

Our ocean voyage

Today is your chance to
use your new atlas.

Year 5

Year 6

Week beginning 22nd June



National
Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL



Encounter
Edu

Outcomes

- **Say how many oceans there are, name and locate them**
- **Name and locate famous marine landmarks**
- **Describe the features of famous marine landmarks**
- **Explain the problem with trying to count the number of oceans**

Brief from Professor Alex Rogers



Alex Rogers

Hi, I'm Professor Alex Rogers. I am a marine scientist with a special fascination in the deep sea. I am based at the University of Oxford, but love spending as much time at sea as possible.

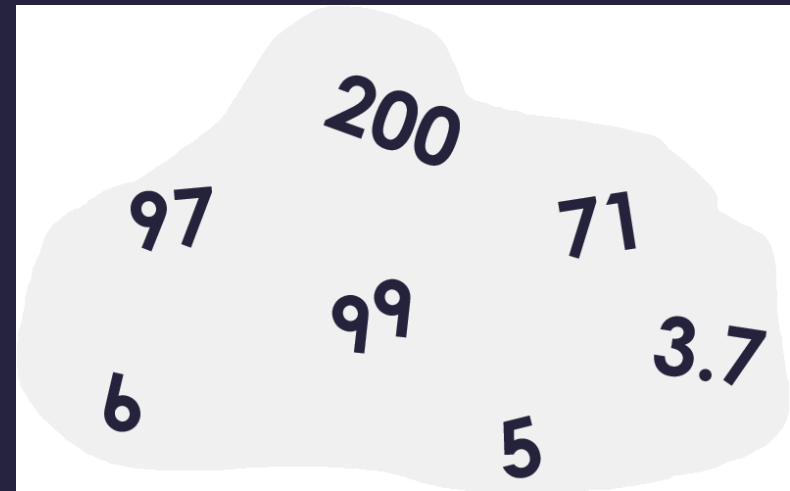
I feel so lucky to be able to spend my life trying to understand the huge diversity of our ocean.

Your mission today is to find out about our planet's oceans and some of the amazing features it contains.

1. What percentage of earth is water?
2. What percentage of the ocean has been explored?
3. What percentage of living space is in the ocean?
4. What's the average depth of the ocean in kilometres?
5. What percentage of the Earth's water is in the ocean?
6. How deep can light go in the ocean in metres?
7. How many teaspoons of salt in every litre of sea water?

Can you match the question to the amount?

The answers are on the next slide.



7 interesting facts about the world's oceans

1. What percentage of earth is water? 71%
2. What percentage of the ocean has been explored? 5%
3. What percentage of living space is in the ocean? 99%
4. What's the average depth of the ocean in kilometres? (3.7km)
5. What percentage of the Earth's water is in the ocean? (97%)
6. How deep can light go in the ocean in metres? (200m)
7. How many teaspoons of salt in every litre of sea water? (6 tsps)

What are our oceans called?

- Use your atlas to help you with the next task.
- Pages 82-83 onwards are most useful.

