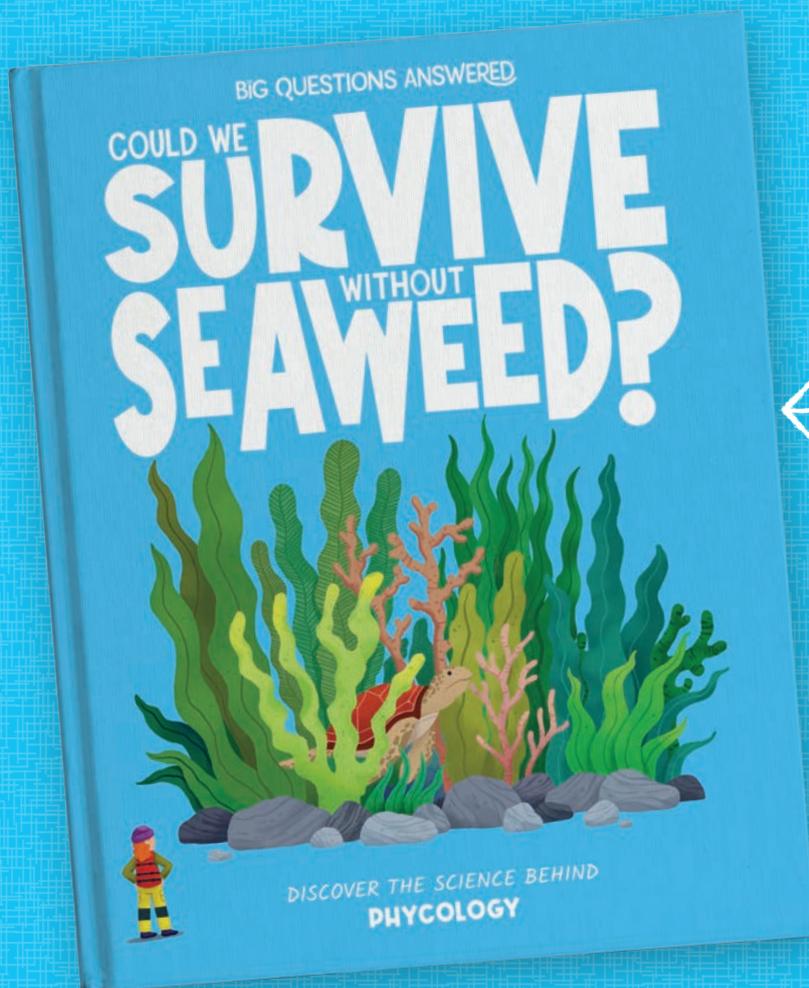


THE BIG QUESTIONS ANSWERED

YOUNG PHYCOLOGISTS'

ACTIVITY PACK



Full of fun and exciting activities to accompany this book!



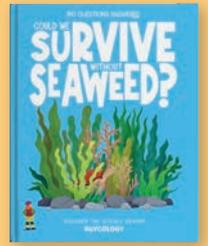
CONTENTS:

Rock Pool Diary: Creative Writing	3
Astonishing Oceans: True or False	4
Sneaky Fish: Odd One Out	5
Home Sweet Home: Word Search	6
Making an Escape: Maze	7
Crystal Clear Water: Creative Drawing	8
All Around the World: Fact File	9
Seaweed Snacks: Spot the Difference	10
Deep Dive: Label the Parts	11
Bumpy Seas: Word Scramble & Words Within Words	12
Extreme Weather: Fill in the Blanks	13
Going Fishing: Line Maze	14
Super Seaweed: Reflective Writing	15
Write Your Own Phycology Story: Creative Writing	16
More Fun Activities: Coloring Sheets and More!	17
Activity Answers	27

COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "Appearances Can Be Deceiving: Scene 1".

www.thebigquestionsanswered.com



ROCK POOL DIARY

Imagine you are going rock pooling on a bright, sunny day. Use the space below to write a diary entry about all of the exciting things that you saw.

A large, light-orange, irregularly shaped area containing ten horizontal lines for writing a diary entry.



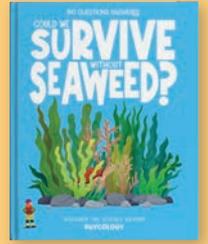
Feeling stuck? Try some of these...

- **Describe what the seaweed you saw looked like.**
Think about its color, texture, and size.
- **Describe the place you were when you saw it.**
Where were you? What was around you at the time?
- **Describe how you would be feeling.**
Would you be excited, nervous, or something else?

COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "Amazing Algae: Scene 2".

www.thebigquestionsanswered.com



ASTONISHING OCEANS

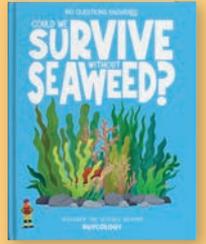
Can you use what you've learned about seaweed and the oceans to work out which of the sentences are true and which are false?

	SENTENCE	TRUE	FALSE
1	Seaweed is vulnerable to rising temperatures in the oceans.		
2	Seaweed is at the top of the food chain.		
3	Seaweed can be used as an ingredient in popcorn.		
4	Kelp grows quicker than some trees.		
5	The scientists who study seaweed are called seaweedologists.		

COULD WE SURVIVE WITHOUT SEAWEED?

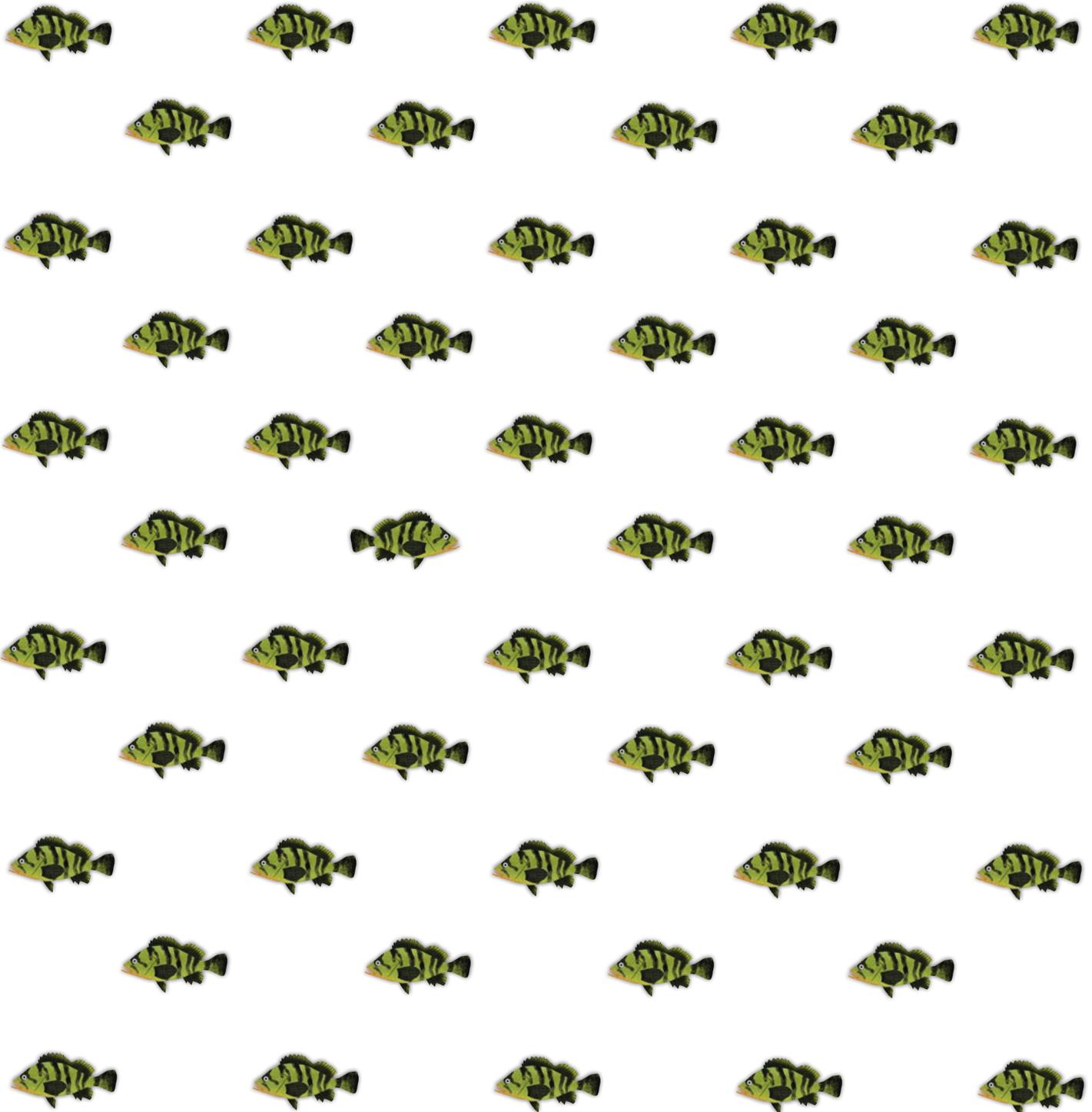
For reference to the Teachers' & Parents' Resources, this goes with "Underwater Cities: Scene 3".

www.thebigquestionsanswered.com



SNEAKY FISH

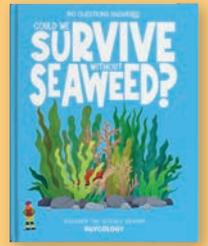
Look at all these fishing swimming around in a kelp forest! Can you spot the one that stands out from the rest?



COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "Important Habitats: Scene 4".

www.thebigquestionsanswered.com



HOME SWEET HOME

Scientists study all kinds of animals that live in kelp forests. Can you find and circle the words listed below, in the grid. Words can be found in any direction (including diagonals) and can overlap each other.

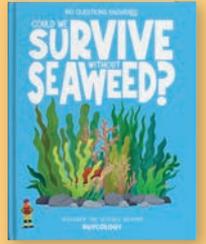
A	I	M	B	Q	K	S	W	O	R	M	D	K	F	U
N	A	C	V	W	H	C	G	H	A	I	Z	F	D	A
R	B	N	R	V	R	J	E	L	L	Y	F	I	S	H
V	U	H	E	G	I	J	L	K	V	J	P	E	O	V
Z	R	S	E	M	E	B	G	A	H	E	E	T	E	W
S	C	S	N	Q	O	C	T	O	P	U	S	I	S	H
S	H	G	L	J	T	N	W	T	F	N	P	T	O	A
T	I	H	N	R	H	I	E	Q	H	E	S	T	B	L
A	N	Q	A	H	G	W	C	A	O	T	T	E	R	E
R	O	C	K	F	I	S	H	F	C	Y	R	U	Z	R
F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

- | | | |
|---------|---------|-----------|
| OTTER | CRAB | WORM |
| SEAL | SHARK | JELLYFISH |
| ANEMONE | URCHIN | STARFISH |
| WHALE | OCTOPUS | ROCKFISH |

COULD WE SURVIVE WITHOUT SEAWEED?

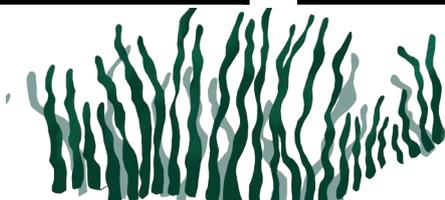
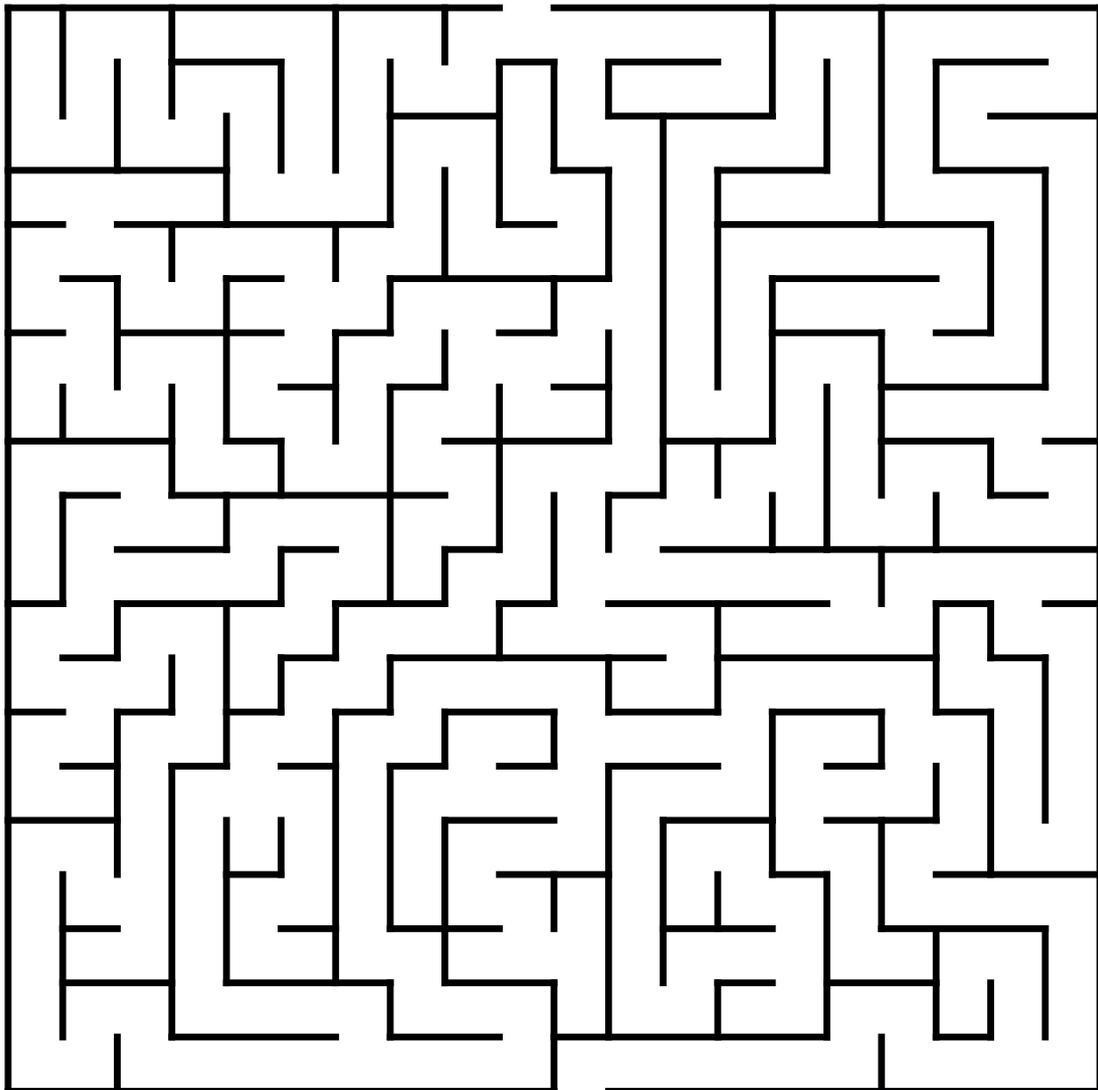
For reference to the Teachers' & Parents' Resources, this goes with "The Food Chain: Scene 5".

