

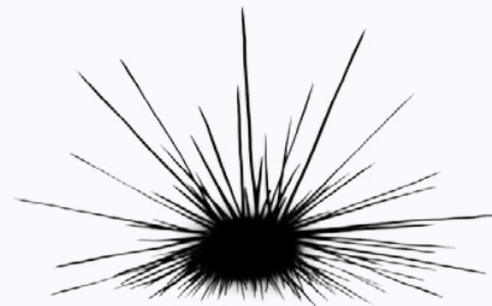
# CARRIBEAN SPECIES



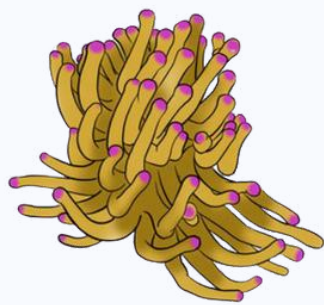
Lionfish (invasive)



Green sea turtle



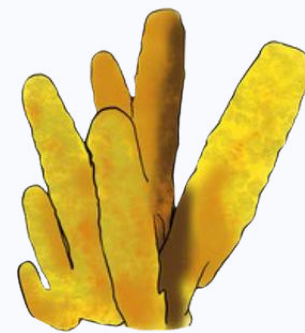
Long-spined sea urchin



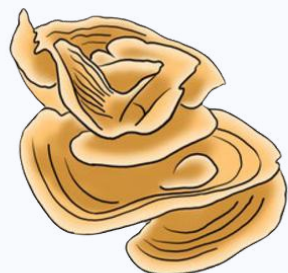
Sea anemone



Sea fan



Yellow tube sponges



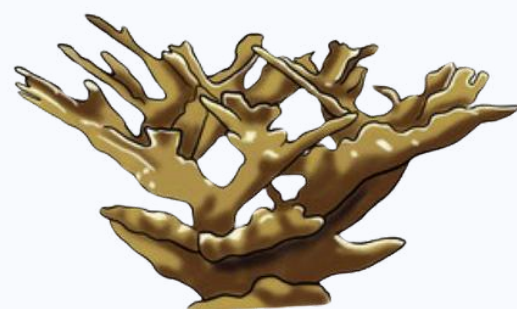
Lettuce coral



Pillar coral



Great star coral



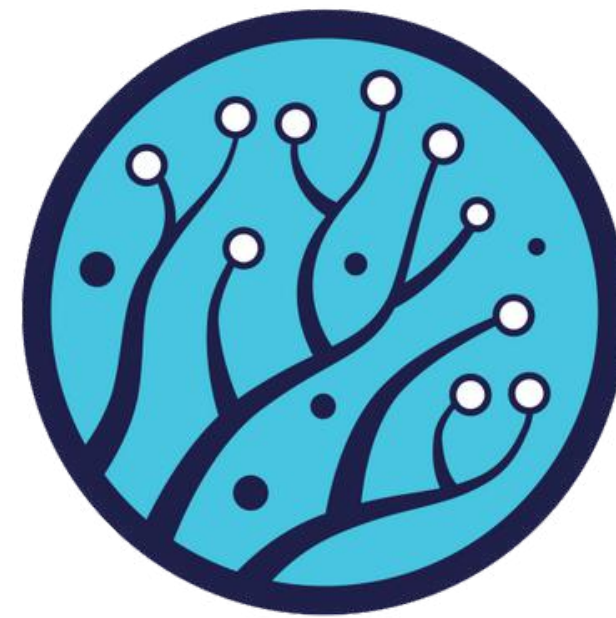
Elkhorn coral



Staghorn coral



Symmetrical brain coral



# CCMI

REEFS GO LIVE

## 2025 BOOKLET



NAME: \_\_\_\_\_

SCHOOL: \_\_\_\_\_



# KEY TERMS

CCMI educators and hosts will refer to important key terms in each episode, which will be explained throughout each broadcast.

**Adaptation** - changes in a living being's shape or behaviour that improves its ability to survive; these changes are passed on to future generations through the organism's genes

**Benthic** - bottom of the ocean or the bottom of any other large body of water

**Camouflage** - colour and/or patterns of an organism that helps it to blend in with the surrounding environment

**Climate change** - change in global weather patterns over time, largely due to increased carbon dioxide in the atmosphere as the result of human activities

**Coral bleaching** - process of corals appearing white, due to the loss of the algae living inside of them

**Coral nursery** - place where scientists grow corals underwater on specialized structures, with the goal of replenishing depleted coral reefs from what is grown in these places

**Ecosystem** - community of living organisms interacting with their physical environment within a specific area, forming a complex network