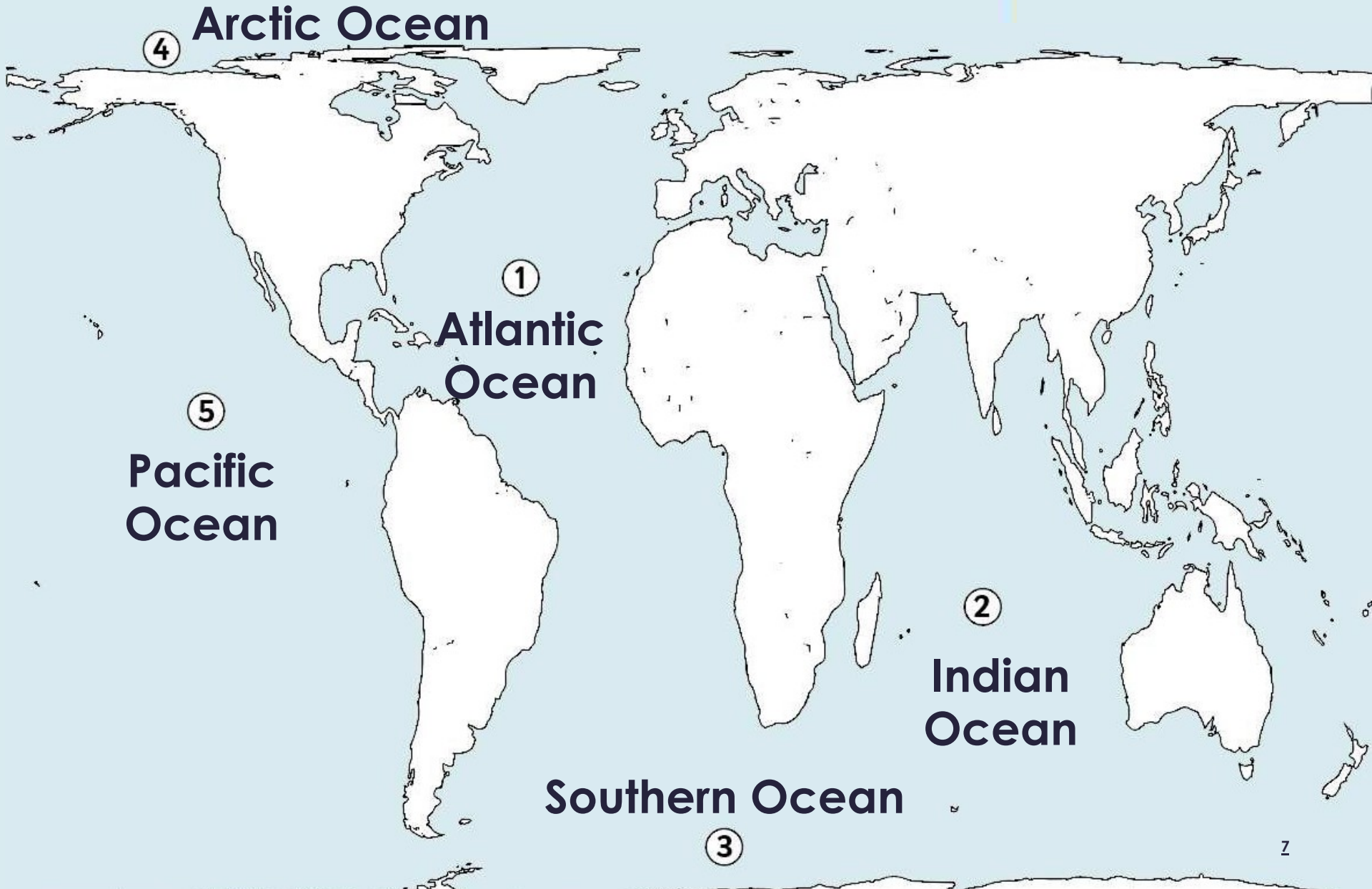


What are our oceans called quiz?