www.thebigquestionsanswered.com



MAKING AN ESCAPE

Oh no! The fish is being chased by a shark! Can you help the fish swim away to safety among the seaweed?

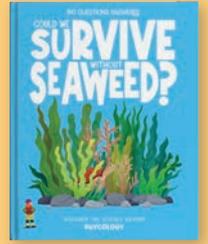




COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "Cleaning the Oceans: Scene 6".

www.thebigquestionsanswered.com



CRYSTAL CLEAR WATER

Seaweed helps to keep the oceans clean, protecting all of the amazing animals that live in them! Imagine you are going diving and draw a scene to show the creatures that you spot.

Draw what you see in here!

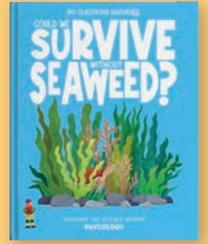
Have you discovered a new species of animal? If so, give it a name!





COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "Shielding the Coastline: Scene 7".
www.thebigquestionsanswered.com



ALL AROUND THE WORLD

Choose an ocean and see what incredible things you can find out about it! Draw it and the animals that live there, color them in, and fill in all of the facts below.



Draw your ocean and its animals here!

This ocean is called

How big is this ocean?

How deep is this ocean?

What kinds of seaweed grow in this ocean?

What animals live in this ocean?

Extra cool facts:

.....

.....

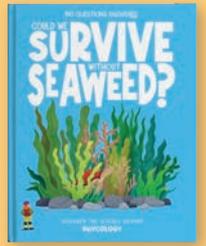


Why not print this sheet off multiple times to create a booklet full of lots of different oceans and animals!

COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "Yummy Seaweed: Scene 8".

www.thebigquestionsanswered.com



SEAWEED SNACKS

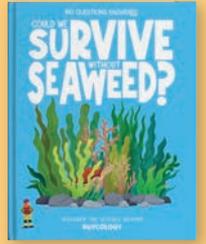
A sneaky chef is trying to catch us out! Can you spot the 11 differences between the two scenes?
Circle them when you spot them.



COULD WE SURVIVE WITHOUT SEAWEED?

