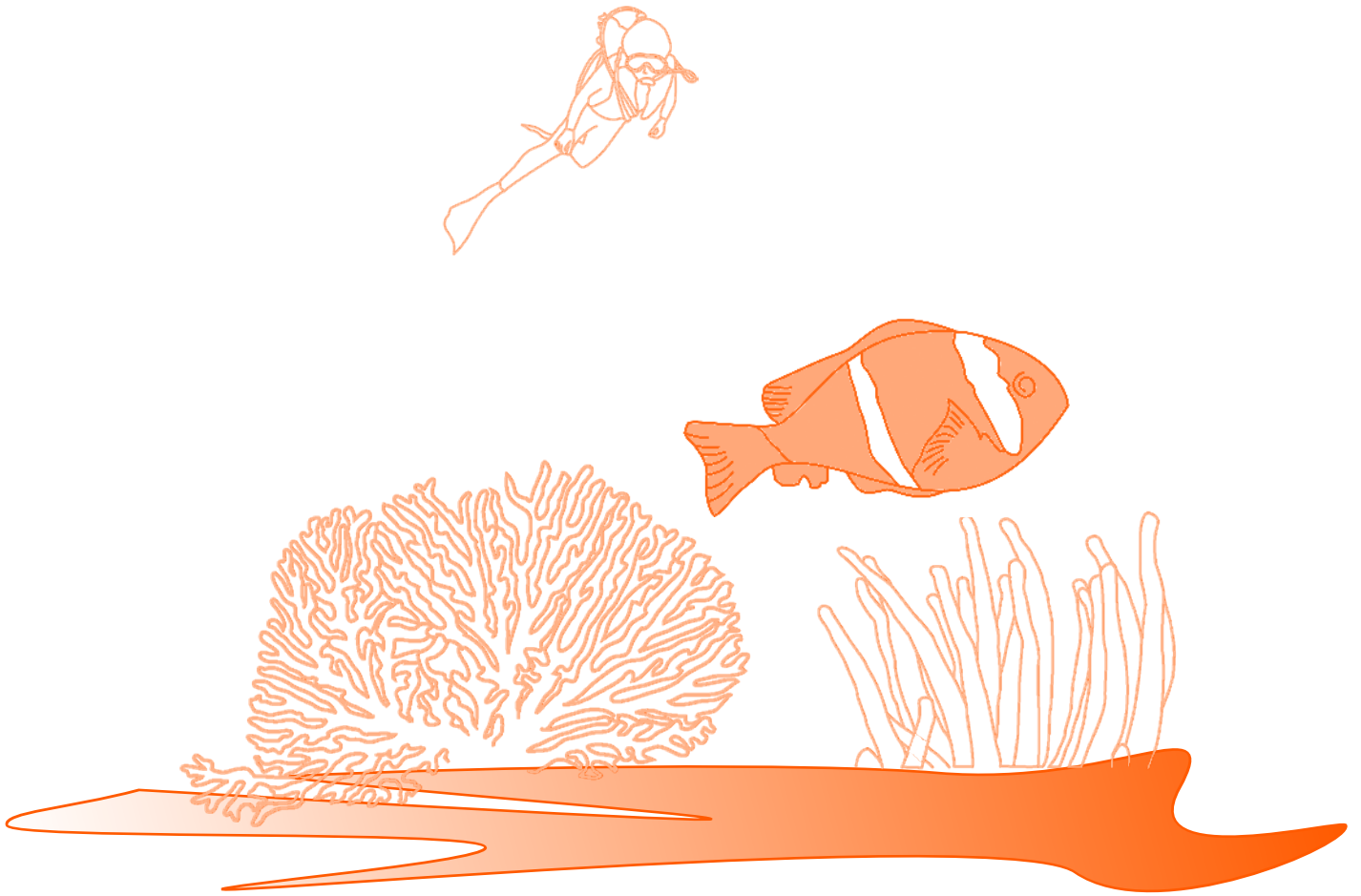


# Coral Reef Activity Book

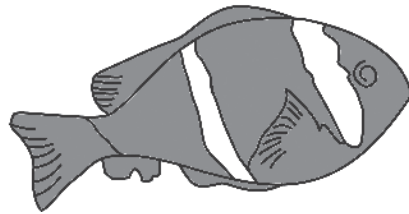


# Coral Reefs...

## ...for health, for wealth, for life

Did you know...

Coral reefs can be found in all tropical areas of the world. Corals can also be found in deep cold oceans.



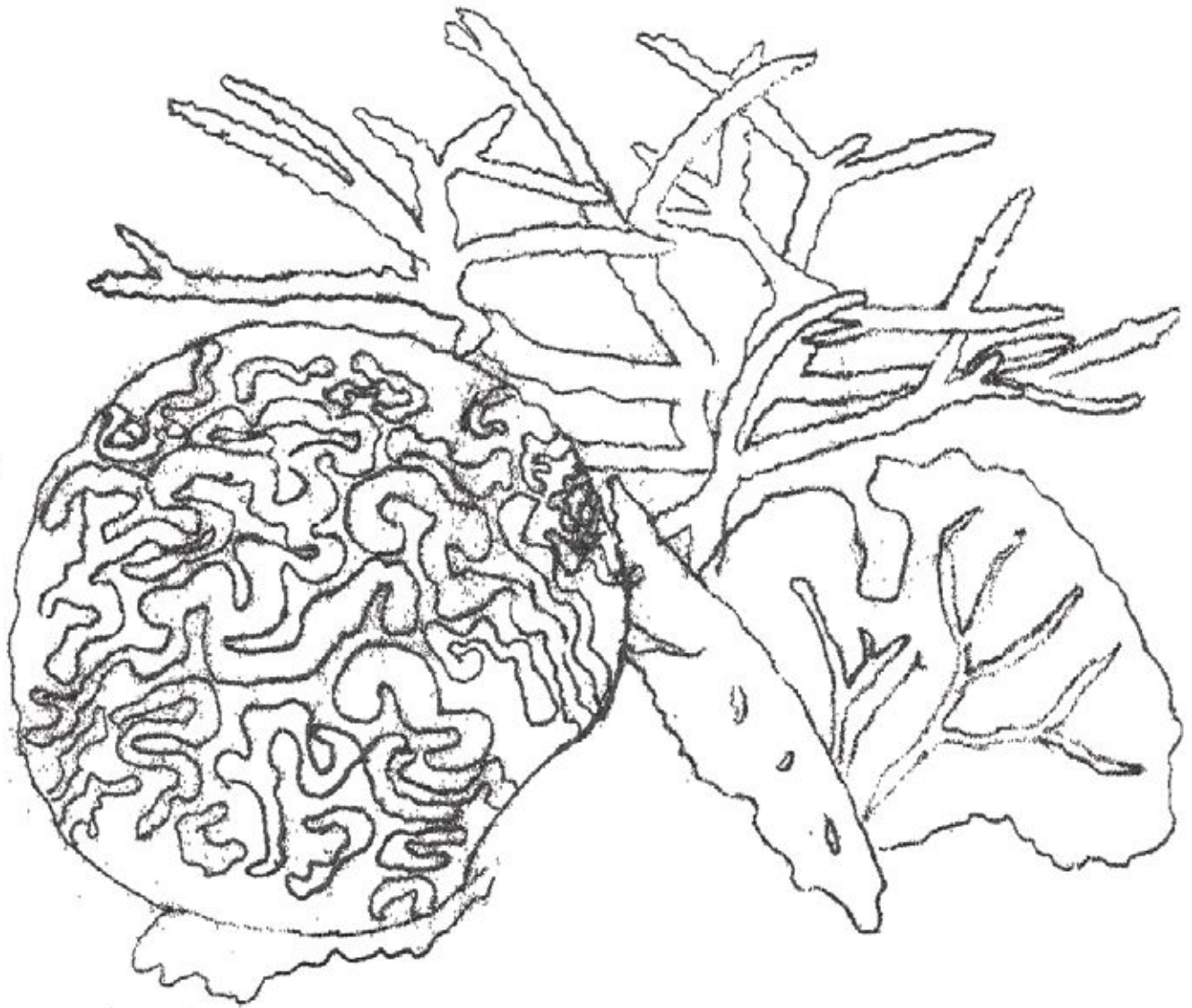
Most corals grow very, very slowly... it can take hundreds to thousands of years for a reef to form.

Coral reefs can be large or small. The Great Barrier Reef in Australia is over 1,200 miles long.

