

Teacher's Guide



Coral Reef in a Box

Coral reefs are important ecosystems that are being harmed by the effects of climate change. In this activity, your students will learn about the importance of coral reefs and the risks they face.

Corals

Corals are colorful animals that live in the ocean. They are made up of tiny, colourful **animals** called **polyps** who stick together and create a skeleton. There are lots of different types of coral, such as blue coral, brain coral, and bubble coral.

They stay in one place during their whole adult lives and can be found in **every ocean**. Some types of coral live alone and others live together in groups called **colonies**

Coral reefs

Coral reefs are **giant colonies** of corals. They can be made up of **different** types of coral and provide a **home** for lots of different sea life, such as fish and turtles.

Coral reefs and climate change

Coral reefs are negatively impacted by **climate change**. Humans often release **nasty gases** (greenhouse gases) into the air, such as when they drive non-electric cars. Some of these gases end up in the ocean, which makes it harder to live for the **wildlife** that calls it home.

This includes **corals**, which become stressed, die, and turn white. This is happening to coral reefs everywhere! Corals can also be harmed when people swim around them and break them.

What can we do about it? (Solutions)

- Stop releasing so many nasty gases into the atmosphere.
- Protect coral reefs.
- If you go diving, try not to touch the coral.
- Throw away/recycle your plastic so that it's less likely to end up in the ocean. Plastic releases chemicals that are harmful to coral.





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Activity

We recommend discussing the background information above with your students **before** starting the activity. The activity can either be done at home or in class. The goal is for students to create their own **coral reef in a box**. The reef should be colourful and filled with lots of different types of coral and sea life. Once the students have finished making their coral reefs we suggest you talk to them about the **solutions** mentioned above so they are left with a positive outlook in the end.

Preparation

To prepare all you need is to acquire the materials mentioned below for each student. We also recommend you print out the sheet with all of the marine life images that students can cut out and glue to their shoe box. You are welcome to add more images of course!

Things students will need

- Glue or tape
- Scissors
- A shoebox

Things they can use

- Colourful paper
- Paint
- Clav
- Pipe cleaners
- Colour pencils, crayons, and markers

We welcome feedback and would be delighted to hear your thoughts on this activity. Feel free to send an email to schools@climatescience.org and we'll be sure to get back to you soon:)