**Endemic** - native to and only found in a limited geographic region

**Keystone species** - a species that has a big impact on its ecosystem because if it were to disappear, it would cause major changes and problems for the rest of the system

**Marine Protected Areas (MPAs)** - sections of the ocean which are partitioned off from certain human activities for the protection of resources

**Mesophotic reef** - coral ecosystem that exists in tropical and subtropical waters between shallow, well-lit areas and the ocean's deepest, darkest depths

**Nutrient cycle** - movement and exchange of living and non-living material through one or more organisms and into the environment, as it contributes to continued production of living matter

**Restoration** - renewal of a damaged, degraded, or destroyed ecosystem by active human intervention

**Scientific method** - the process of discovering facts through testing and experimentation. The basic process involves making an observation, forming a hypothesis, making a prediction, conducting an experiment and analyzing the results.

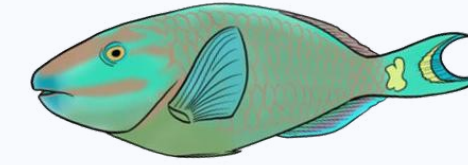
**Seamount** - underwater mountain formed by volcanic activity; rises from the ocean floor but does not reach the water's surface

**Threat** - something with the intention to cause harm

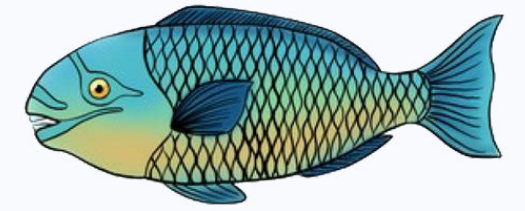
# CARRIBEAN SPECIES



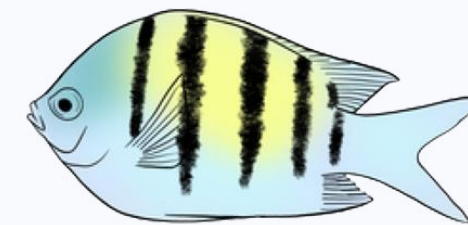