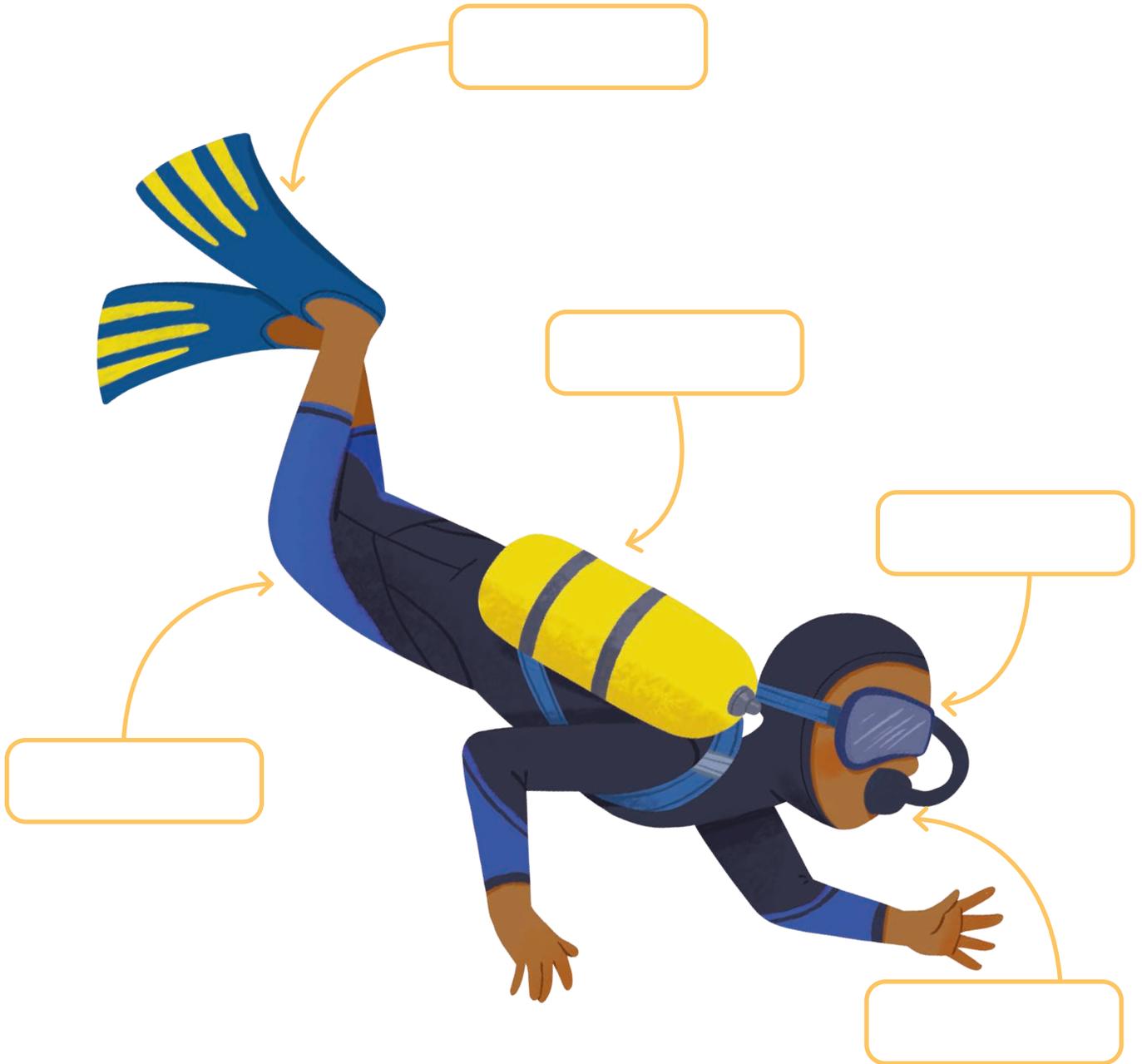
For reference to the Teachers' & Parents' Resources, this goes with "Producing Oxygen: Scene 9".

www.thebigquestionsanswered.com



DEEP DIVE

Divers need a lot of special equipment for their trips underwater. Can you fill in the boxes to label this diver's equipment? Each answer can only be used once.



FLIPPERS

WETSUIT

GOGGLES

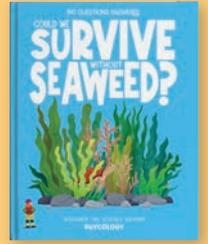
OXYGEN TANK

MOUTHPIECE

COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "Fragile Seaweed: Scene 10".

www.thebigquestionsanswered.com



BUMPY SEAS

Oh no! Rough seas have jumbled up these words! Test your word-solving skills by trying to unscramble the words. They are all related to boats. There is a list of the correct words below to help you.

OPEORLLPR

TNE

NNGEIE

EDCK

HTILGS

IARNLIG

URRDDE

DECK

ENGINE

RAILING

PROPELLOR

RUDDER

WAVES

NET

EXTRA ACTIVITY - WORD WITHIN WORDS

How many words can you find within the word "underwater"?

1. You can only use the letters within the word "underwater".
2. Each of these letters can only be used once: U, N, D, W, A, T.
3. "Underwater" has two letter E's and two letter R's so you can use them twice each.
4. You can't use any other letters from the alphabet.