Coral reefs are some of the oldest ecosystems on the planet.



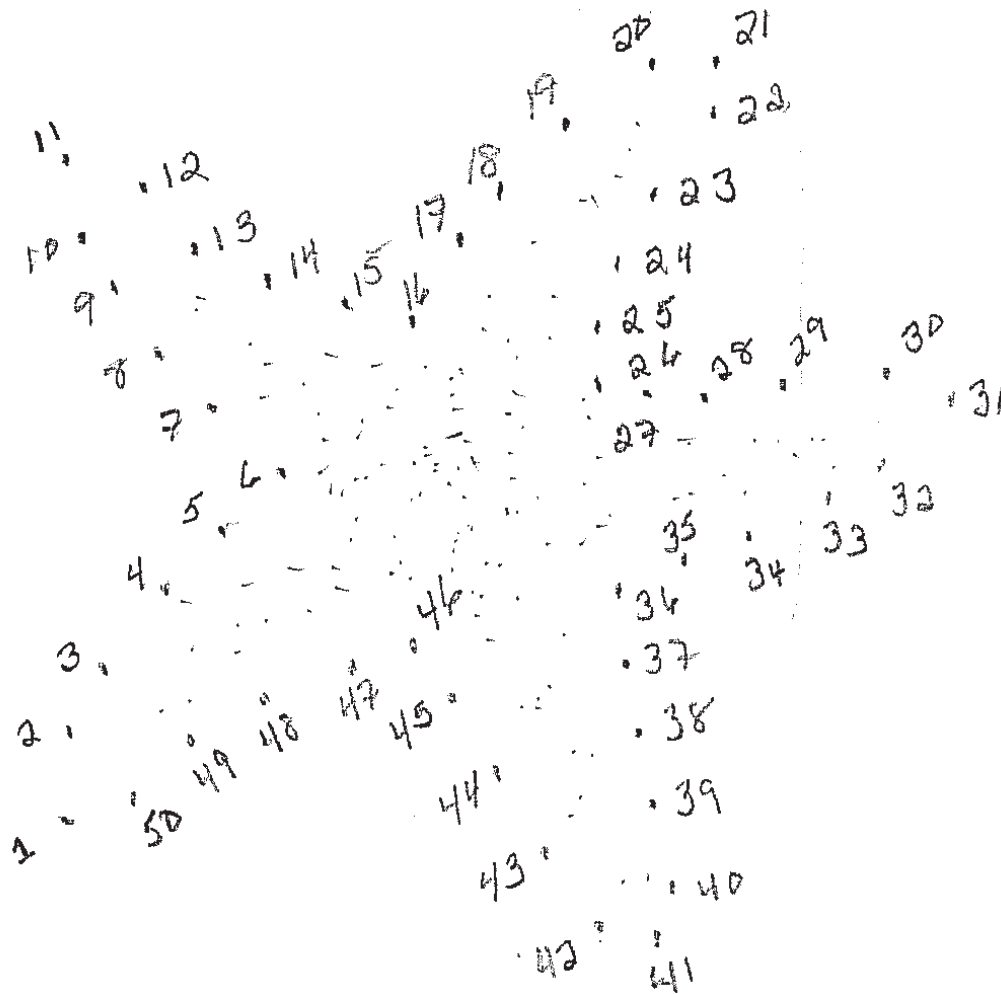
## Color Me!



There are thousands of species of coral, some named for their colors, others named for their shapes. In this picture are a brain coral, a staghorn coral, and a seafan. Can you guess which one is which?



# Connect the dots



Sea Stars have a strange way of eating. When they find something tasty, they can push their stomachs outside of their body and digest their food right there! Once they're finished, they pull their stomach back inside... until the next meal.



# Color Me!



Coral animals (polyps) are often protected by hard skeletons that form many different shapes. Large areas of coral are called coral reefs, and these occur in warm shallow seas.



# Word Search

Can you find these coral words?

S	A	E	Z	O	O	P	L	A	N	K	T	O	N	R
T	O	C	O	R	A	L	R	E	E	F	E	O	R	O
O	K	P	O	L	Y	P	R	D	E	A	T	S	A	A
N	O	L	X	O	T	L	C	G	A	M	L	N	R	O
Y	S	P	A	W	N	I	N	G	N	S	L	T	T	M
S	M	T	N	E	M	A	T	O	C	Y	S	T	N	N
P	H	O	T	O	S	Y	N	T	H	E	S	I	S	E
A	A	T	H	O	R	S	E	L	K	H	O	R	N	B
W	T	A	E	N	E	E	I	S	S	A	F	N	A	A
N	O	B	L	E	A	C	H	I	N	G	T	L	B	R
I	L	L	L	N	T	E	N	E	Z	R	C	G	R	R
N	L	E	A	N	E	M	O	N	E	S	O	P	A	I
G	E	T	E	M	P	E	R	A	T	U	R	E	I	E
D	I	V	E	R	S	E	A	N	I	M	A	L	N	R
D	I	V	E	R	S	E	A	F	A	N	L	R	A	L

Words are found down and across:

Zooxanthellae

Coral reef

Anemone

Zooplankton

Polyp

Photosynthesis

Animal

Stony

Nematocyst

Elkhorn

Table

Spawning

Diverse

Bleaching

Temperature

Brain

Soft coral

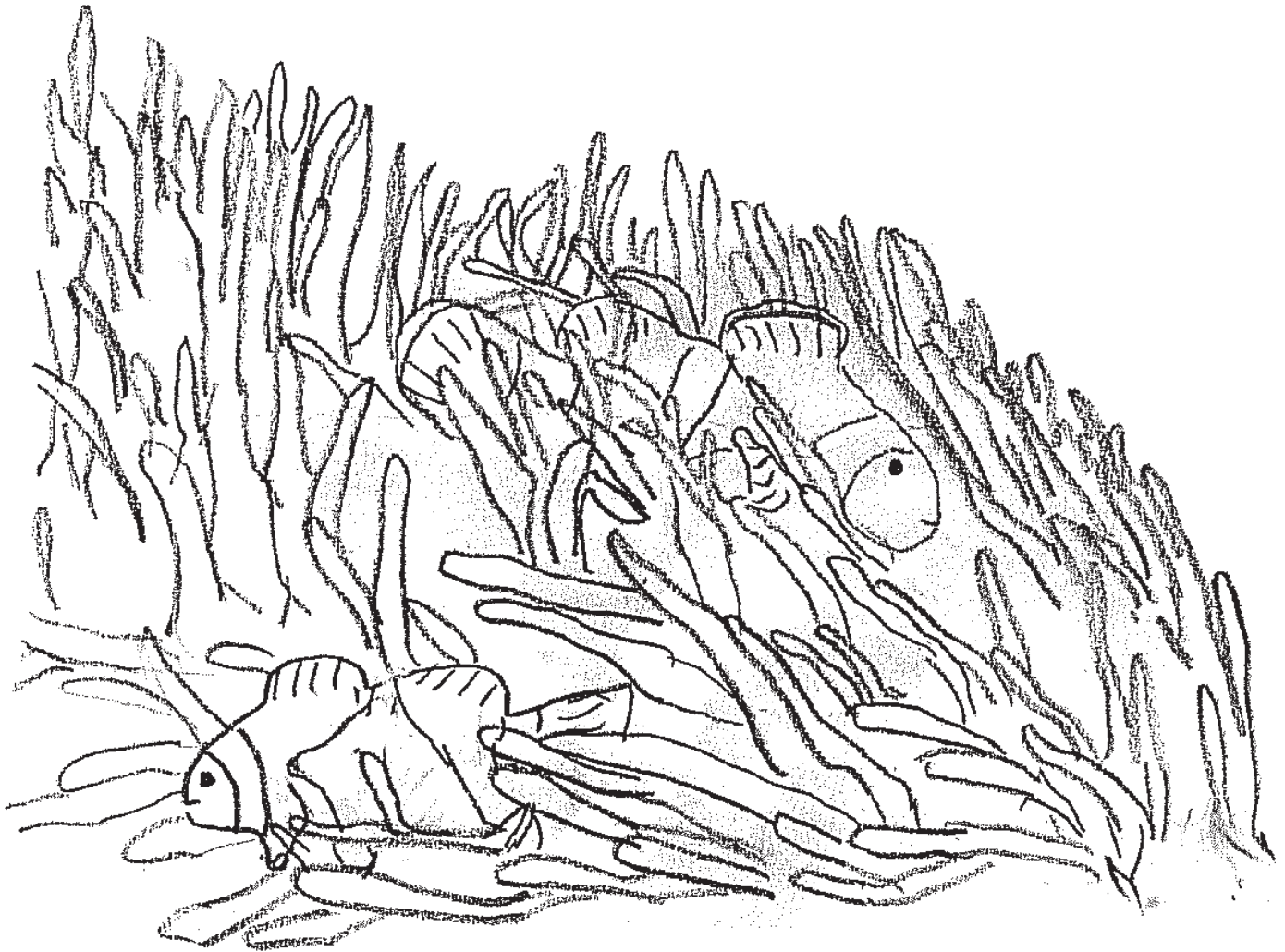
Sea fan

Atoll

Barrier



## Color Me!

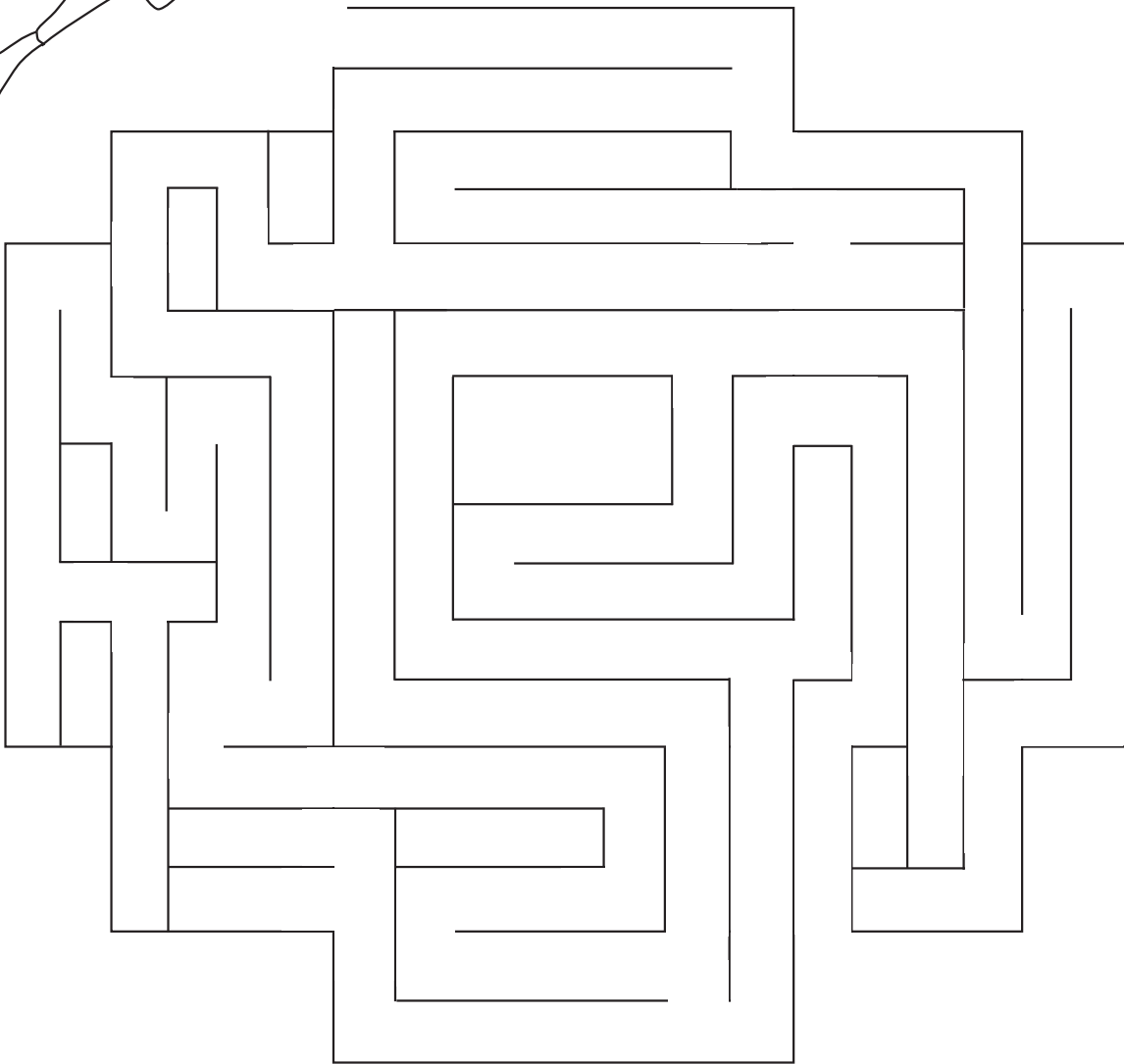
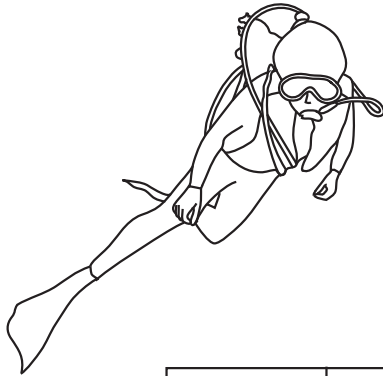


Several species of fish spend part or all of their lives in association with sea anemones. The clownfish does not stray far from its anemone. This lets the fish avoid being eaten by other fish by hiding in the anemone's stinging tentacles. Clownfish have a special mucus coating that protects them from the anemone's stinging cells.

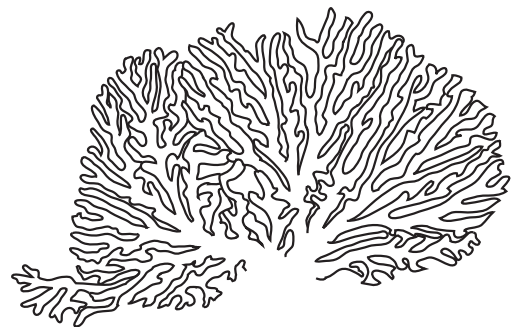


# Maze

Can you help the scuba diver find the sea fan?