Nassau grouper



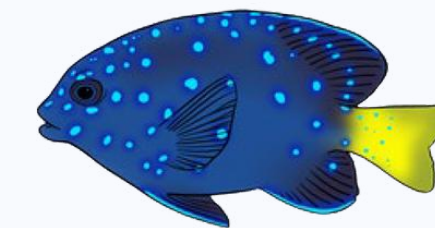
Stoplight parrotfish



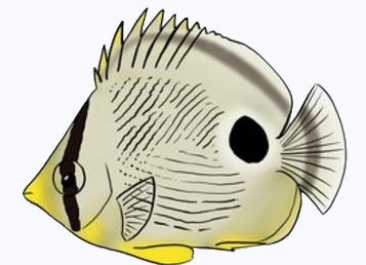
Princess parrotfish



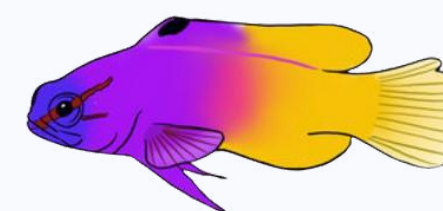
Sergeant major



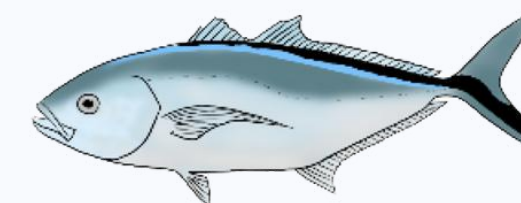
Yellowtail  
damselfish



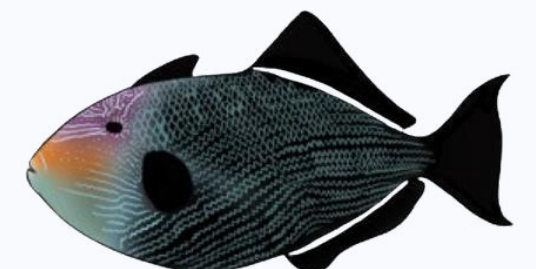
Foureye  
butterflyfish



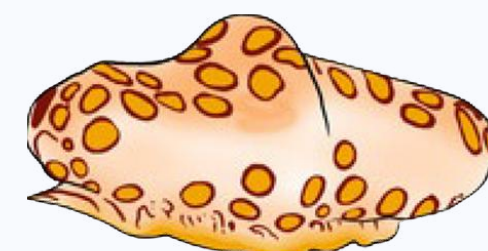
Fairy basslet



Bar jack



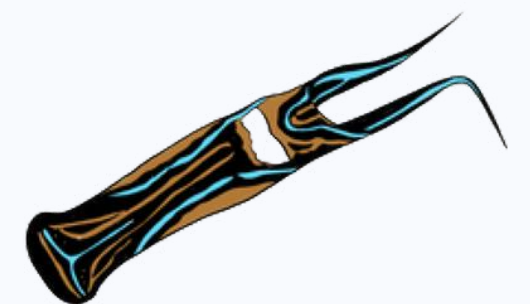
Black durgon



Flamingo tongue



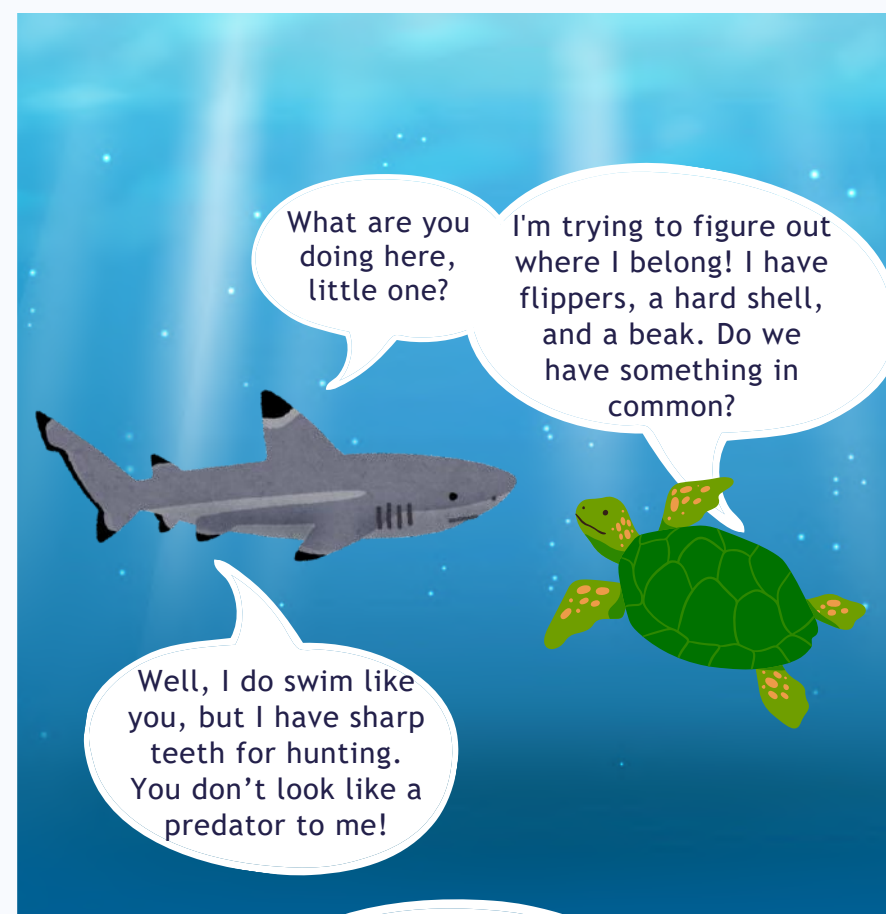
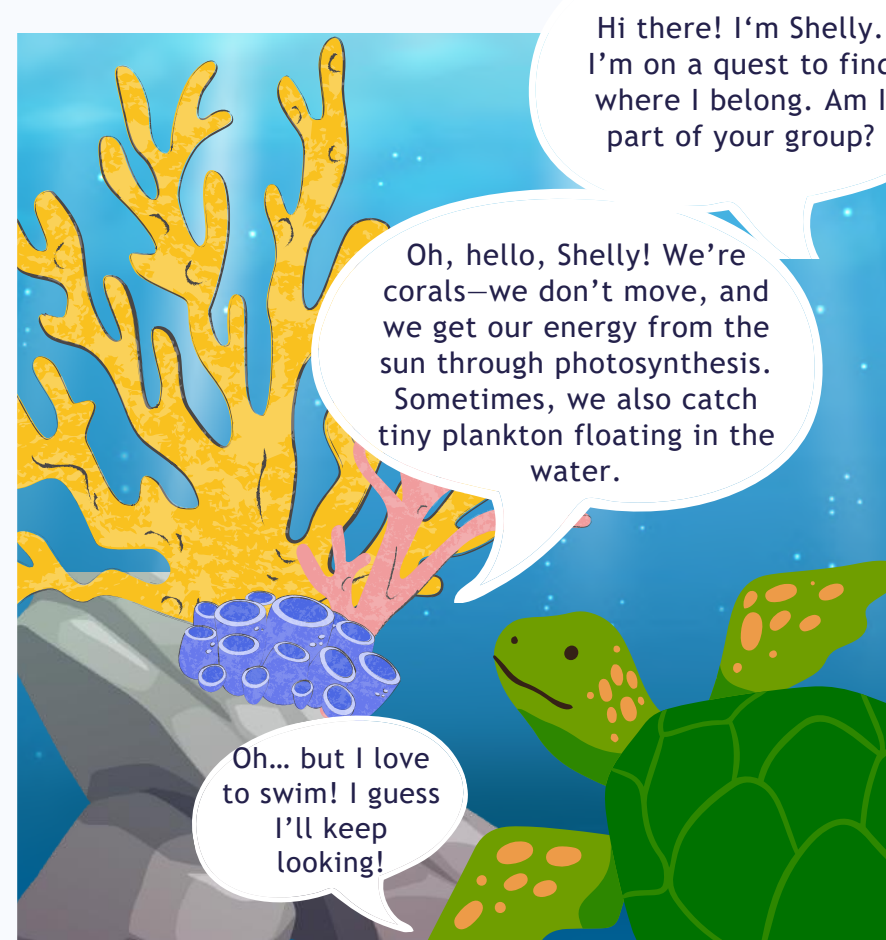
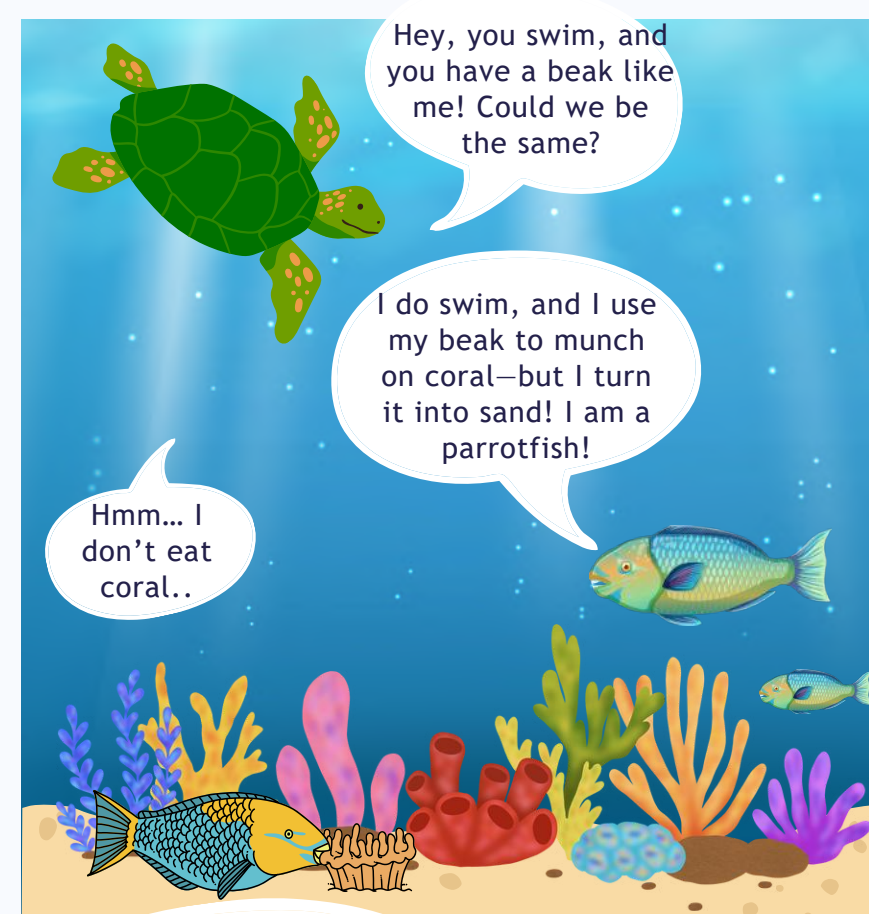
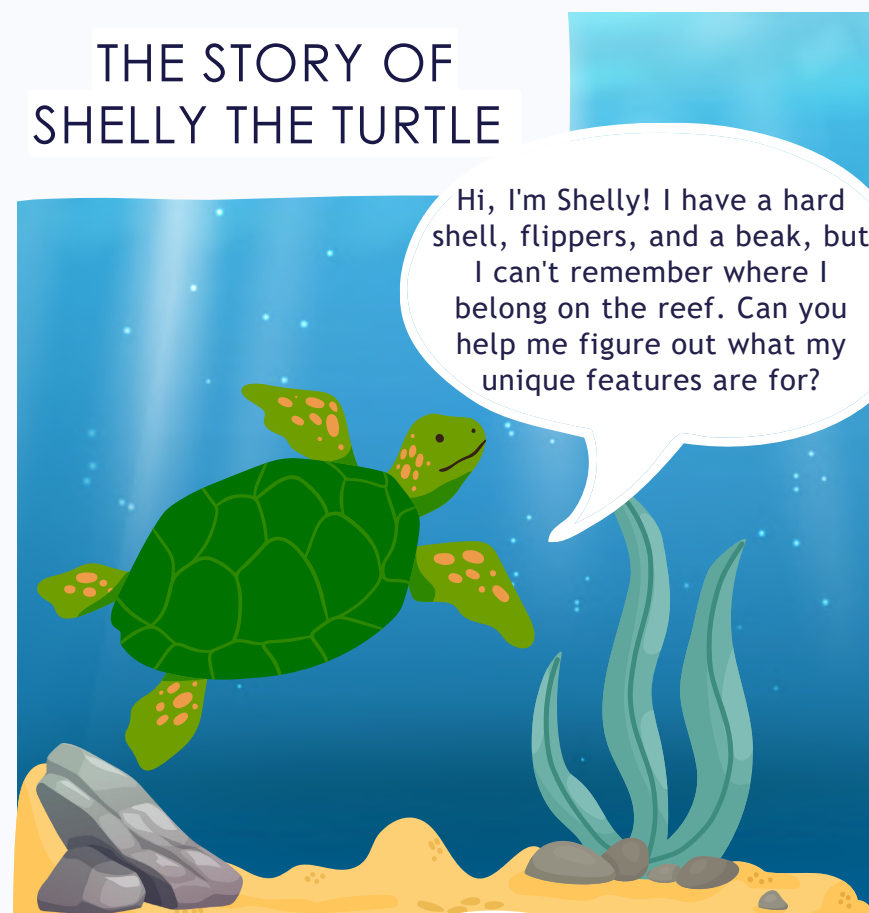
Lettuce slug



