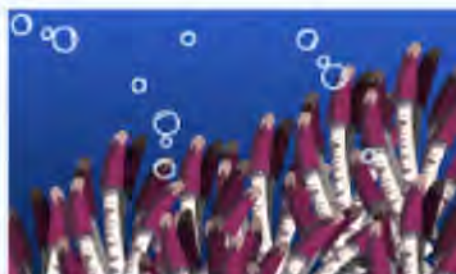


Deep-Sea Vents

Four years later, Ballard and his old friend *Alvin* traveled to the coast of Ecuador, in South America. Ballard wanted to look for deep-sea vents, large holes in the earth's undersea crust, on the ocean floor near the Galapagos Islands. Ballard used *Alvin*'s special underwater camera to take pictures of incredible creatures living in the pitch-black depths. Ballard's crew discovered many life forms that grew only at the deep-sea vents. They found giant red tubeworms, which looked like huge dandelions.



8



The scientists were puzzled. No sunlight reached this far into the ocean's depth; so what energy source could be providing food for these creatures? Ballard's team eventually realized that the deep-sea vents spewed out hot water that was rich in nutrients. The animals fed in this deep-sea vent water.

9



Try making an idea web to organise this information. If you put "giant tubeworms" in the centre, what details about tubeworms would you put in the surrounding circles? Use a sticky note to jot down the ideas.



This word has the vowels "i" and "e" side by side. Do you think these two vowels make up two syllables? How do you think this word is pronounced?

15

Can you think of two different meanings for the word “waves”? If you have a dictionary available, you can look it up there. Which meaning do you think the author intends in this sentence?

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on its right side, suggesting it's resting on a surface.

DESTINATION READING COURSE 3

UNIT 08: Robert Ballard, Modern Sea Explorer The Lure of the Sea

Finding *Titanic*

Back in 1912, the famous ship *Titanic* ended its first voyage when it struck an iceberg and sank into the North Atlantic Ocean. More than 70 years later, finding the *Titanic* would become Robert Ballard's most famous achievement.

In 1985 Ballard searched the ocean floor where *Titanic* had sunk. For weeks, Ballard and his crew searched with a new robot submersible called *Argo*. The surface ship pulled *Argo* along, just above the sea floor.

No humans rode on *Argo*, but it held a passenger: *Jason*. *Jason* was a smaller robot that the crew in the surface ship controlled by remote. Robert Ballard had developed all of this robot technology himself.

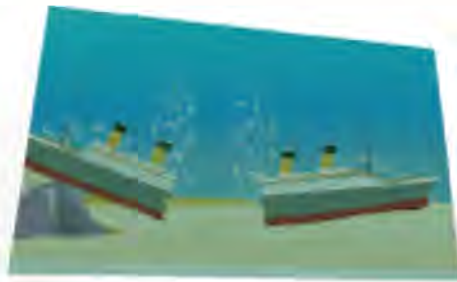
10



11



Robert Ballard is a marine geologist. What does this sentence tell you he is also good at?