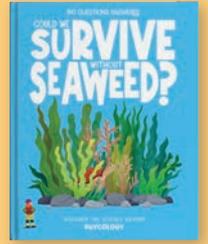
EXAMPLE: you can make the word NEW using the letters in UNDERWATER.

UNDERWATER

COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "The Threat of Climate Change: Scene 11".

www.thebigquestionsanswered.com



EXTREME WEATHER

Can you use the words below to fill in the blanks and uncover facts about different kinds of extreme weather? Each answer can only be used once.

wildfires

heatwave

rainfall

flash flood

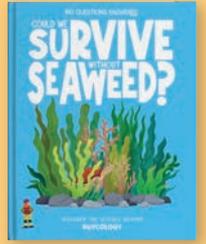
eye

1. A _____ occurs when temperatures are a lot higher than normal over two or more days. Climate change is causing these to become more common.
2. A _____ can happen very quickly when a lot of rain falls faster than the ground can absorb it.
3. Hurricanes are known for their incredibly fast winds. The middle of a hurricane, which is calm compared to the area around it, is called an _____.
4. When the weather has been very dry with little to no rain, there is a higher risk of _____ because of all the dry wood and soil.
5. When the temperature increases, the atmosphere is able to hold more water. This can lead to _____ becoming heavier and more intense.

COULD WE SURVIVE WITHOUT SEAWEED?

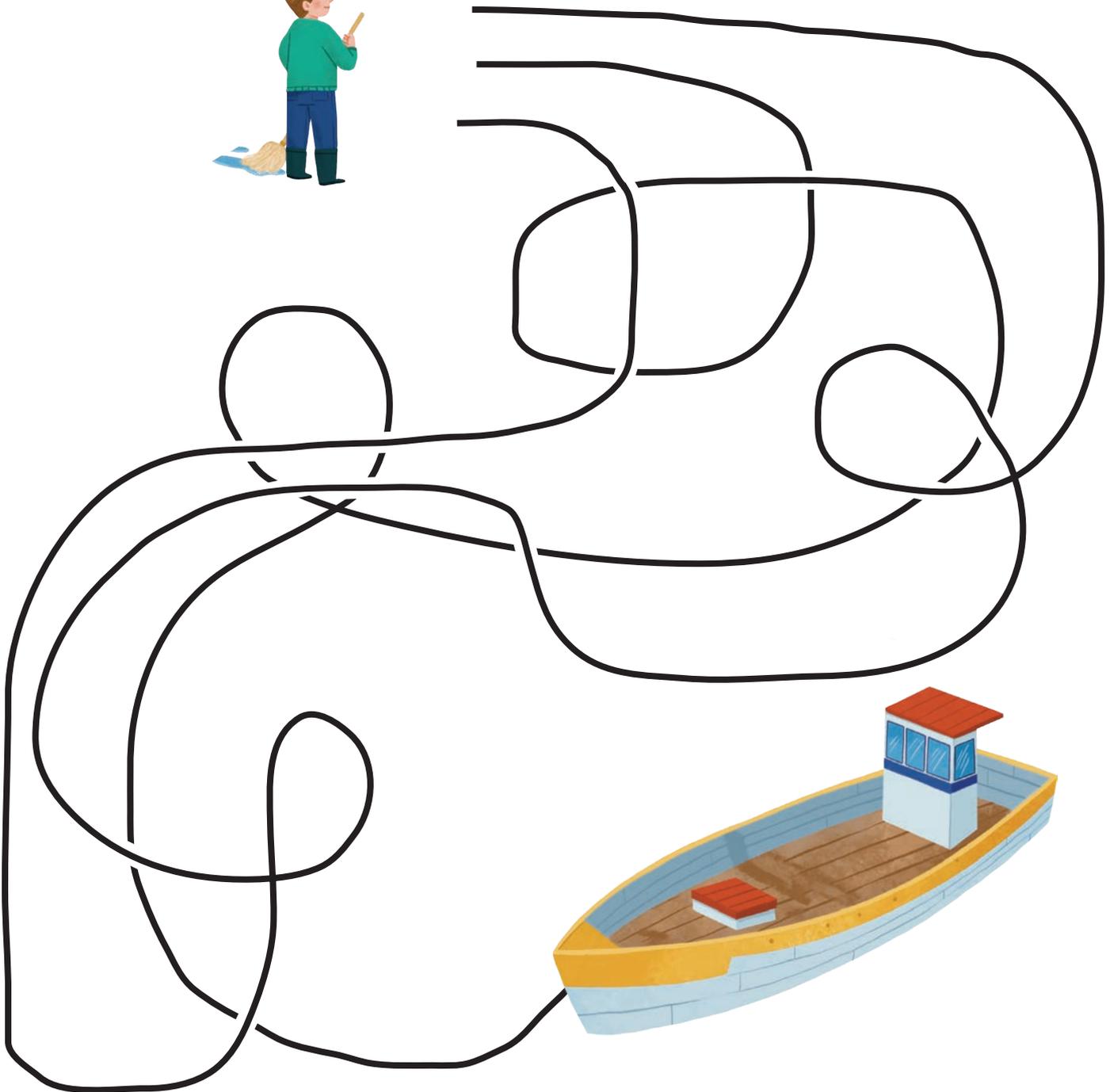
For reference to the Teachers' & Parents' Resources, this goes with "Seaweed Farming: Scene 12".