Headshield slug



## THE STORY OF SHELLY THE TURTLE



# DEAR TOMORROW...

## YOUR MISSION!

Inspired by the DearTomorrow campaign, write a letter to your future self or to someone very important in your life about how you promise to help the ocean and fight climate change!

Think of a person important in your life - your child, a friend, a family member or your future self. Imagine it is the year 2050, and they receive a message from you, which was written today. In the box below:

- Share your thoughts about climate change and
- Your hopes for the future of the oceans and
- Your promise to take bold climate action today to ensure they have a safe and healthy world

DEAR \_\_\_\_\_



HAVE YOU COMPLETED YOUR PLEDGE?  
WE WOULD LOVE TO HEAR FROM YOU!  
SHARE ON SOCIAL MEDIA AND TAG  
@REEFRESEARCH #DEARTOMORROW

reefresearch.org  
info@reefresearch.org  
@reefresearch



# EPISODE 1 - SEAMOUNTS

How are seamounts formed?

\_\_\_\_\_

What is a biodiversity hotspot? What features of a seamount make them good hotspots?

\_\_\_\_\_

\_\_\_\_\_

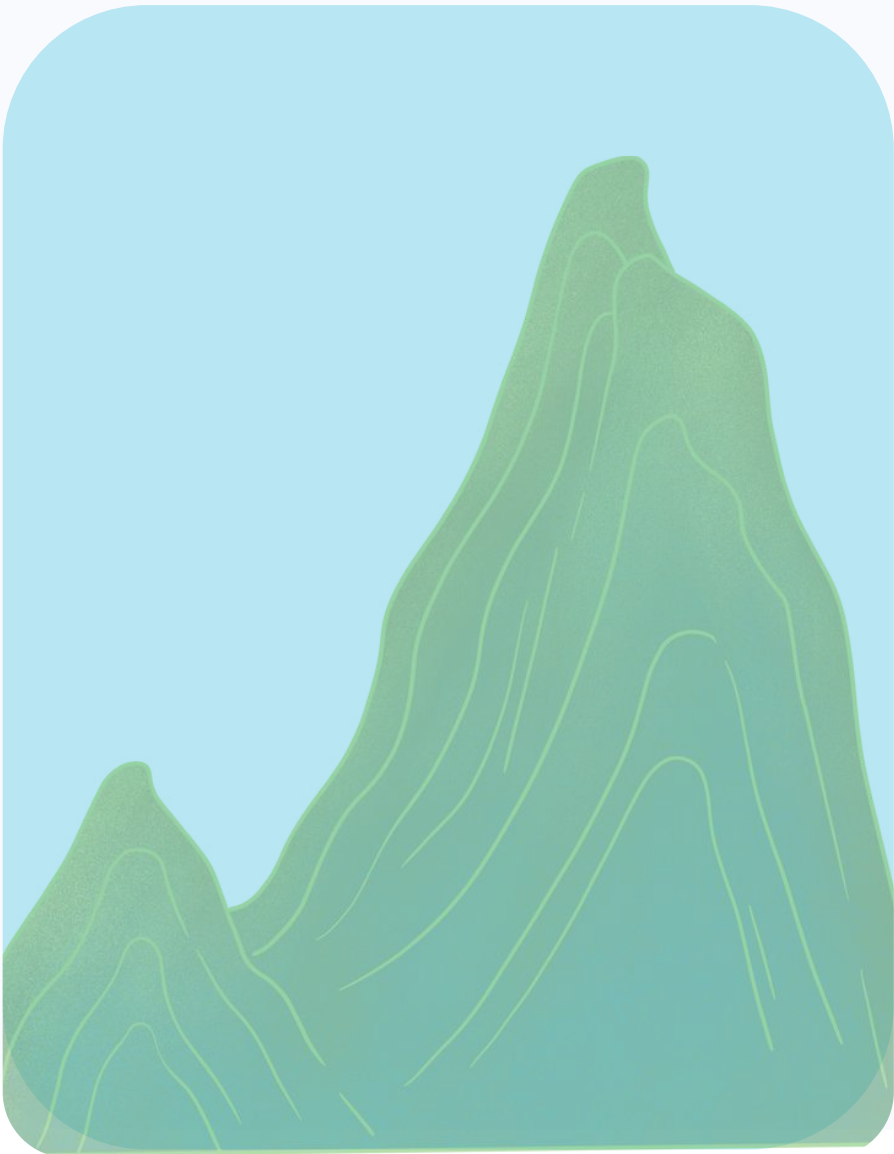
Complete the sentences by filling in the blanks with the correct word from the list below.

**overfishing    sponges    protect    upwelling    hotspots    mountains**

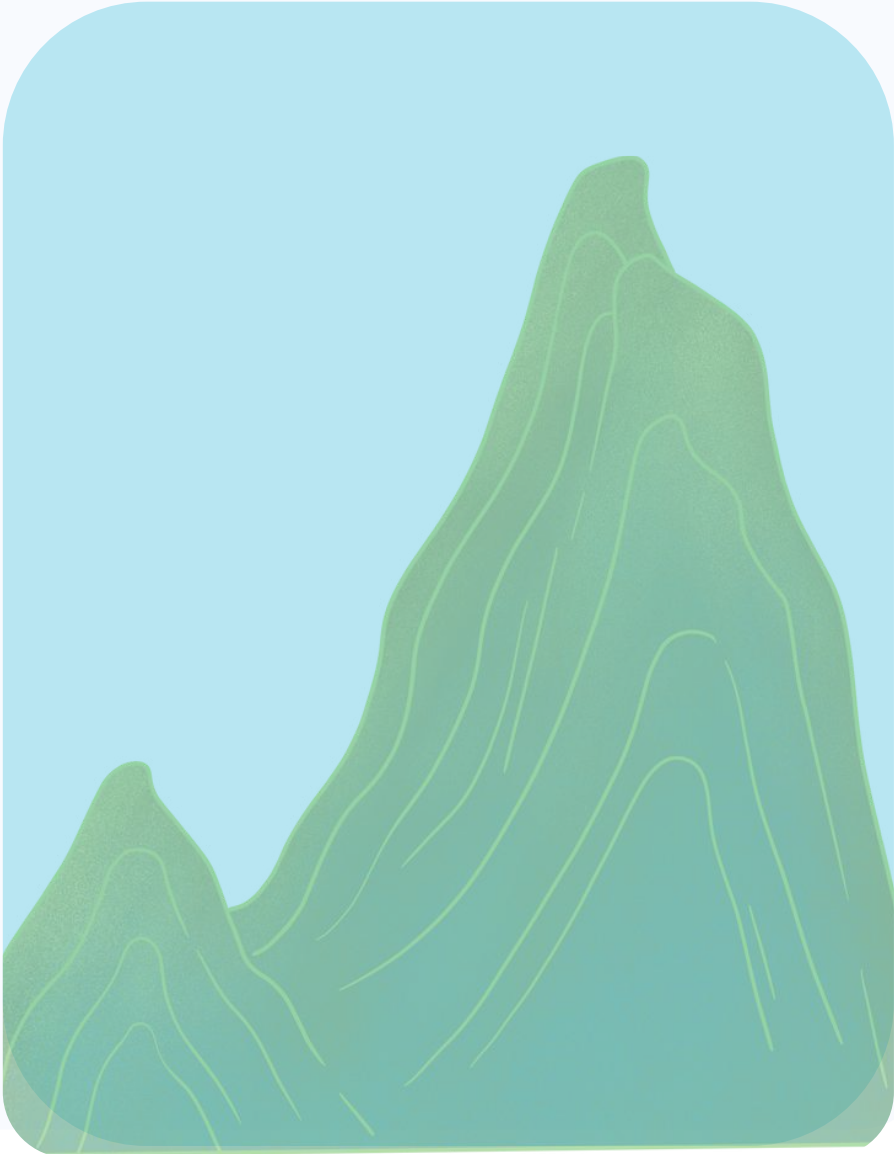
Seamounts are underwater \_\_\_\_\_ that don't quite reach the surface. The process of \_\_\_\_\_ brings nutrient rich water to these areas. This attracts small plankton feeding animals such as fish, corals, \_\_\_\_\_. In turn this attracts larger fish and other creatures even sharks, turtles and whales. The variety of life makes these areas biodiversity \_\_\_\_\_. MPAs can help \_\_\_\_\_ seamounts from threats such as \_\_\_\_\_.