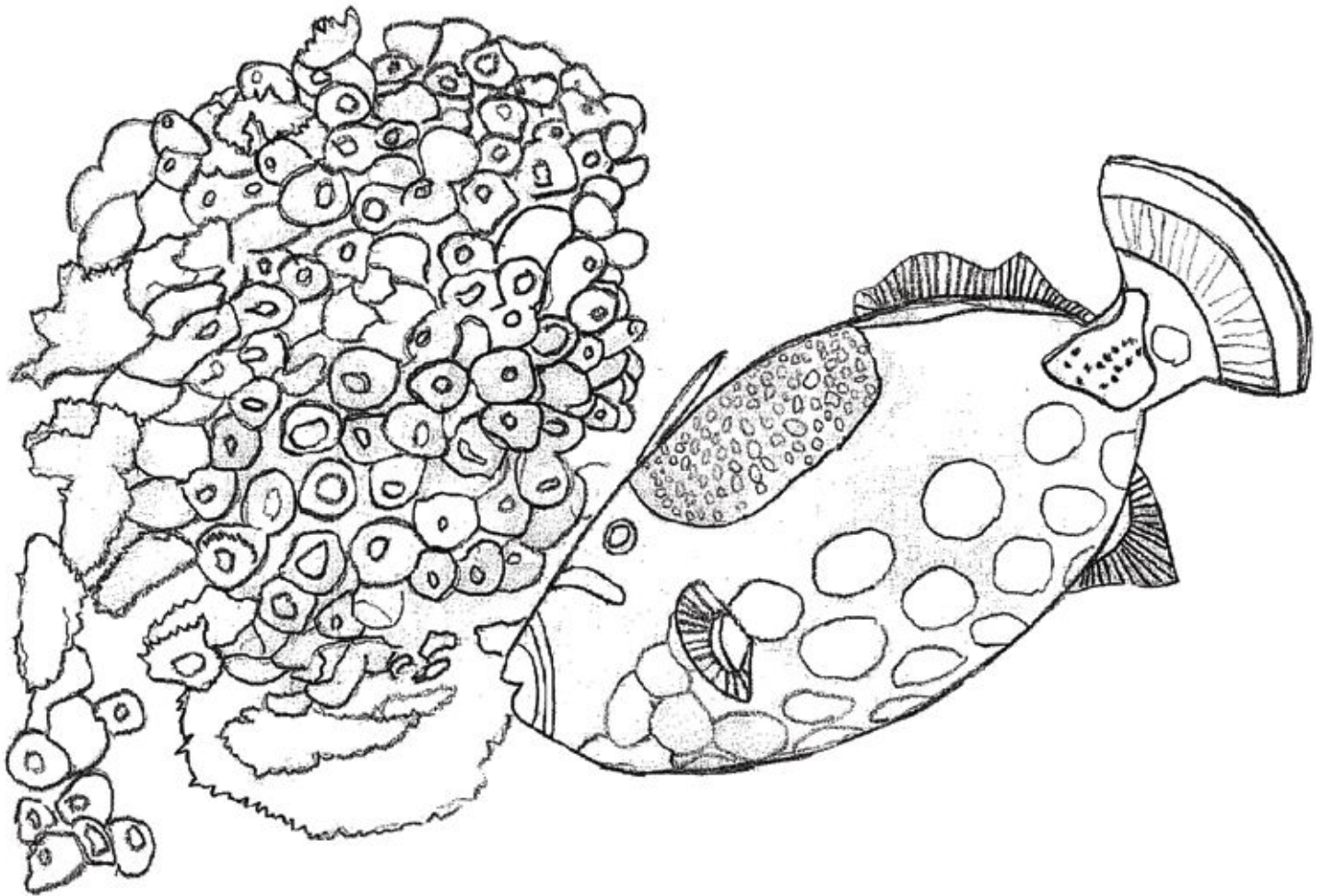


When diving  
or snorkeling take only  
pictures, leave only bubbles.  
Do not touch marine life.





## Color Me!

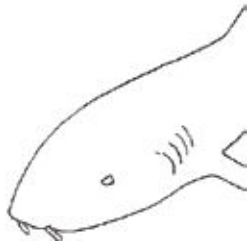


Many reef fish are very colorful, like this clown triggerfish. Spots and stripes break up the body shape and make it hard for their enemies to find them. This is called disruptive coloration. Other reef fishes have “false eye spots” that help them confuse predators.

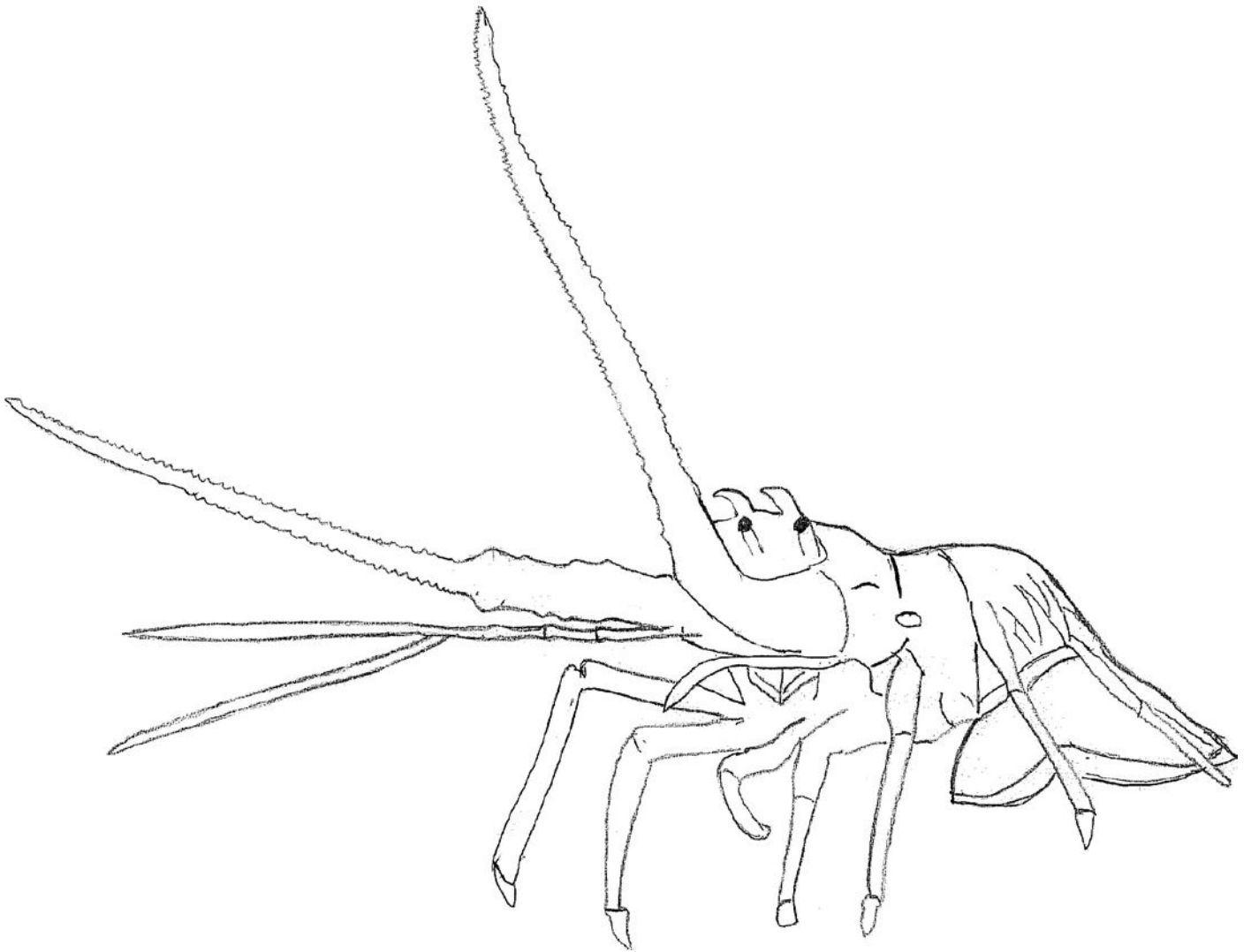


# Match the animals!

Draw a line from half an animal on the left to the other half on the right. See what Sea Horses, Sharks, Tangs, and Eagle Rays look like.



# Color Me!

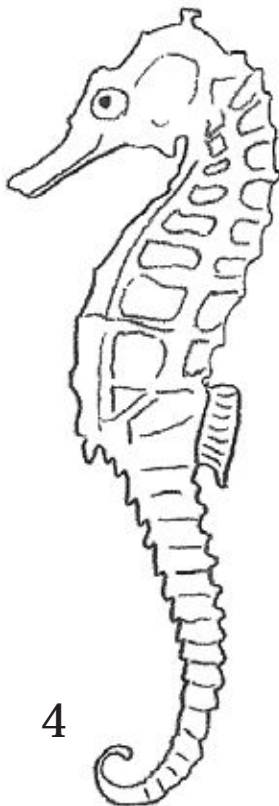


The Spiny lobster found in the Caribbean is different from the Maine Lobster that most people eat in restaurants. The Spiny lobster does not have claws, but uses sharp spines for protection.