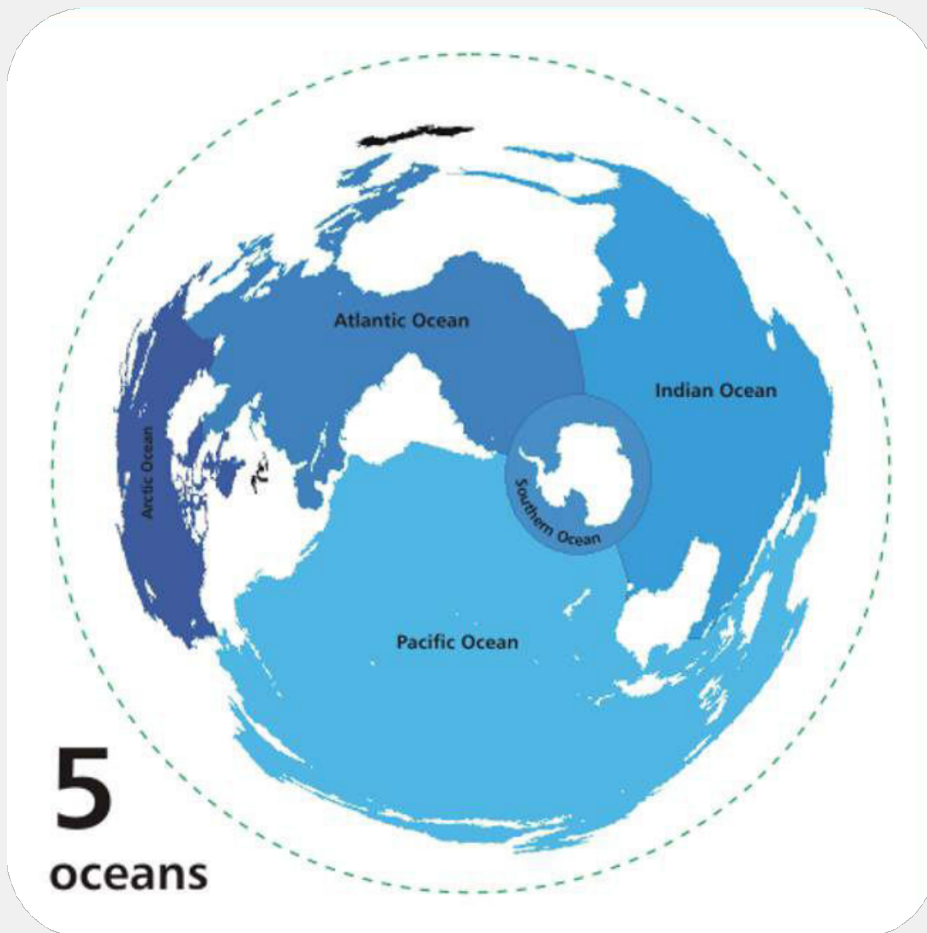
The five main oceans on Earth are labelled with a number. Use the clues below to work out the names of the oceans:

1. This is the UK's closest ocean.
2. This ocean is named after the country that has the second largest number of people living in it.
3. This ocean is named after the compass point opposite North.
4. This ocean is named after the cold place at the North of the Earth.
5. This ocean is an anagram of 'capicif'.

The answers are on the next slide.



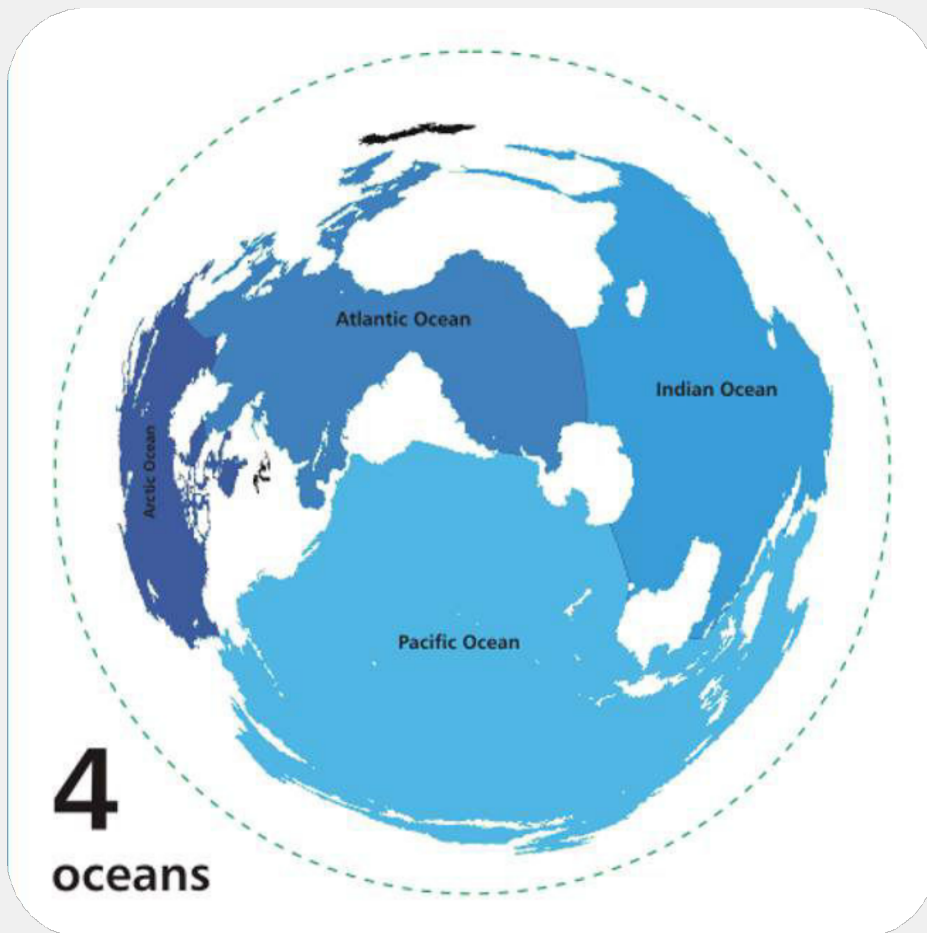
How many oceans are there?