As explained in the episode, Marine Protected Areas can be a very important way to protect our ocean habitats. Use the boxes below to draw a seamount ecosystem that is inside an MPA and one that is not to show how the environment might be different. you can include animals and plants as well as potential threats.

MPA



No MPA



# EPISODE 4 - WORLD OCEAN DAY: CLIMATE CHANGE AND OUR OCEAN

What is climate change and what causes it ?

\_\_\_\_\_

\_\_\_\_\_

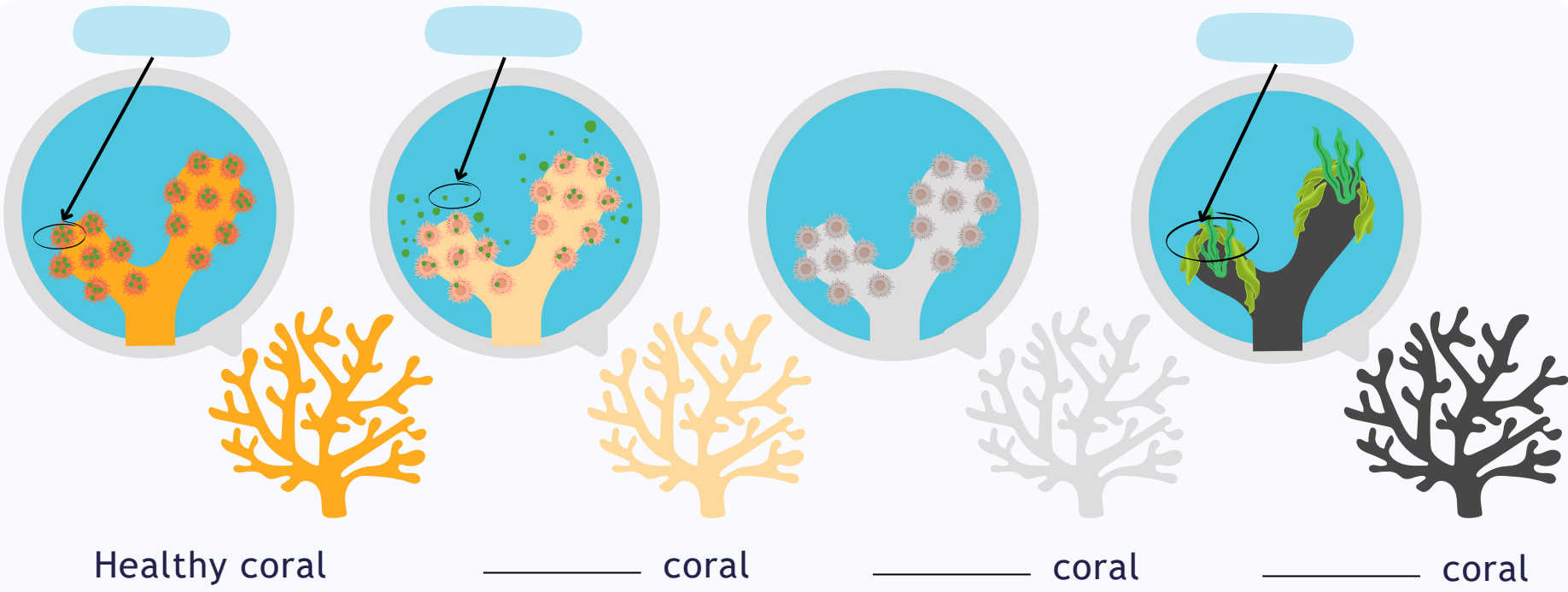
\_\_\_\_\_

How can you, along with the rest of the world, work together to address the factors contributing to climate change? Add one more environmental issue to the list at the end of the table!

