



Explorers Of The Deep

You might think that there isn't much of the Earth that is yet to be explored. Humans have climbed the highest mountains, crossed deserts and journeyed to the poles. They have even travelled into space and walked on the moon. However, there is one part of our planet that remains relatively unknown: the depths of the world's oceans.

Just how deep are we talking?

The deepest part of the ocean is called the Mariana Trench. It is in the middle of the vast Pacific Ocean near the Mariana Islands. The deepest part of the Mariana Trench reaches about 11km below the surface of the sea! This means that Everest would fit under the water here with plenty of room to spare.

What's it like down there?

As you go deeper and deeper under the surface of the ocean, it gets very dark. This is because no sunlight can penetrate this far. Once you get to an area like the Mariana Trench there is no light at all. The lack of sunlight also means that the deep ocean is very cold. An even bigger challenge is pressure. The water pushes down so hard that, if you were to go to the very bottom of the trench, it would feel like 100 elephants were sitting on you! Not very pleasant! Surprisingly, there are creatures that live in these challenging conditions. In fact, if you want to look for 'aliens', you'd be better off exploring down here than up in space. Down here, far from the sunlight, there are strange animals lurking. For example, the angler fish which lures unsuspecting victims into its waiting jaws using a light dangling from its head!

Can we explore the deep ocean?

The first people to venture into the deepest part of the Mariana Trench – called the Challenger Deep – were Don Walsh and Jacques Piccard in 1960. It was another 50 years until someone repeated the journey. Since 2019, there has been a flurry of new descents. However, it is still an incredibly challenging adventure. Submersibles (underwater vehicles) need to be incredibly strong so they are not crushed by the pressure. New materials have been created to help with this. The construction needs to be perfect so there are no weak joins or faults. The vessels are packed with equipment to keep



passengers alive and to take measurements and recordings. They are certainly not designed for comfort! Exploring the deep is certainly not for the fainthearted. However, for those who want to find new, unexplored places, the ocean floor still holds many secrets.

RETRIEVAL FOCUS

1. Where is the Mariana Trench?
2. How deep is the Mariana Trench?
3. What is the biggest challenge of exploring the deep ocean?
4. When was the first descent to the bottom of the Mariana Trench?
5. What is the name for the deepest part of the Mariana Trench?

VIPERS QUESTIONS

V

Find and copy a word which means *very big*.

E

Why does the reader compare the pressure to elephants sitting on you?

E

Why is the word *aliens* in inverted commas?

V

What does the word *flurry* tell us about recent deep-sea exploration?

S

Would you like to explore the deep ocean? Why or why not? Use information from the text to justify your answer.