Advanced

Explain the problem with trying to count the number of oceans there are

How many oceans are there?

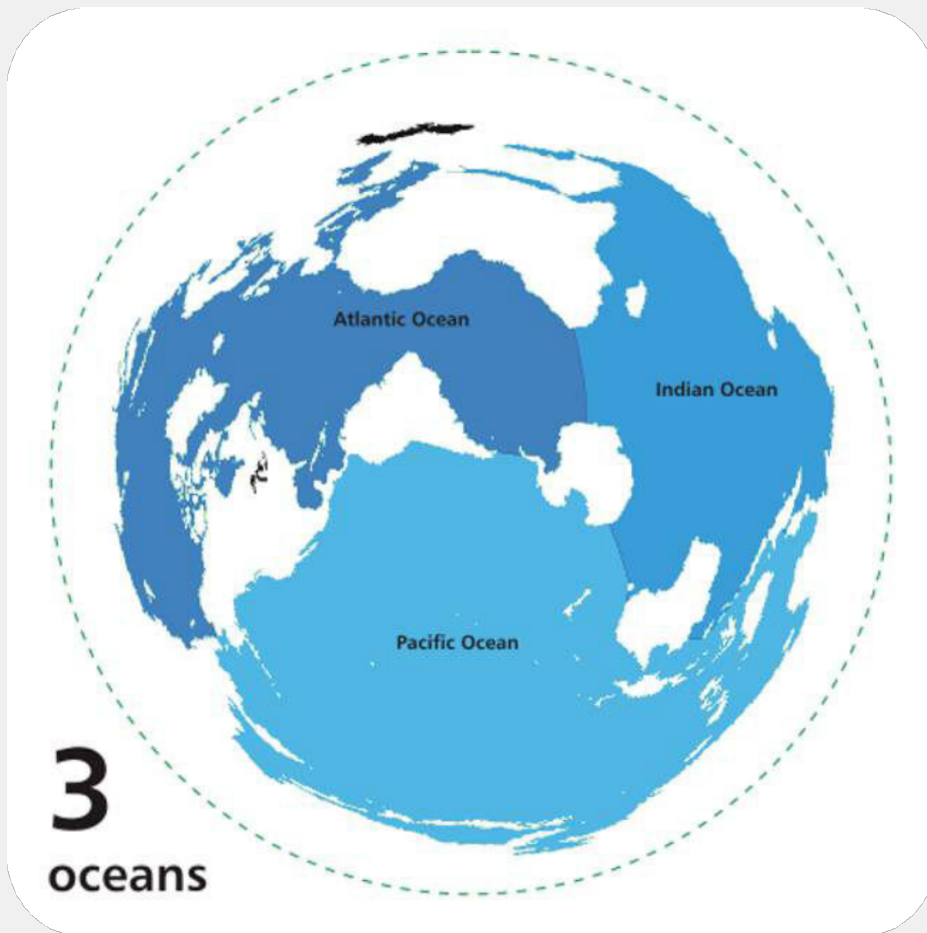


Advanced

Explain the problem with trying to count the number of oceans there are



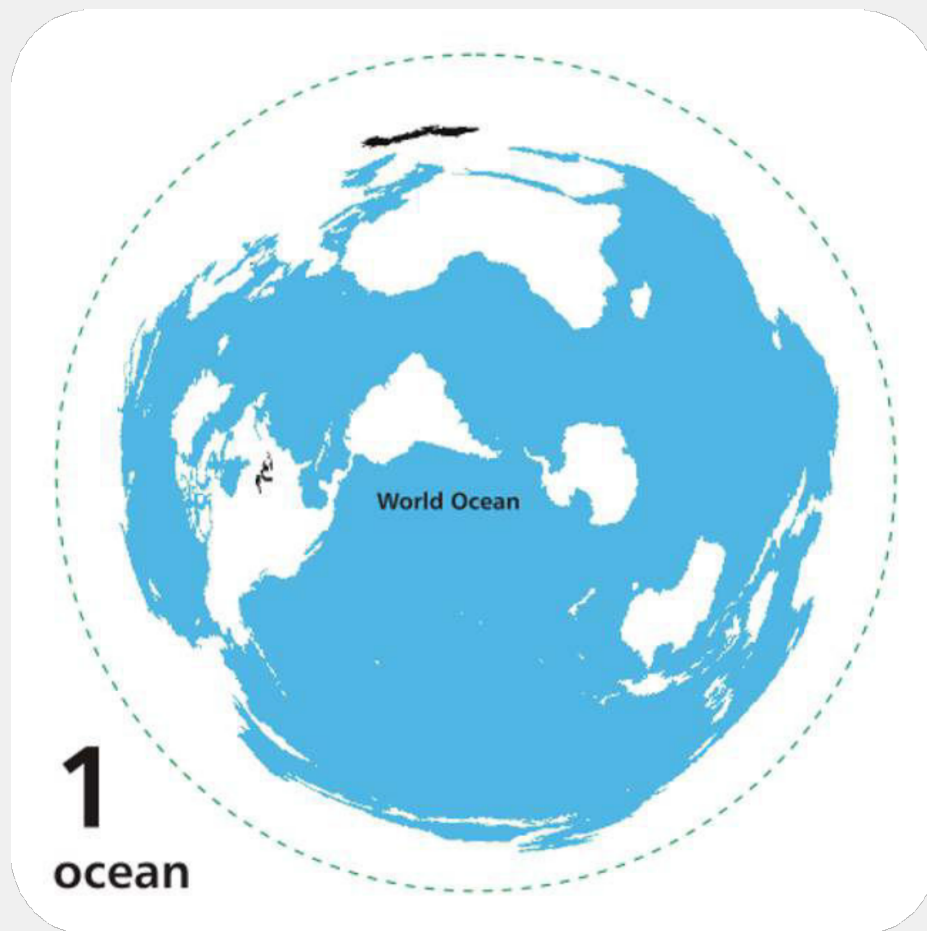