www.thebigquestionsanswered.com



GOING FISHING

The fisherman is ready to set sail for their seaweed farm! Can you help the fisherman find their way to their boat?

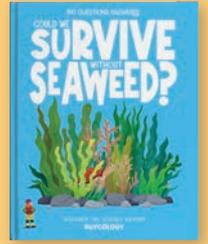




COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "Nature's Unsung Hero: Scene 13".

www.thebigquestionsanswered.com



SUPER SEAWEED

Read the questions below and think about your own opinions before filling in your answers.

What do you find most interesting about seaweed?

.....
.....
.....

What do you think is the most important thing that seaweed does?

.....
.....
.....

If you were a phycologist, what would you most enjoy – studying the importance of seaweed to animals or to humans?

.....
.....
.....

What would be your big question about seaweed?

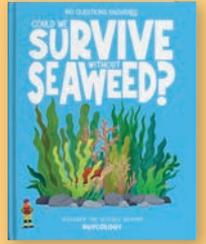
.....
.....
.....



COULD WE SURVIVE WITHOUT SEAWEED?

For reference to the Teachers' & Parents' Resources, this goes with "Post-Reading Questions".

www.thebigquestionsanswered.com



WRITE YOUR OWN PHYCOLOGY STORY

Can you write a story of your own about phycoology, making sure to include the 3 key words below?

SEAWEED

OCEANS

PHYCOLOGIST

A large, light-orange, irregularly shaped area with a white border, containing 18 horizontal lines for writing a story.

MORE FUN PSYCHOLOGY ACTIVITIES

COLORING SHEETS & MORE!

The following activities aren't based on any specific scenes in the book. They can be used on their own or alongside the book as extra activities.

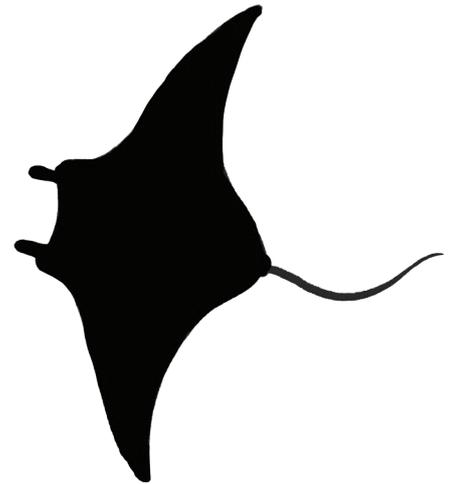
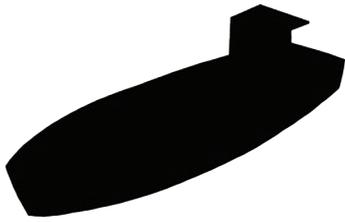
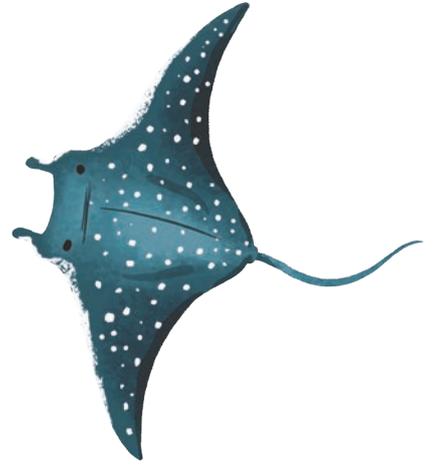
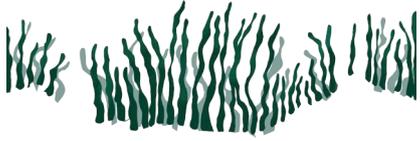
FIND THE SCIENTIST

There are lots of different scientists below. Can you find the phycologist?
Circle them when you find them – there's only one!



