

# Blue Abyss



These activities are for you to do at home with an adult. You can do all of them or choose the ones that you find most interesting.

## Activities

1. Use a dictionary to help you write definitions for the topic-related words listed.

adaptation

aquatic

marine

ocean

oceanography

pollution

sea

species

2. Use online sources or information books to find out about the world's five oceans. Record your findings in a table and include information about each ocean's size, temperature, characteristics and animal life.
3. Marine species rely on each other as a food source. Answer the questions, then draw some marine food chains.
  - What is a food chain?
  - What is the producer in a food chain?
  - What is the consumer in a food chain?
  - What are a predator and prey? Give some examples.
4. Use your research skills to find out about the different ocean zones (sunlight zone, twilight zone and midnight zone) and the marine animals that live in them. Divide an A4 piece of paper into three rows, one for each zone. Draw marine animals in the zones in which they live. Compare the animals that live in the different zones. What similarities or differences are there between them? Record some of your comparisons.
5. Find out about unusual marine animals, such as the deep-sea angler fish, the gulper eel or the Greenland shark. Draw sketches of the animals that interest you and write a short paragraph to explain the adaptations that help them survive in a particular ocean or ocean zone.

6. Read the statements about the Great Barrier Reef and use a range of sources to find out if they are true or false. Put a line through the false statements and write the correct answer. Then answer the questions.

### Statements

- The Great Barrier Reef lies off the coast of Africa.
- The Great Barrier Reef gets its name because it acts as a barrier between the coast and the large waves of the Indian Ocean.
- The Great Barrier Reef can be seen from the International Space Station.
- The Great Barrier Reef is the world's largest living structure.
- Very few marine species inhabit the Great Barrier Reef. The only creatures living here are sea urchins and barrel sponges.
- Captain James Cook and his crew were sailing up the coast of Australia in 1770 in their ship, HMS *Endeavour* when they discovered the Great Barrier Reef by crashing into it.
- Climate change is not changing or posing a danger to the Great Barrier Reef and other coral reefs of the world.

### Questions

- Why is the Great Barrier Reef an important structure?
  - How has the Great Barrier Reef changed over time?
  - What threatens the Great Barrier Reef?
  - What impact are the dangers and changes to the reef having on other living things that inhabit the area?
7. Look at marine artwork by artists, such as Amber Marine, Jenny Berry and Michael Hoffman. Choose an artist whose work you like and use their style as inspiration for creating a marine-inspired artwork. Consider elements of shape, line, pattern and colour when creating your piece.
8. Significant people, events and technology of the past and present have helped scientists learn about the oceans. Use a range of sources to determine what achievement the person, event or technology listed has made to progress oceanography. Record your findings.
- Cornelius Drebbel: 1620
  - HMS *Challenger*: 1872–1876
  - Jacques Cousteau: 1943
  - *Deepsea Challenger*: 26th March 2012

9. A combination of global warming, pollution, overfishing, and coastal development is destroying many marine habitats. Use your research skills to read about these factors and their effects on the world's oceans, marine life and coastal areas. Find out what conservation is taking place to limit these effects. Write a persuasive newspaper report or letter, setting out an argument for preserving the oceans and marine life. Include persuasive devices in your writing, such as facts that support your argument, repetition and emotional language.
10. Finish your home learning by writing a summary of the topic, explaining what you have learned about the world's oceans, marine life, ocean exploration and why ocean conservation is essential.

### Useful websites

DKfindout! – Oceans of the World  
 BBC Bitesize – What is a food chain?  
 BBC Teach – Food chains and food webs in animals – Science KS2/KS3  
 BBC Four – Nature's Microworlds, The Deep Sea, Twilight zone  
 BBC One – Blue Planet II, Series 1, The Deep  
 National Geographic – Ocean Wildlife  
 WWF Australia – The Great Barrier Reef  
 Linda Hall Library – Cornelis Drebbel  
 Dive & Discover – The Challenger Expedition  
 Britannica Kids – Jacques Cousteau Kids – Homework Help  
 National Geographic – DEEPSEA CHALLENGE Expedition – James Cameron  
 Greenpeace UK – Ocean sanctuaries

### Good reads

Title	Author	ISBN
Song of the Dolphin Boy	Elizabeth Laird	9781509828234
Manfish – A Story of Jacques Cousteau	Jennifer Berne	9781452141237
Flowchart Science: Oceans	Louise and Richard Spilsbury	9781398200845
Ocean – a children's encyclopedia	DK	9780241185520
National Geographic Kids: Ocean Animals – Who's Who in the Deep Blue	Johnna Rizzo	9781426325069
Kids Fight Plastic – How to be a #2minutesuperhero	Martin Dorey	9781406390650