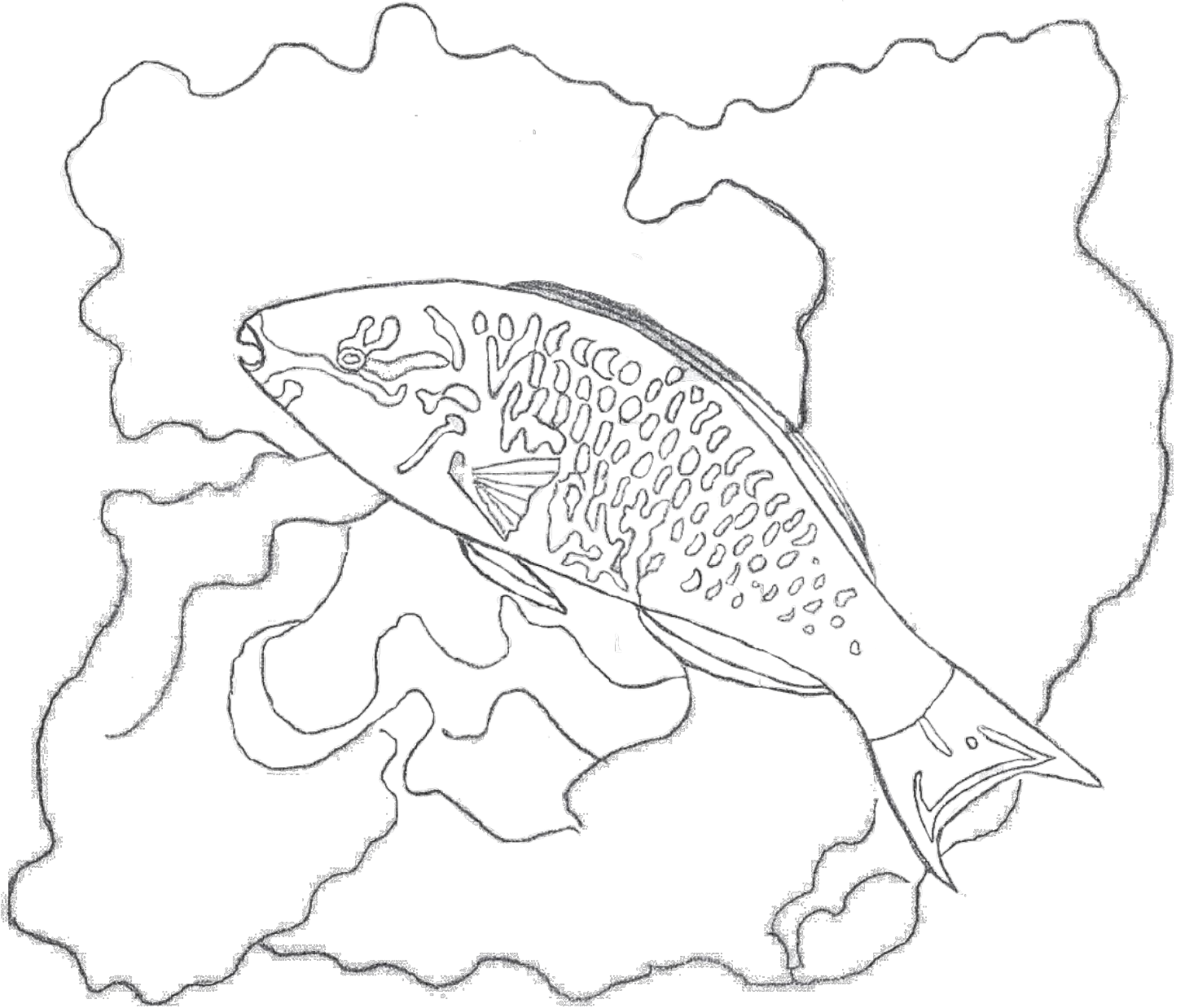


# Match the Sea horses

Which two are the same?



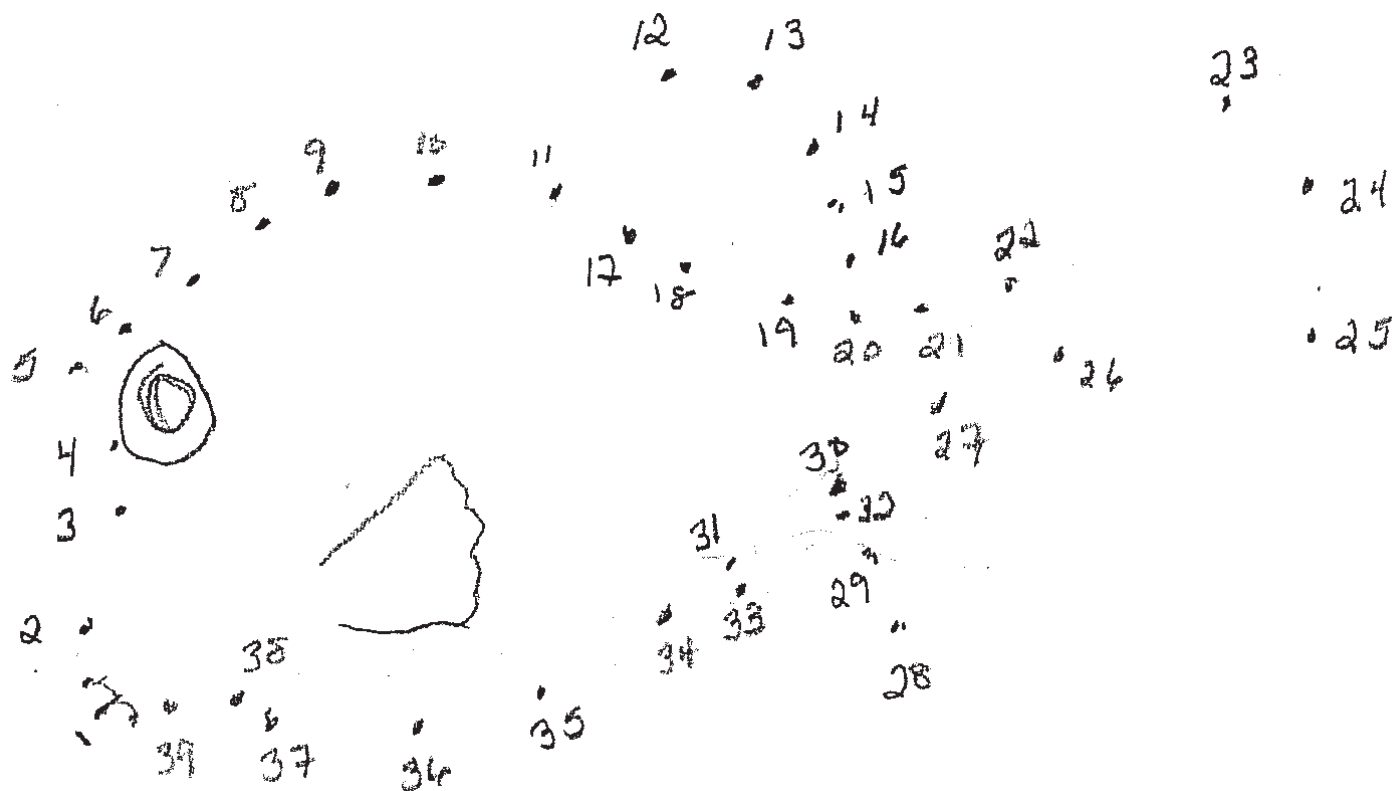
## Color Me!



Parrotfish are named for their bright colors and strong beak-like jaws, used to bite off chunks of coral. They like to eat the plants (algae) that grow on corals. Parrotfish have a special grinding plate in their throat which they use to grind up the coral's hard skeleton. When they are finished, all that is left is fine sand.



# Connect the dots



Boxfish are covered with a bad-tasting slime, which protects them from being eaten.



# Color Me!

Coral reefs are in danger of disease and possible disappearance due in part to human activities.



A reef is like a busy city. More creatures live on coral reefs than in any other habitat in the ocean. Each animal and plant on or around the reef has a job to keep the ecosystem healthy. How many different animals can you count on this reef?



## Word Search #2

Can you find these coral reef words?

C	L	Y	H	L	R	B	F	N	L	P	M	F	W	I
R	E	E	F	S	H	A	R	K	P	N	P	O	O	B
A	H	L	D	H	G	R	G	H	D	W	G	O	R	D
B	I	L	H	M	O	R	A	Y	E	E	L	D	M	P
S	P	O	N	G	E	A	N	G	E	L	F	I	S	H
N	R	W	R	R	R	C	A	R	P	S	L	V	U	R
I	R	T	F	O	W	U	A	E	C	E	L	E	D	F
N	O	A	Y	T	A	D	T	L	O	A	H	R	S	A
L	Y	N	T	R	E	A	O	D	R	U	M	S	A	F
Y	W	G	L	O	B	A	L	W	A	R	M	I	N	G
G	R	O	U	P	E	R	L	E	L	C	A	T	Y	E
B	A	R	R	I	E	R	Y	R	S	H	S	Y	M	N
Y	S	W	E	C	F	R	I	N	G	I	N	G	A	A
A	S	W	R	A	M	W	A	O	I	N	Y	E	Y	B
J	E	W	E	L	R	Y	A	F	L	R	I	M	O	A

Words are found down and across.

