorded two dolphins having a conversation for the first time after the development of an underwater microphone which can distinguish the animals' different 'voices'. Researchers have known for years that dolphins have an advanced form of communication, using a range of clicks and whistles to show they are excited, happy, stressed or separated from the group. But scientists have now shown that dolphins make changes to the volume and frequency of their clicks to form individual 'words', which they group together into sentences similar to how humans speak.

B Researchers at Karadag Nature Reserve in Feodosia, Ukraine, recorded two Black Sea bottlenose dolphins called Yasha and Yana talking to each other in a pool. They found that each dolphin would listen to a sentence of clicks, without stopping the other dolphin, before replying. Lead researcher Dr Vyacheslav Ryabov said, 'Essentially, this exchange is very much like a conversation between two people. Each click that is produced by dolphins is different from another, so we can assume that each click represents a word of the dolphin's spoken language.'

C The researchers found that Yasha and Yana could create sentences of up to five 'words', but the scientists have not worked out the content yet. Dr Ryabov said it was now almost certain that dolphins speak their own language and it is time to start studying how to communicate directly with them. Because dolphins have brains that are larger, more complex and older than human ones, Dr Ryabov said, 'Humans must take the first step to form relationships with the first intelligent inhabitants of the planet Earth. We need to create devices that allow communication between dolphins and people'.

D Scientists already knew that dolphins use more than 1,000 different types of whistles depending on social context, but it was unclear if they could communicate directly with each other, one to one. In 2007, Australian scientists identified specific whistles which they interpreted to mean, 'I'm here, where is everyone?', 'Hurry up!' and 'There's food over here.' Researchers also think that dolphins have developed a type of sign language in which they communicate with their flippers.

E Research has come a long way since the founder of dolphin communication research, Louis Herman, started out. Herman worked with two dolphins, Pheonix and Ake, in Hawaii. Pheonix was taught to respond to computer-generated whistles, while Ake learnt a 'dolphinsed' version of American Sign Language. The two systems had their own different grammar structure. For Pheonix, 'pipe fetch gate' meant 'take the piece of pipe to the pool gate', but for Ake the words were organized differently, so 'channel fish fetch' meant 'take the first to the channel connecting the pools'. Each dolphin learnt about 300 words in all and by following the commands correctly, they both showed an understanding of directions.

Vocabulary required:

- *distinguish (v): to recognize the difference between two people or things*
- *exchange (n): a conversation or an argument*
- *represent (v): to be an expression of something*
- *social context (n): the immediate physical and social setting in which something happens or develops*
- *interpret (v): explain the meaning of something*
- *sign language (n): a system of communicating with people who cannot hear, by using hand movements rather than spoken words*

Answer the questions below. Choose NO MORE THAN TWO WORDS for each answer.

1. What did scientists use to record Yasha and Yana's 'conversations'?

2. As well as changing how often they 'click', what else do dolphins change about their 'clicks' to help them communicate?

3. What are the researchers in Ukraine unable to understand about Yasha and Yana's 'conversations'?

4. What form of communication do scientists believe dolphins use when they communicate with their flippers?

5. What type of instruction were both Phoenix and Ake able to follow in Louis Herman's research?