How many oceans are there?



Advanced

Explain the problem with trying to count the number of oceans there are

How many oceans are there?

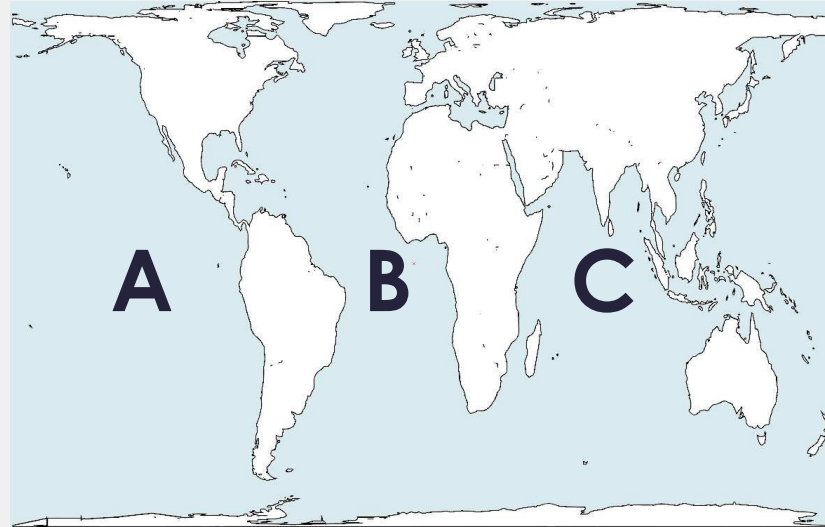


Advanced

Explain the problem with trying to count the number of oceans there are

Have a go at this.

