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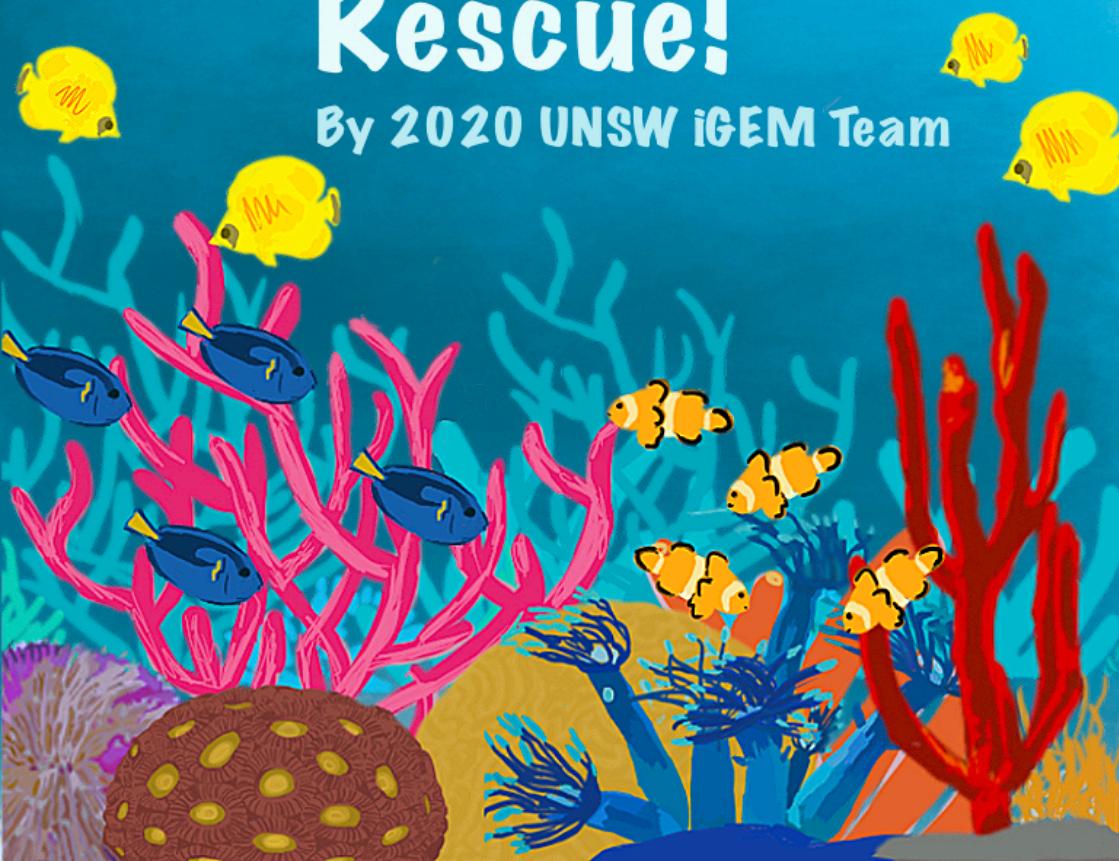