Food

Diversity

Fringing

Barrier

Atoll

Global warming

Moray eel

Reef shark

Crabs

Corals

Yellow tang

Tropical

Angelfish

Deep coral

Sea urchin

Worms

Wrasse

Sponge

Barracuda

Grouper

Drum













Jewelry

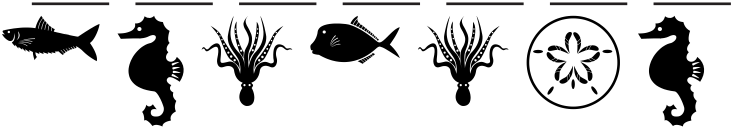
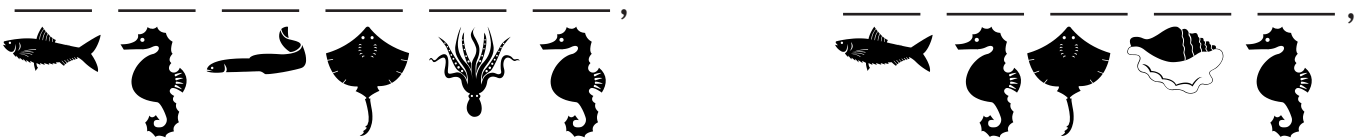
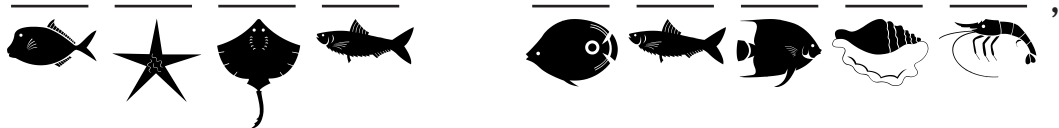
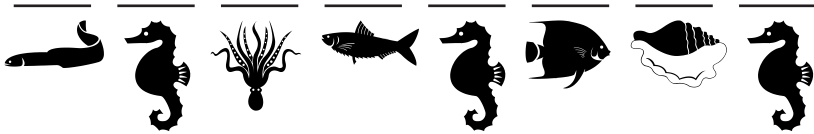




# Secret Code

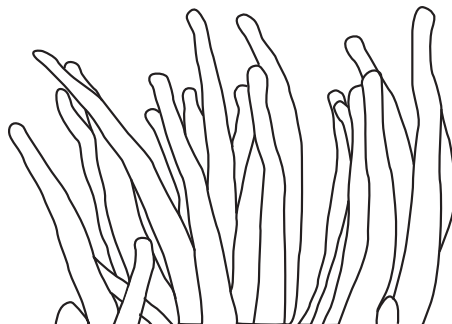
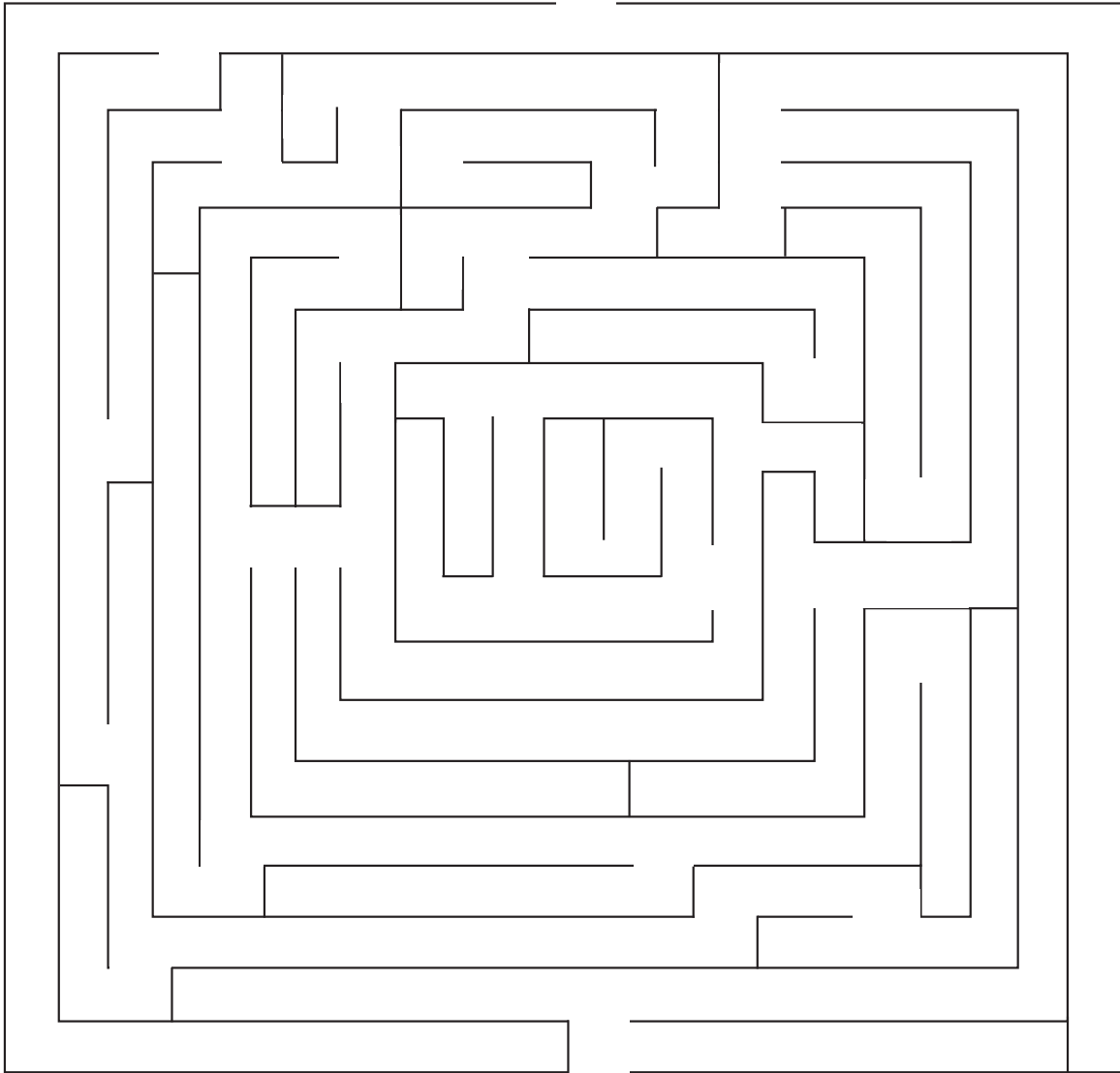
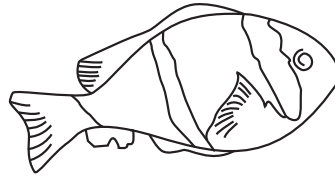
Even if you live far from the ocean, your actions impact coral reefs around the world. Find out how you can make a difference by decoding the secret message below.

- |     |   |     |   |
|-----|---|-----|---|
| A = |  | O = |  |
| C = |  | R = |  |
| D = |  | S = |  |
| E = |  | T = |  |
| H = |  | U = |  |
| L = |  | Y = |  |