1. Name the oceans A, B and C.



2. Some people think that the Arctic Ocean shouldn't be a separate ocean. Explain why.



Learning check point 1: Answers

1. Name the oceans A, B and C.

A – The Pacific Ocean

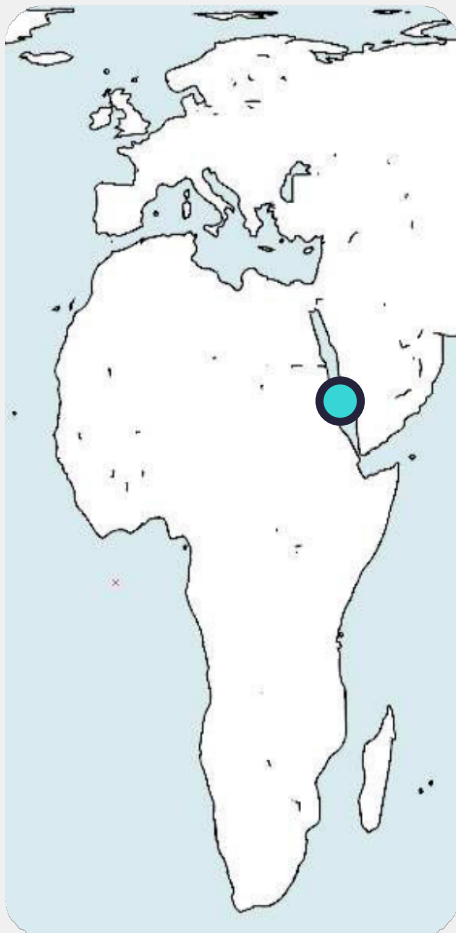
B – The Atlantic Ocean

C – The Indian Ocean

2. Some people think that the Arctic Ocean shouldn't be a separate ocean. Explain why.

The Arctic Ocean is connected to the Atlantic Ocean and they share a large current.

Use the index of your atlas to help you with this task.