revive & restore  
genetic rescue for endangered and extinct species



# Captain Coral to the Rescue!

By 2020 UNSW iGEM Team



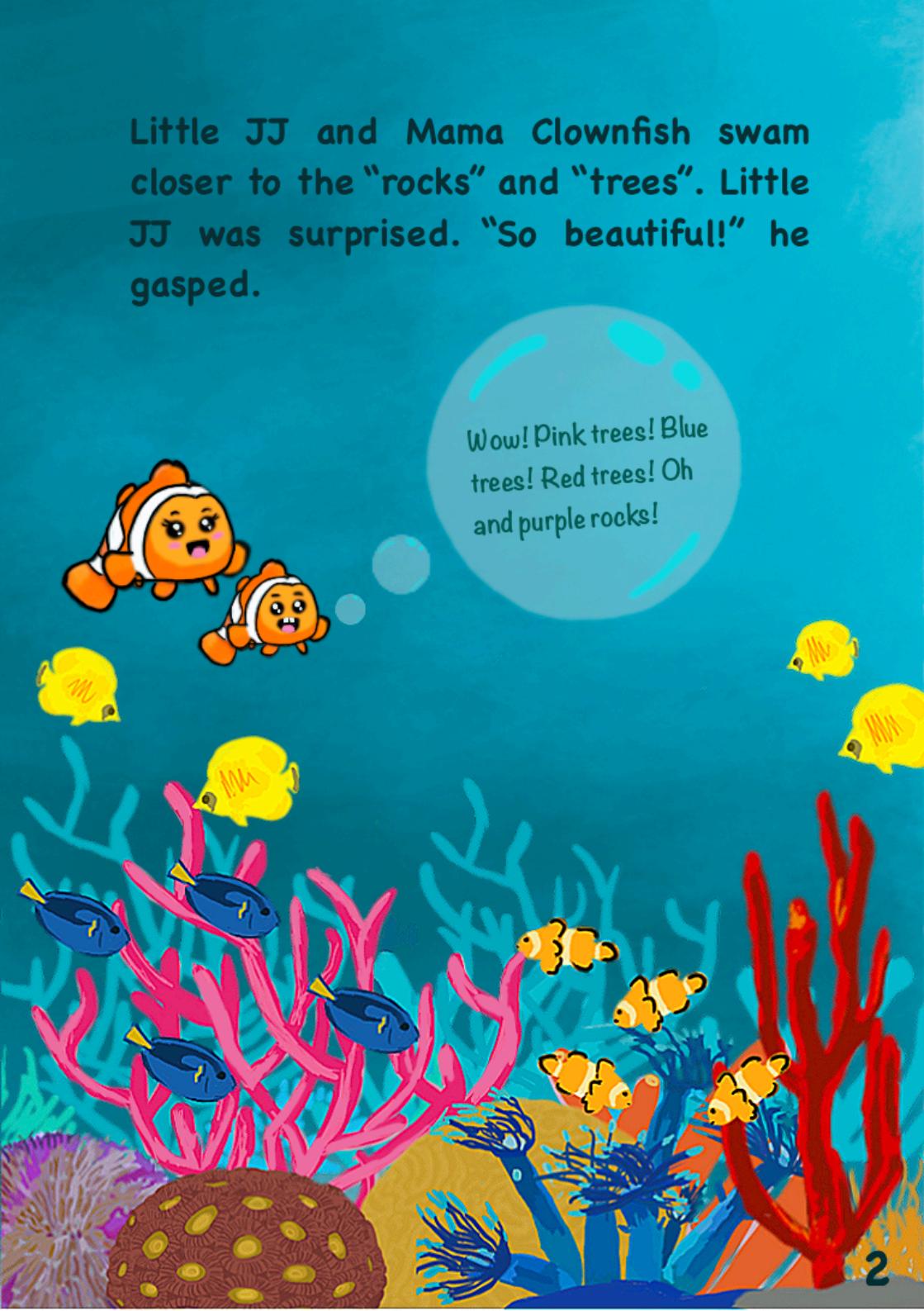


One summer evening, Little JJ and Mama Clownfish went to explore the great wide ocean. Little JJ was excited to be out swimming with his mother.