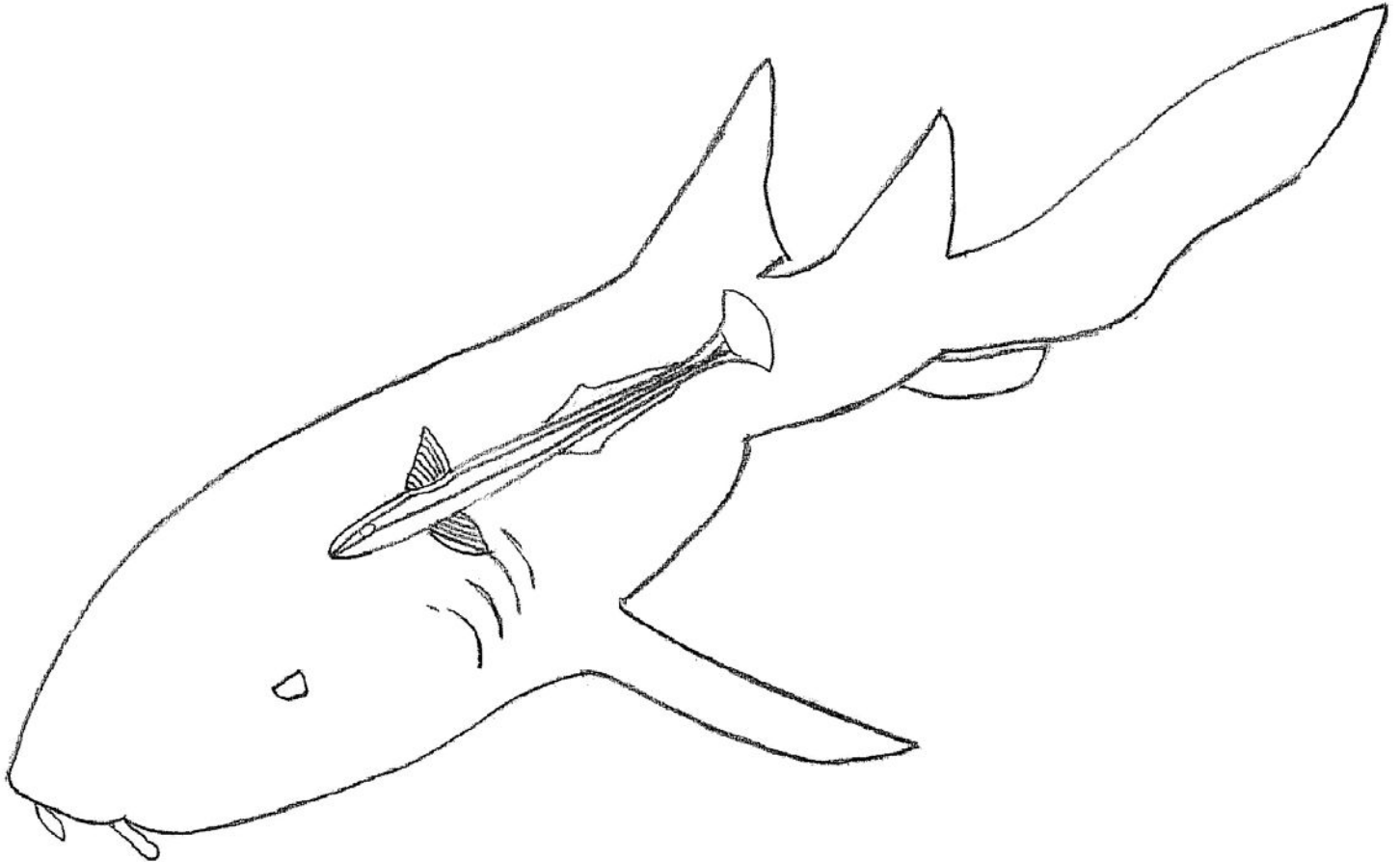


# Maze

Can you help the clownfish find his anemone?



# Color Me!



Nurse sharks, unlike most pelagic (open ocean) sharks, do not continuously move to stay alive. They are commonly found sitting on the ocean floor in and around coral reefs. They are active at night, and use the long barbels next to their mouths to sense and touch potential prey. The remora is a fish commonly found swimming alongside or attached to large fish or sharks, eating scraps of food missed by their host.



# Hidden animals

Can you find the ten animals in this picture?



# Mad Lib

- |                                |                                     |                        |
|--------------------------------|-------------------------------------|------------------------|
| 1. _____<br>Day of the Week    | 10. _____<br>Color                  | 19. _____<br>Animal    |
| 2. _____<br>Town               | 11. _____<br>Object                 | 20. _____<br>Size      |
| 3. _____<br>First name         | 12. _____<br>Action                 | 21. _____<br>Action    |
| 4. _____<br>Animal             | 13. _____<br>Place                  | 22. _____<br>Color     |
| 5. _____<br>Ocean name         | 14. _____<br>Size                   | 23. _____<br>Your name |
| 6. _____<br>Friends first name | 15. _____<br>Color                  | 24. _____<br>Machine   |
| 7. _____<br>Color              | 16. _____<br>Ocean animals (plural) | 25. _____<br>Action    |
| 8. _____<br>Ocean animal       | 17. _____<br>Color                  |                        |
| 9. _____<br>Celebrity's name   | 18. _____<br>Shape                  |                        |

On \_\_\_\_\_<sup>(1)</sup>, I went to the Aquarium in \_\_\_\_\_<sup>(2)</sup> with \_\_\_\_\_<sup>(3)</sup> and last night I had the strangest dream. I dreamt I was a \_\_\_\_\_<sup>(4)</sup> in the \_\_\_\_\_<sup>(5)</sup>. My friend \_\_\_\_\_<sup>(6)</sup> was a \_\_\_\_\_<sup>(7)</sup> (color) \_\_\_\_\_<sup>(8)</sup>! We ran into \_\_\_\_\_<sup>(9)</sup>, the starfish who asked if we wanted to take a ride in a \_\_\_\_\_<sup>(10)</sup> submarine to see a \_\_\_\_\_<sup>(11)</sup>. We \_\_\_\_\_<sup>(12)</sup> to the sub and in no time we were at a part of the ocean we had never seen...a coral reef! It looked like a \_\_\_\_\_<sup>(13)</sup> city, but underwater with \_\_\_\_\_<sup>(14)</sup> \_\_\_\_\_<sup>(15)</sup> \_\_\_\_\_<sup>(16)</sup>. We saw a \_\_\_\_\_<sup>(17)</sup> \_\_\_\_\_<sup>(18)</sup> \_\_\_\_\_<sup>(19)</sup>, sea turtles, and a really \_\_\_\_\_<sup>(20)</sup> shark \_\_\_\_\_<sup>(21)</sup>. I couldn't believe my eyes! I was going to take a piece of \_\_\_\_\_<sup>(22)</sup> coral back home to prove I'd been there, but \_\_\_\_\_<sup>(9)</sup> said "Stop \_\_\_\_\_<sup>(23)</sup>! It is very important that when you visit the ocean you take only pictures and leave only bubbles. You can harm the reef by touching it or leaving trash. When you get home, tell all your friends how nice it is here and that we can help protect the ocean together." Suddenly, my \_\_\_\_\_<sup>(24)</sup> sounded and I \_\_\_\_\_<sup>(25)</sup>, but I remembered \_\_\_\_\_<sup>(9)</sup>'s words and couldn't wait to start helping protect coral reefs and the ocean.



# Marine Debris

Draw a line from the type of debris (trash) to the time it takes to decompose (go away) in the marine environment.