	What I can do	What the world can do
Pollution from fossil fuels		
Plastic pollution		
Habitat destruction & overfishing		
Water pollution		



## EPIISODE 3 - ENDANGERED CORALS: FINDING AND RESTORING RARE CORAL SPECIES






Fill in the blanks using the correct word below:

algae    polyp    bleached    zooxanthellae    stressed    dead

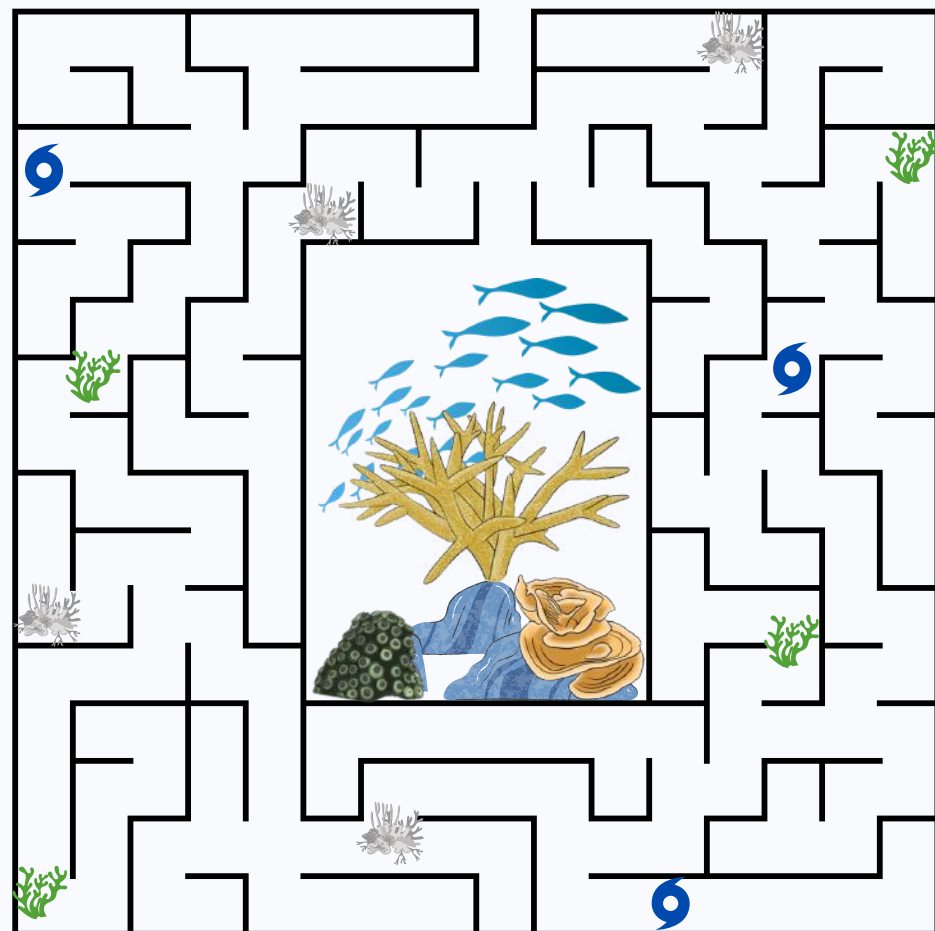
## What is a coral nursery?

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## CORAL RESTORATION MAZE

1. Follow the correct path through the maze to help a baby coral fragment travel from the nursery to the reef.
2. Along the way, you will encounter obstacles:
  -  hurricanes
  -  algae overgrowth
  -  coral disease

If you hit one, you must explain how scientists help corals overcome these challenges before continuing. Only explain the ones on the right path! 🌀:




## EPISODE 2 - CRYPTIC CREATURES OF THE REEF

The creatures in the ocean have many different adaptations to their environments. This includes the things they eat. Draw lines between the boxes below to match the type of feeding strategy to the definitions.

Herbivore

An animal that eats dead organic matter

## Detritivore

An animal that eats other animals

## Carnivore

An animal that eats plants



All these creatures have adaptations to make them camouflaged on the reef. Write the name of each animal below the picture of that animal in the top bubble. Then write the adaptations of that animal in the second bubble.

- A. Scorpionfish
- B. Sea slug
- C. Sea cucumber
- D. Octopus

1. Toxins and bright colours to prevent being eaten
2. Can change colour to match their environment
3. Move slowly along the sand with similar colours
4. Camouflaged to look like a rock, with deadly venom