"Mummy, look over there!" Little JJ pointed.  
"There are so many colourful rocks and trees!"



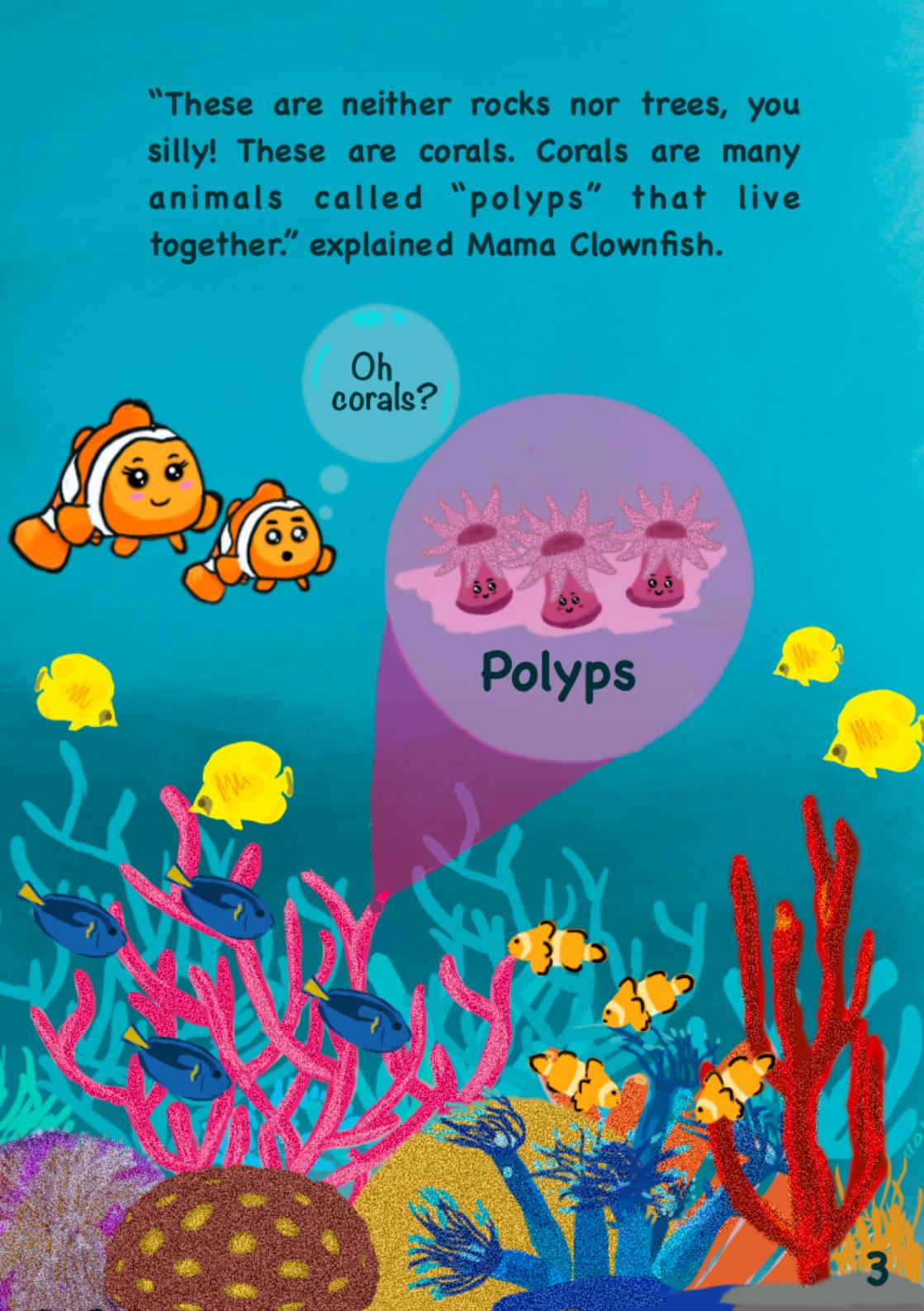
Little JJ and Mama Clownfish swam closer to the "rocks" and "trees". Little JJ was surprised. "So beautiful!" he gasped.