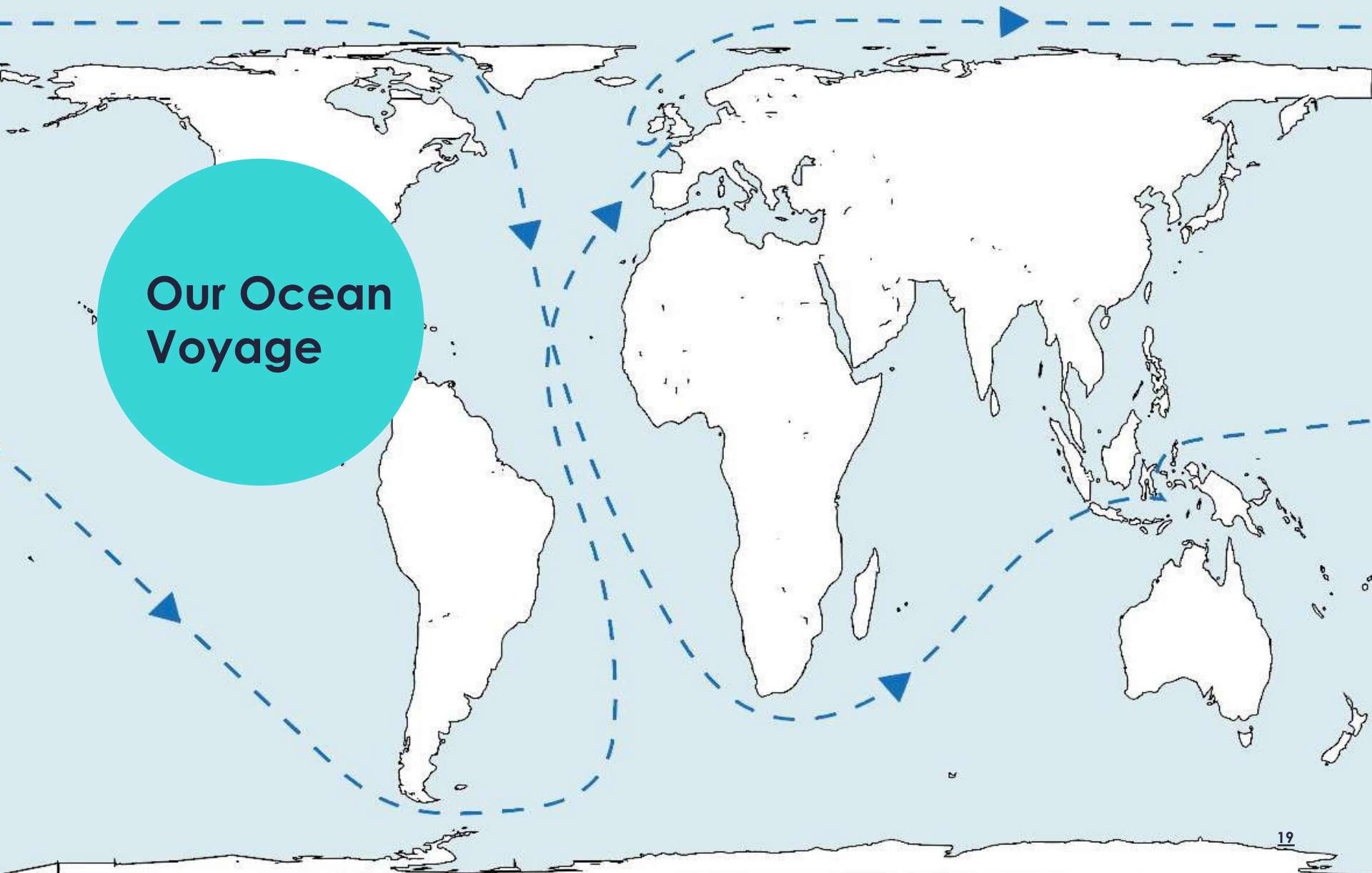


1. Where is the Great Barrier Reef?
2. Where is Hawaii?
3. What is the “Mid-Atlantic ridge”?
4. What is special about the Red Sea?
5. What feature is marked on the map?

Learning check point 2: Answers

1. Where is the Great Barrier Reef?
Near Australia
2. Where is Hawaii?
In the middle of the Pacific Ocean
3. What is the “Mid-Atlantic ridge”?
A mountain range under the Atlantic Ocean
4. What is special about the Red Sea?
It's the saltiest sea on Earth
5. What feature is shown on the map?
The Red Sea





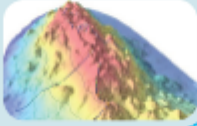
**Our Ocean
Voyage**



Building your map

1. **Shade the sea in on your map.**
2. **Write the name of the five main oceans in the correct place.**
3. **Write the names of the famous landmarks in the correct places**
4. **Write a small description under four of the landmarks.**

Have a go at matching the ocean landmarks to their description.

Great Barrier Reef 	<p>Description: This has biggest difference between the high and low tide: 16.3m, which is taller than a 3 storey building!</p> <p>Location: The east coast of Canada.</p>
Mauna Kea 	<p>Description: This is the largest coral habitat in the world.</p> <p>Location: Off the east coast of Australia.</p>
Southern Ocean 	<p>Description: This is the deepest place on Earth. It is 10,994m below sea level.</p> <p>Location: In the Pacific Ocean.</p>
Challenger Deep 	<p>Description: This is the roughest ocean in the world, making tall, steep waves. This happens because of the wind and current.</p> <p>Location: All around Antarctica.</p>
Red Sea 	<p>Description: An enormous, mostly underwater mountain range, that runs for over 10,000 miles!</p> <p>Location: Middle of the Atlantic Ocean.</p>
Mid Atlantic Ridge 	<p>Description: This is the saltiest sea on Earth.</p> <p>Location: Between Africa & Middle East.</p>
Bay of Fundy 	<p>Description: This is actually the tallest mountain in the world at over 10,000m; but most of it is below the sea.</p> <p>Location: Hawaii, centre of the Pacific.</p>

Final thoughts from Professor Alex Rogers



At sea

Being involved in ocean science is so exciting because there is so much still to know. With some deep ocean habitats, we have only explored a tiny fraction, sometimes as little as 0.0001 per cent.

I get to scuba dive, use underwater robots and work with some amazing people, and I would recommend a career in ocean science to anyone.

And for everyone, just get to the sea, dip your toe in, you never know what you might find!