plastic bottle



200 years

apple core



400 years

plastic 6-packaging



6 weeks

wax milk carton



450 years

aluminum cans



3 months

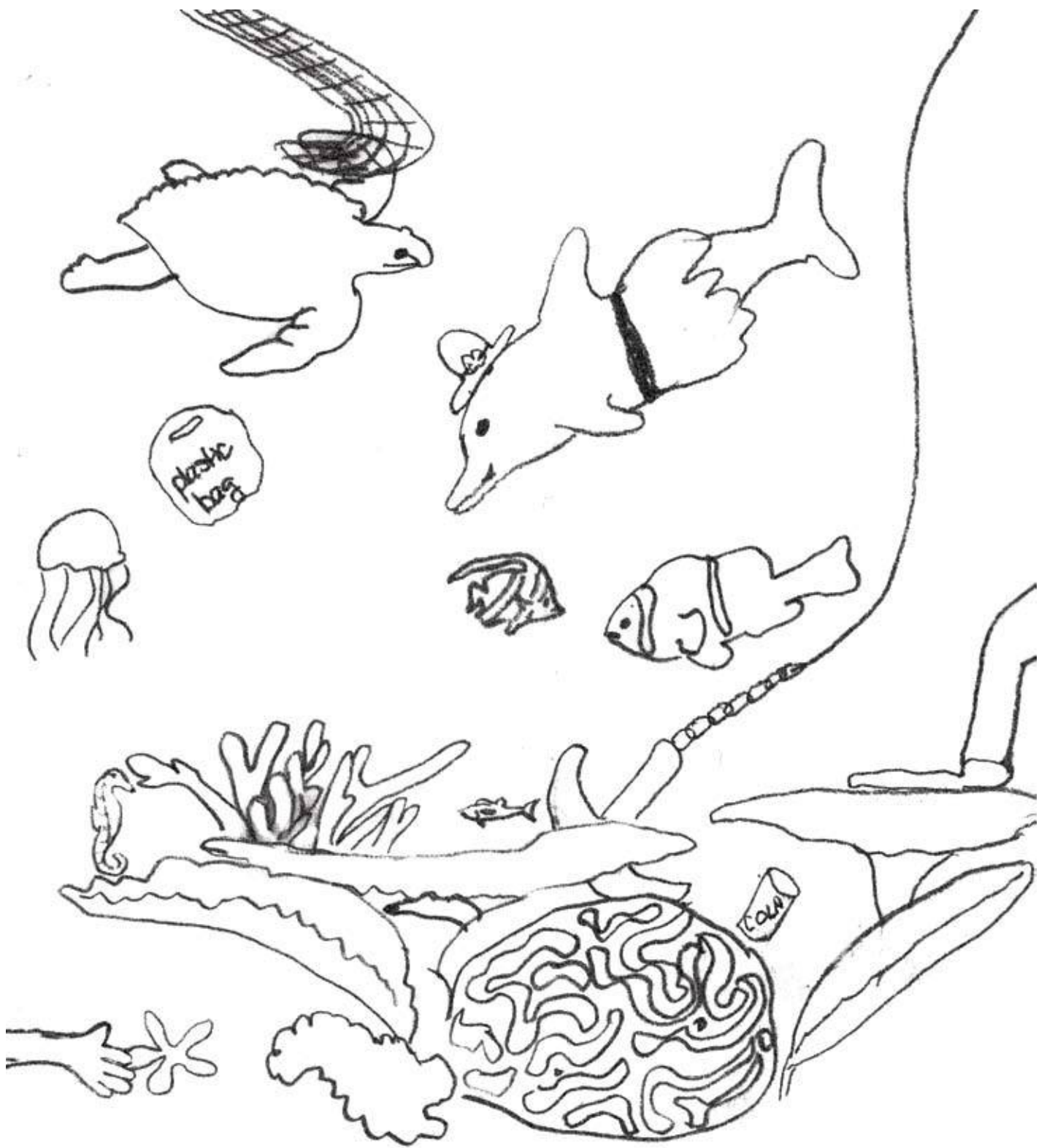
newspaper



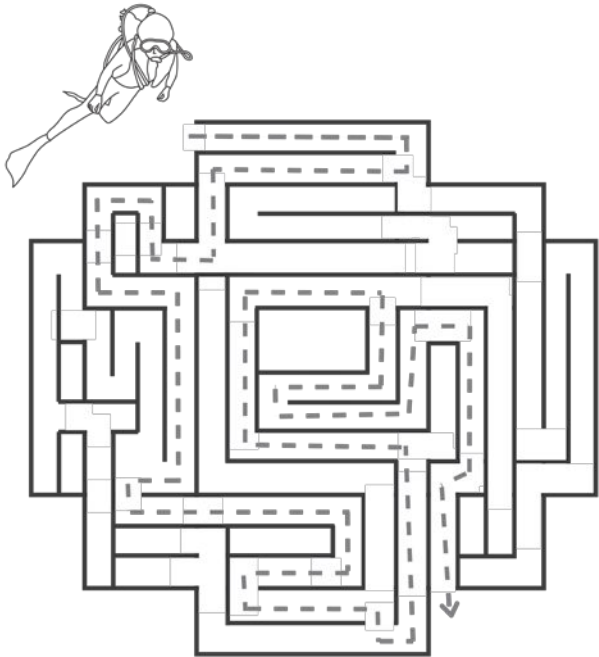
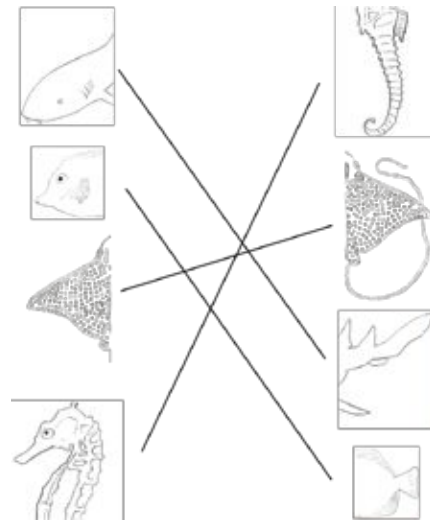
2 months



**Can you find the 8 things wrong**  
in this picture?



# Answers



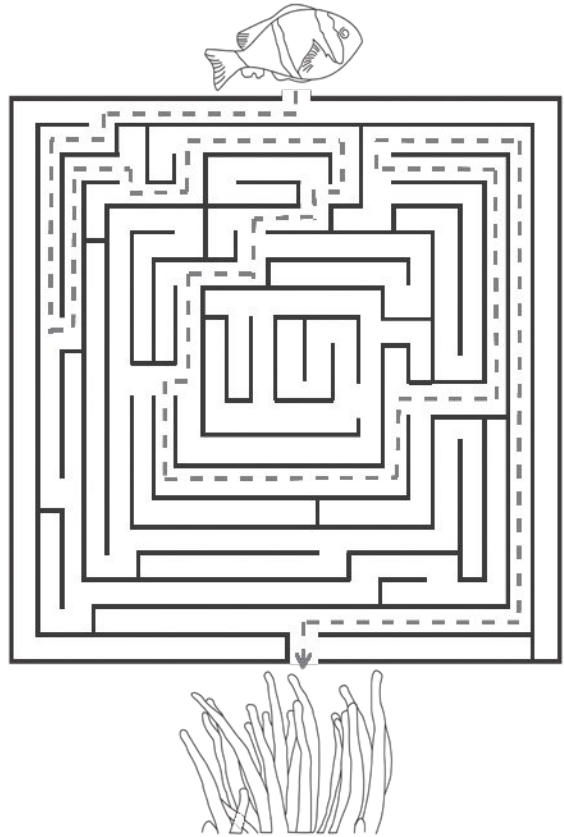
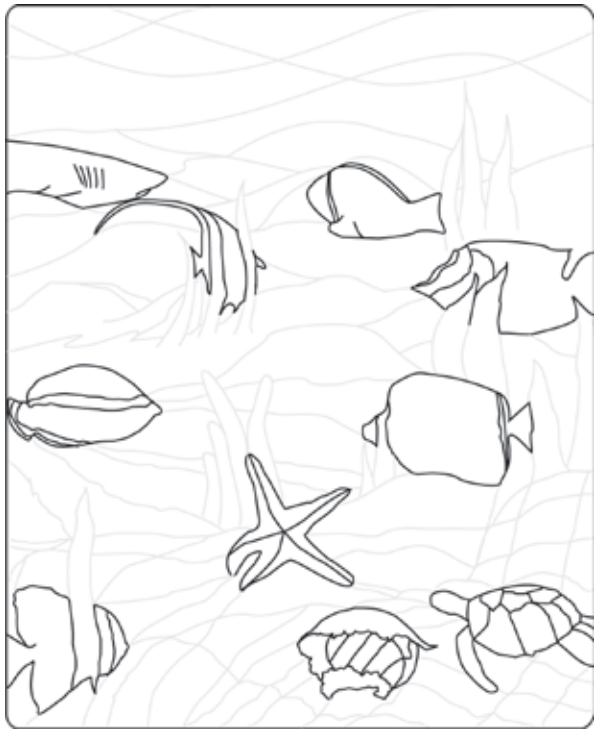
Sea horse match: #'s 3 and 5 are the same

Secret Code: Decrease your trash, reduce, reuse, recycle





# More Answers



1 nets can be very damaging to reefs, and many reef creatures are protected

2 litter such as plastic bags can hurt sea turtles who mistake them for jellyfish, a favorite food

3 (3 and 4) Just silly—dolphins don't wear hats or skirts!

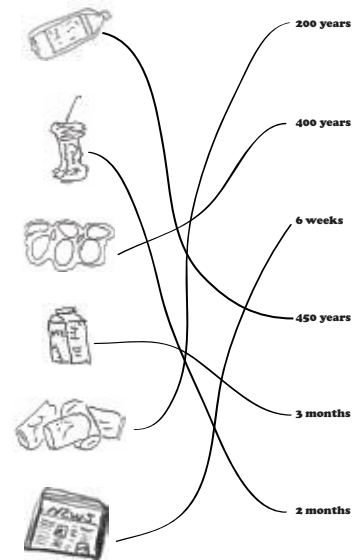
4 Watch your step! Stepping on the coral can damage the reef too

5 Reef creatures are better when left where they belong—take only photos

6 dropping your anchor on the reef can cause serious harm to this fragile area

7

8 Cans and bottles can stay in the environment for a long, long time



# In honor of the International Year of the Reef of 2008.

## Regional Activity Book Series:

1. Chesapeake Bay Activity Book
2. Coastal North Carolina Activity Book
3. Salish Sea Activity Book
4. Mobile Bay Activity Book
5. Why Is Hawaii's Ocean Important: A Keiki Activity Book
6. Coastal Louisiana Activity Book
7. Arctic/Antarctic Activity Book

## Thematic Activity Book Series:

1. Coral Reef Activity Book
2. Red Tide Activity Book

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