A vibrant underwater scene featuring several clownfish swimming near pink and red coral reefs. In the background, yellow tangs with black stripes are scattered across the blue water. A large, light blue speech bubble contains the text.

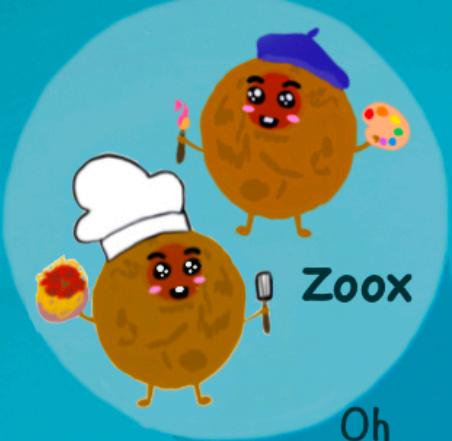
Wow! Pink trees! Blue  
trees! Red trees! Oh  
and purple rocks!

"These are neither rocks nor trees, you silly! These are corals. Corals are many animals called "polyps" that live together." explained Mama Clownfish.



Oh  
corals?

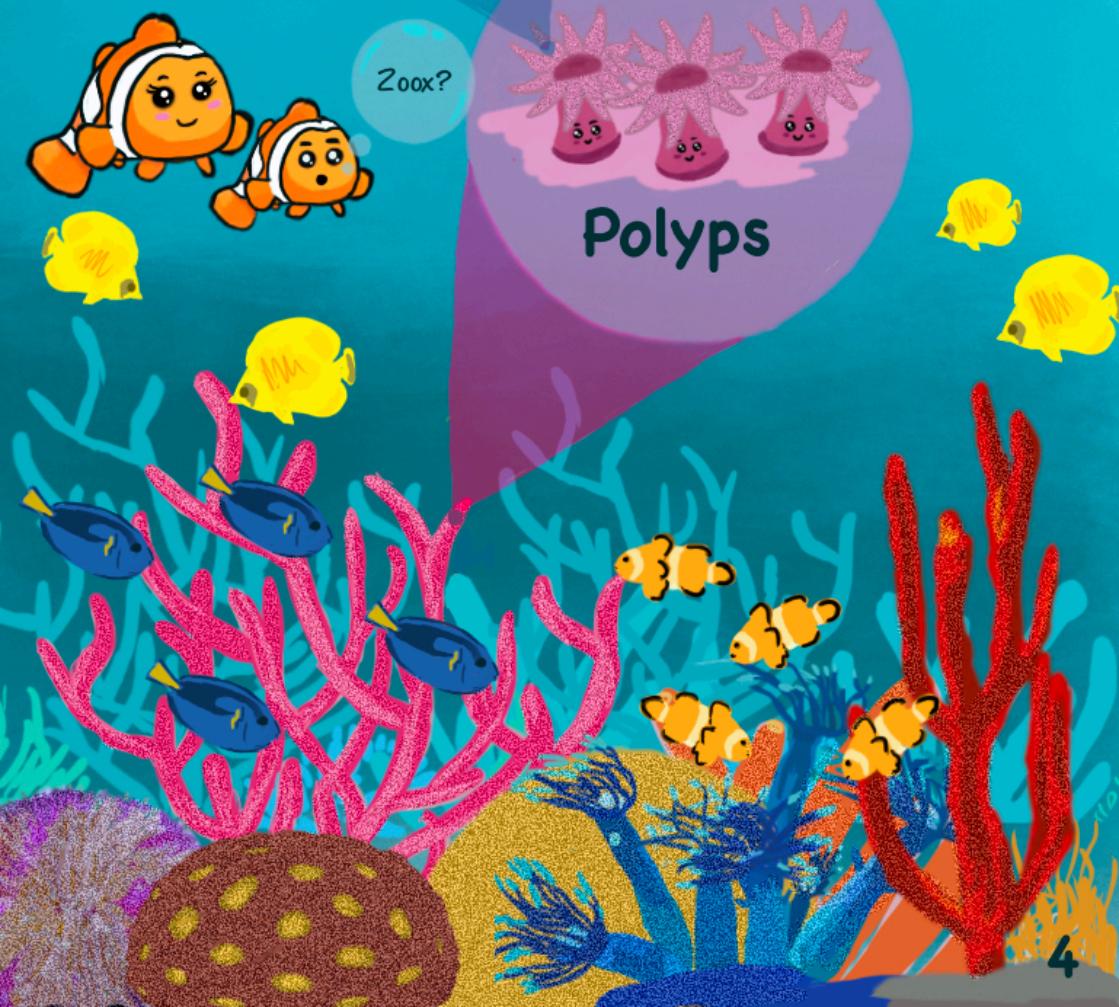
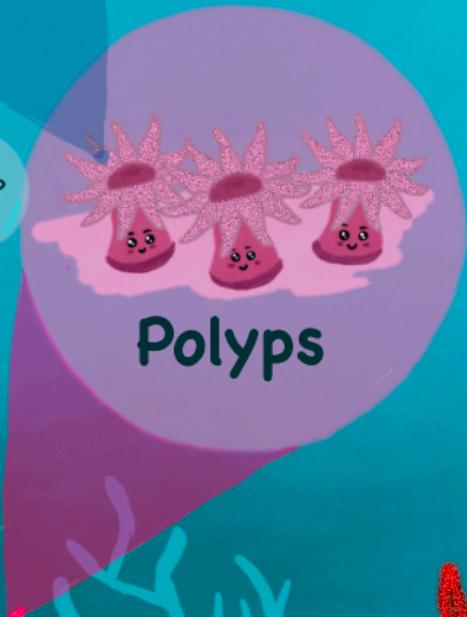
Polyps



"The polyps live together with the Zoox. The Zoox are their tiny friends. They bring the polyps food. They also give them their color," added Mama Clownfish.

Oh

Zoox?



## Polyps

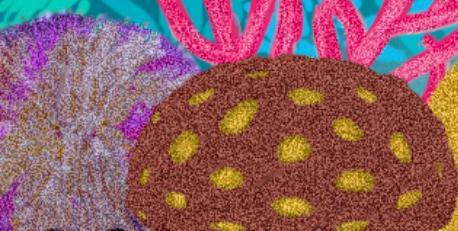
My new friends!



Little JJ swam closer to meet the polyps and the Zoox. Mama Clownfish followed him.



My new friends!



As Little JJ was swimming from one coral to another, he spotted a building. It was an ice cream shop!

Okay my Little JJ,  
you can get some  
because you have  
been a good boy!