13

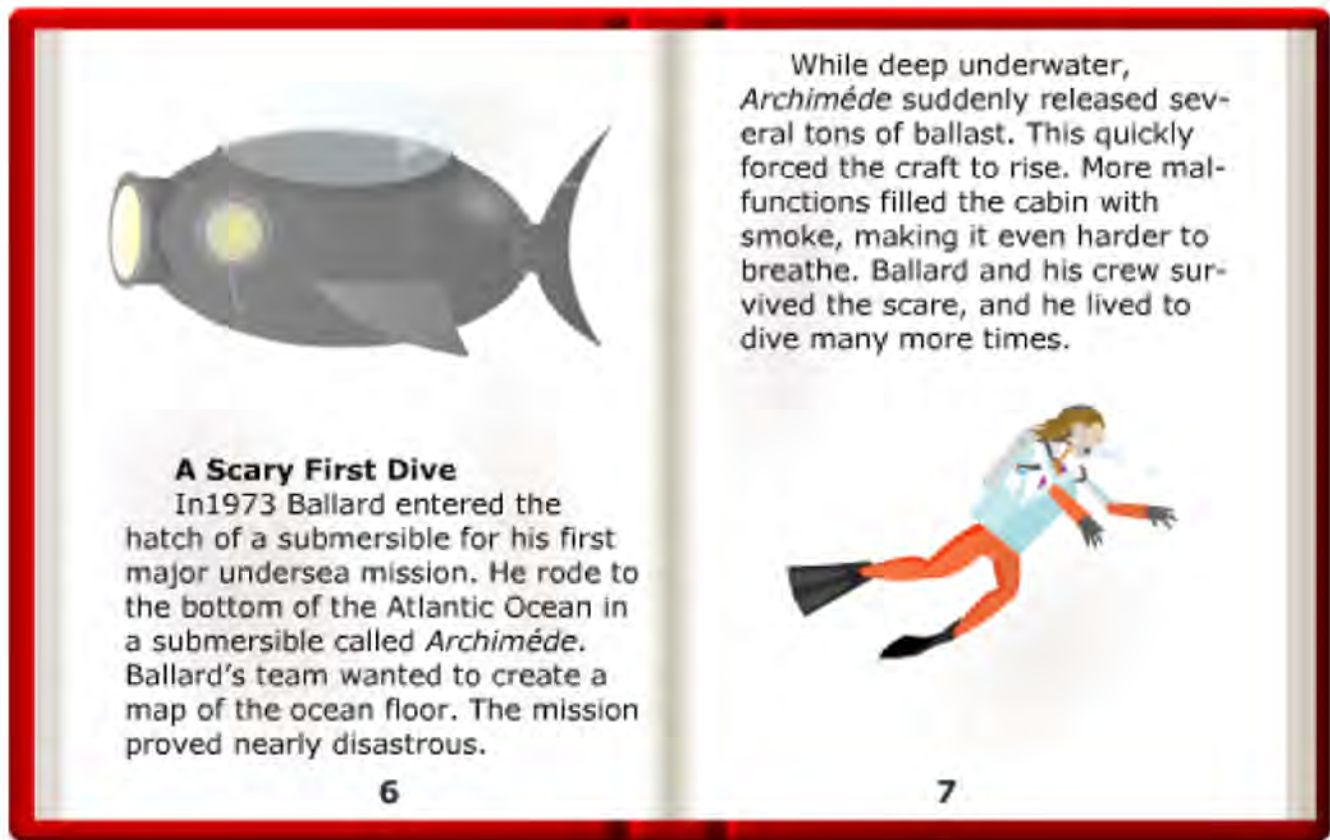
At this point in the story, can you figure out what year it was? How old was Robert Ballard when he returned to Titanic with Alvin?

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

2

3

This image shows a blank sheet of white paper with horizontal grey ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for handwriting practice or general writing. There are no margins, text, or other markings on the paper.



If you look up the word “hatch” in a dictionary, you will see that it means “small door”, and it also means “emerge from an egg”. What do you think is the correct meaning in this sentence?



If the *Archimède* suddenly rose when it lost its ballast, what do you think ballast is for? What other kind of vehicles do you think might use ballast?

DESTINATION READING COURSE 3

UNIT 08: Robert Ballard, Modern Sea Explorer The Lure of the Sea

In college, Ballard studied marine geology. He wanted to learn everything he could about the ocean floor and the creatures that lived there. Ballard's love of the sea continued through his service in the U.S. Navy. The navy sent him back to work at the Woods Hole Oceanographic Research Institute in Massachusetts. There, Ballard first worked with Alvin—not a person, but a machine.



4



Alvin was a submersible, a tiny submarine designed to explore the deepest parts of the ocean. Alvin could carry only three people. In Alvin, Robert could travel through very tight undersea holes and canyons. He collected samples by using the remote-controlled arm attached to Alvin's bow, or forward part.

5



Imagine an idea web to organize this information. The word “Alvin” could be in the center, and the words “submersible” and “deepest ocean” could be in connecting circles. What other information could you add to this idea web?