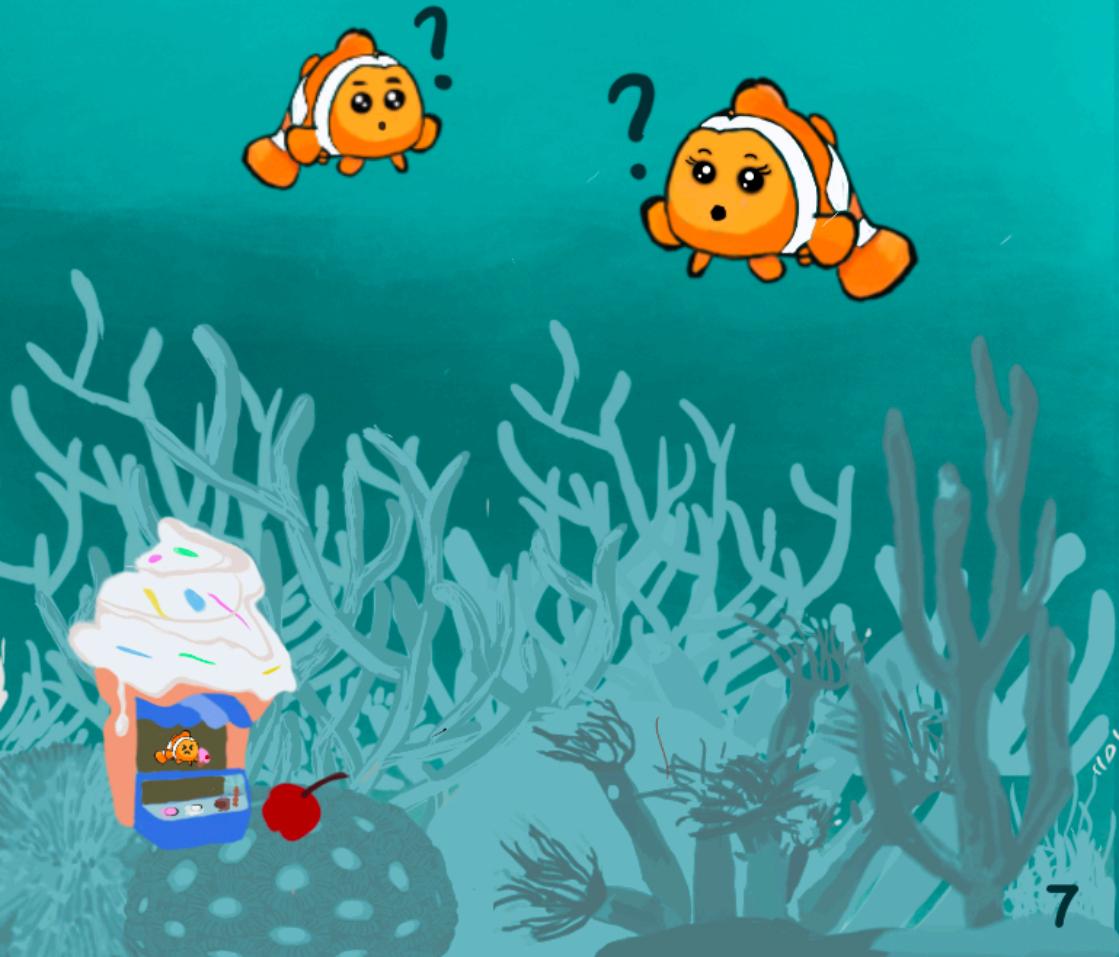
Yummy! Can I get  
some, mummy?



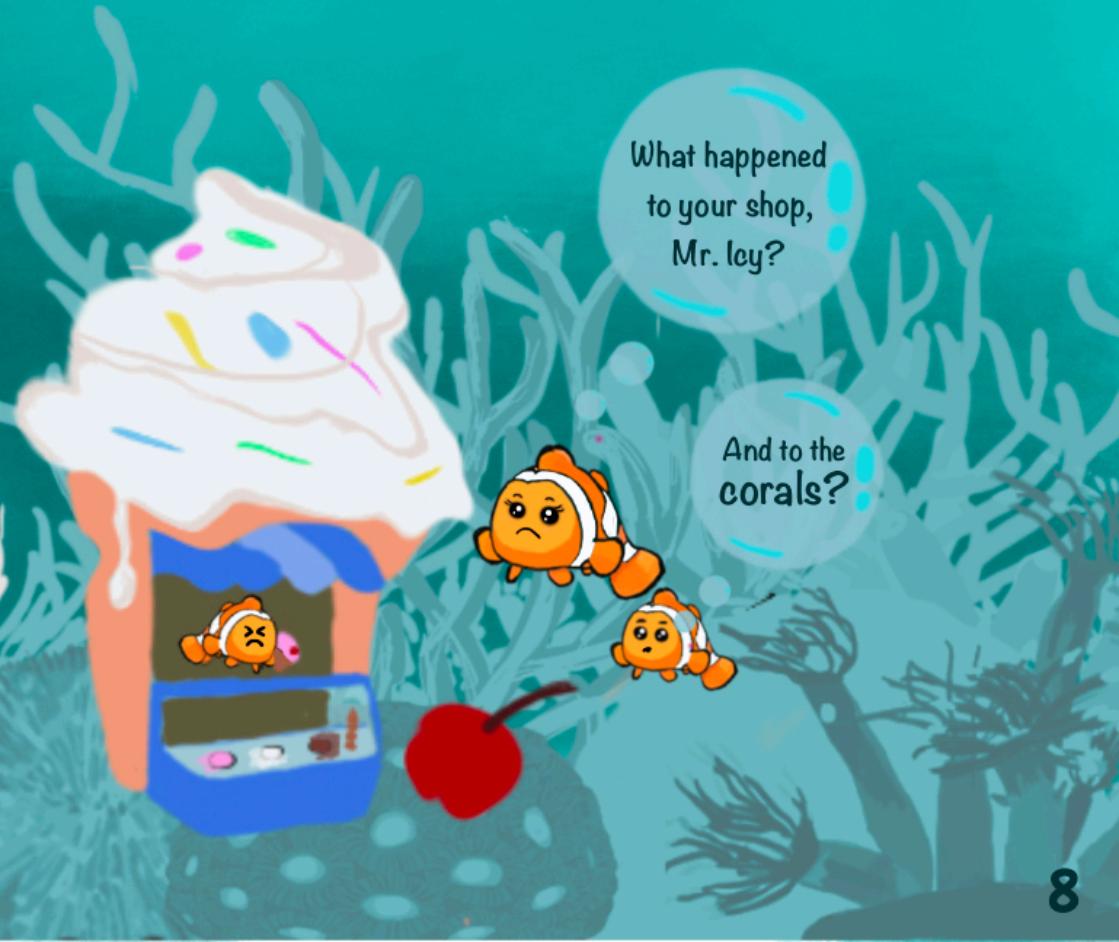
After a big scoop of ice cream, Mama Clownfish and Little JJ returned home. Little JJ could not wait to come back again.



Little JJ and Mama Clownfish returned after a few nights. They were shocked. All the corals have lost their colour. "Oh no! What happened?" Little JJ exclaimed.



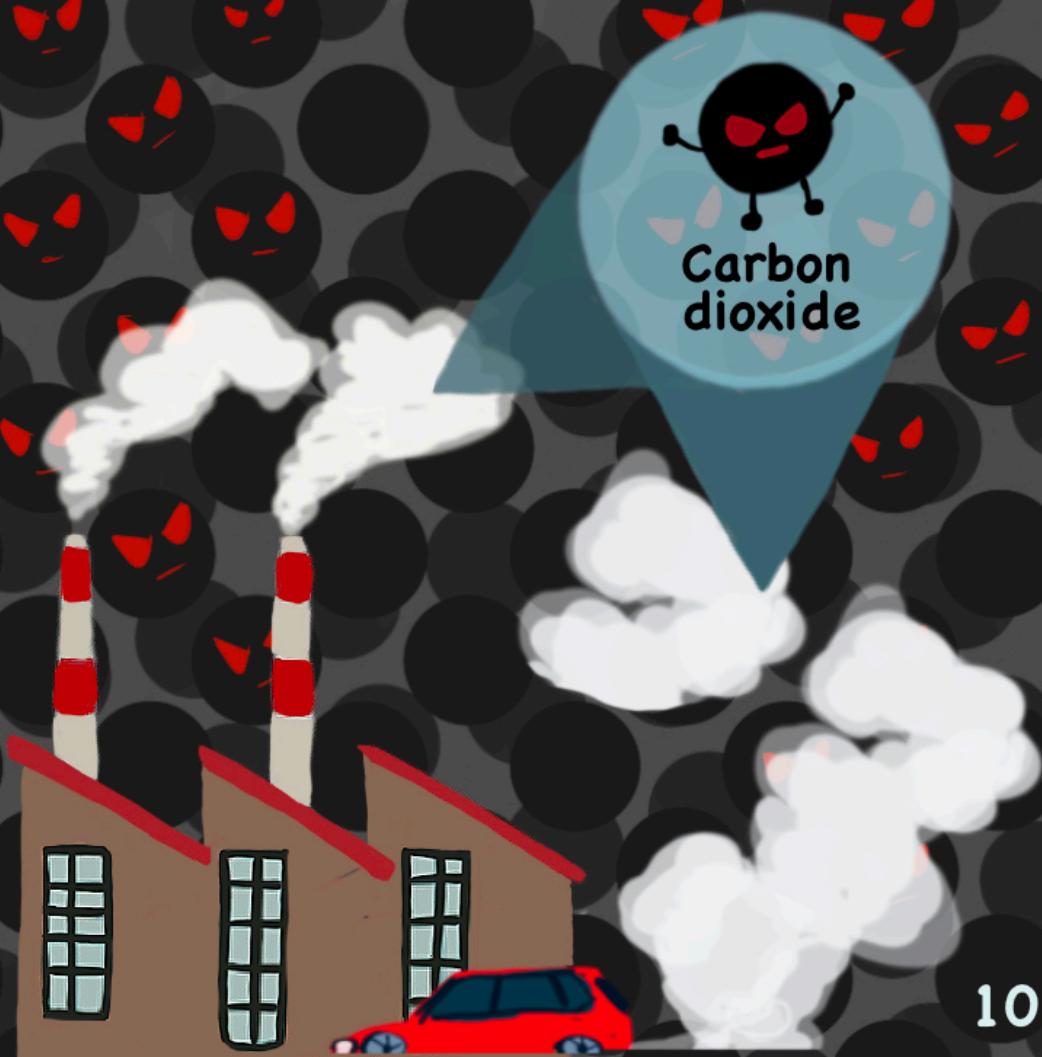
"The ice cream is melting and the Zoox are leaving their coral friends. This is because the ocean is getting too hot. The Zoox do not like the heat," explained Mr. Icy sadly.



The ocean is getting too hot because of global warming. Global warming is when the Earth gets hotter and hotter.



Humans use too many vehicles and have many factories. These activities release too much gas called "carbon dioxide".



Trees help to decrease carbon dioxide. But humans cut down many trees.



I am next!  
No!

But why? We  
help you!

- Carbon dioxide covers Earth.



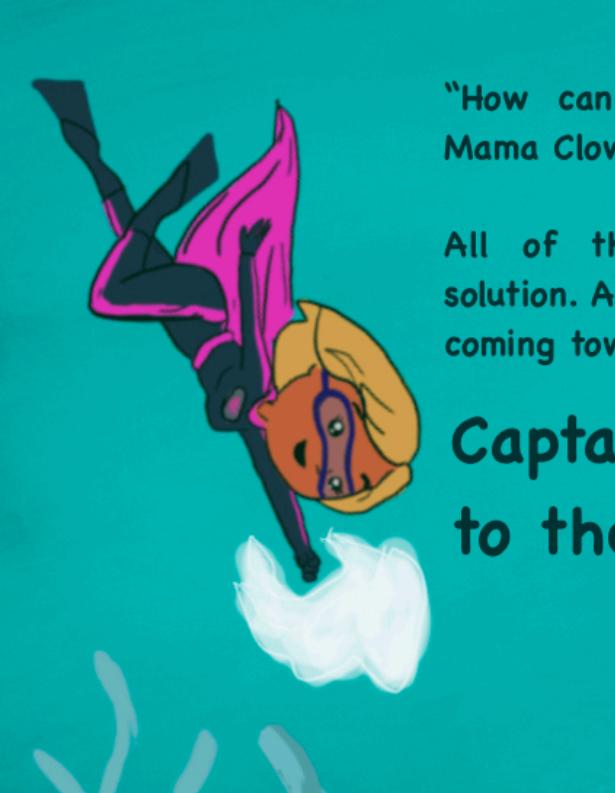
As more carbon dioxide is released, more carbon dioxide covers Earth.



The carbon dioxide that covers Earth traps heat from the sun.



This causes the Earth to become hotter.



"How can we fix this?" wondered Mama Clownfish.

All of them were thinking of a solution. A very loud noise was heard coming towards them.

## Captain Coral comes to the rescue!



"I know what we can do to stop the melting and bring the Zoox back! This is all up to the humans!" said Captain Coral.





Go GREEN!!



Reuse bags



Reduce energy



Plant !



"The ice cream will stop melting and our dear little Zoox will be back! Peace will be restored!" exclaimed Captain Coral.

A colorful illustration set in an underwater environment. On the left, a large vanilla soft-serve ice cream cone with a cherry on top sits next to a small blue shop window where a small orange fish is looking out. To the right, a superhero girl with blonde hair and purple goggles stands on a yellow sandy area. She wears a pink superhero suit with a cape and has a determined expression. Behind her are several cartoonish orange and white clownfish swimming near pink coral branches. A speech bubble above her contains the text "Go Captain Coral!".

Go Captain  
Coral!

# Now, it is your turn...



## 5 day - save Earth and corals challenge

- Day 1 : Use reusable water bottle
- Day 2 : Use public transport or walk to school
- Day 3 : Use a recycling bin
- Day 4 : Plant / water your plants
- Day 5 : Learn new facts about corals

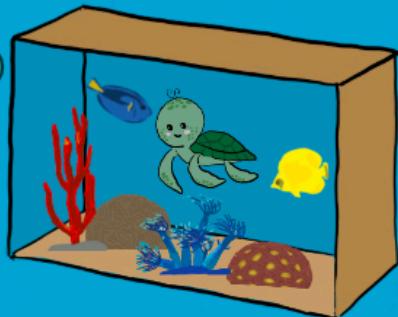


# GO GREEN!

# Make your own coral reef

Materials needed:

- Shoebox
- Recycled cardboard (used cereal box, etc.)
- Colouring material (paint, crayons,etc.)
- Scissors
- Glue or tape



Instructions:

1. Take a open shoebox and paint the inside of it blue.
2. Draw corals, sea animals, rocks and plants on recyclable material. Cut and colour it.
3. Position and glue or tape the cutouts in the painted shoebox.
4. Enjoy!

## Try making this too!

Additional materials needed:

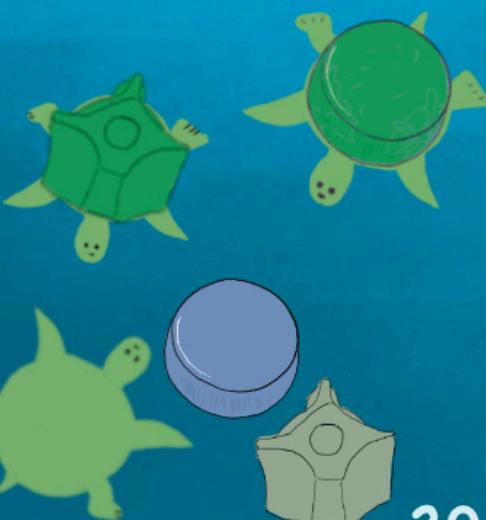
- Bottle cap or egg carton

Instruction:

1. Cut turtle's body shape.

Paint and decorate.

2. Paint then paste bottle cap or egg carton on top as its shell.



# Fun Facts



1. Many corals make up a coral reef.
2. Coral reefs are home to fishes and other sea animals such as turtles.
3. The biggest coral reef is the Great Barrier Reef in Australia.
4. There are many types of corals.



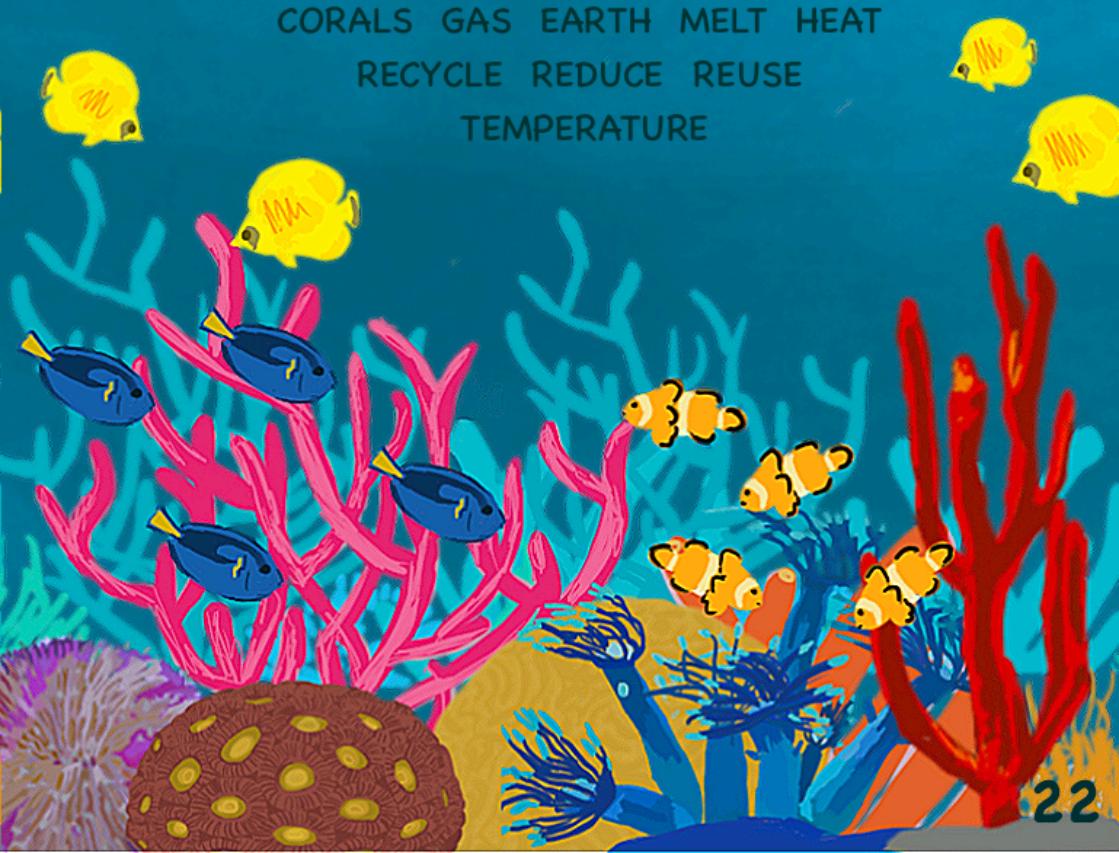
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CORALS GAS EARTH MELT HEAT

RECYCLE REDUCE REUSE

TEMPERATURE



The ice cream is melting...  
The corals are turning white...  
Little JJ wants to solve these  
problems and Captain Coral might  
just know how.