MATCH THE SHAPE

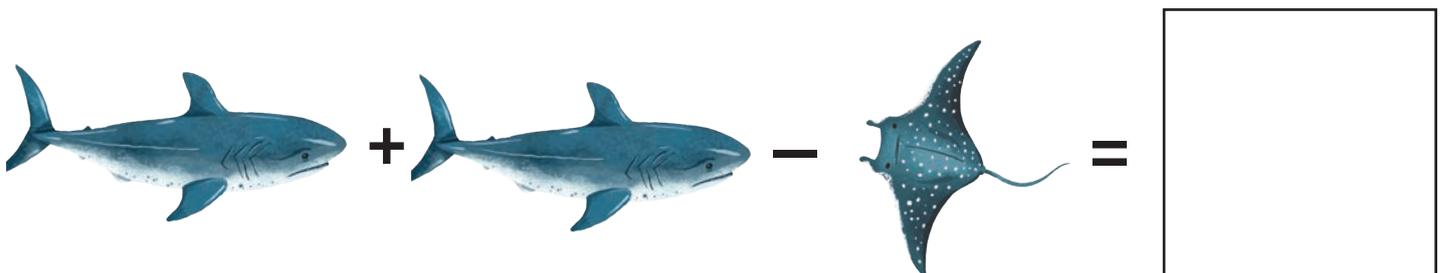
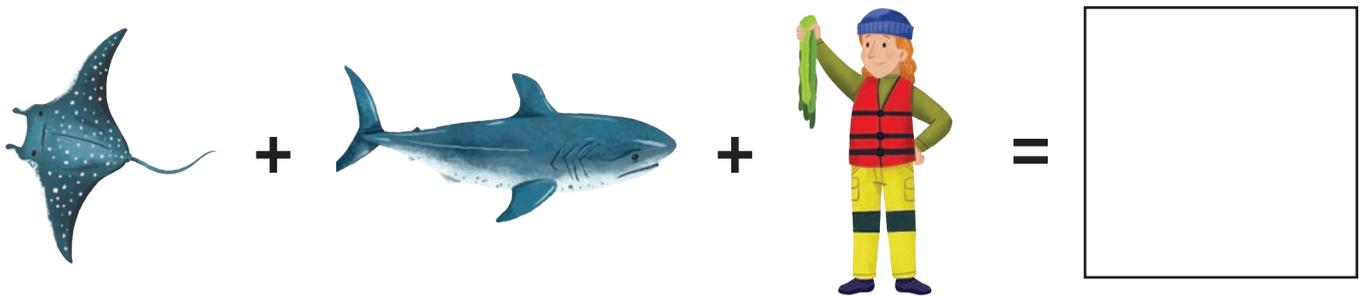
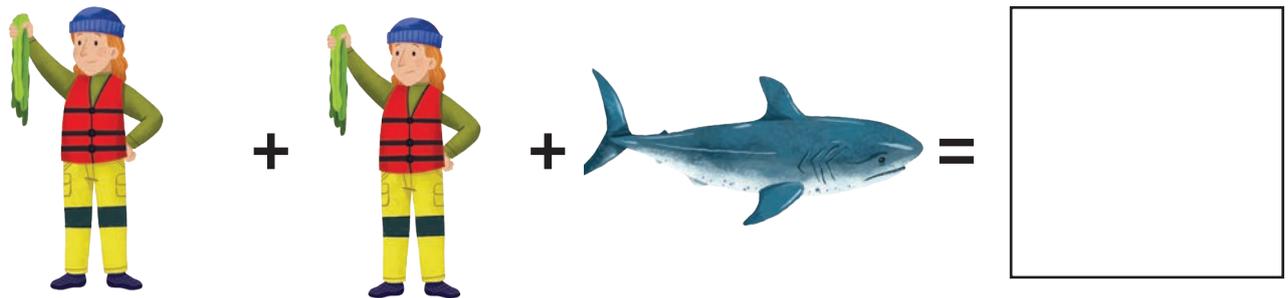
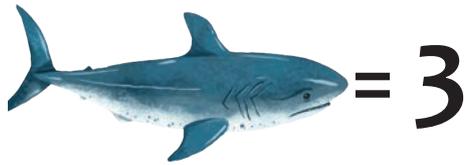
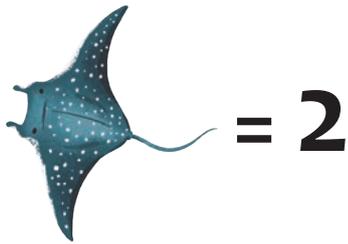
Can you match each shadow to the correct picture? Draw a line to connect them.



SIMPLE SUMS

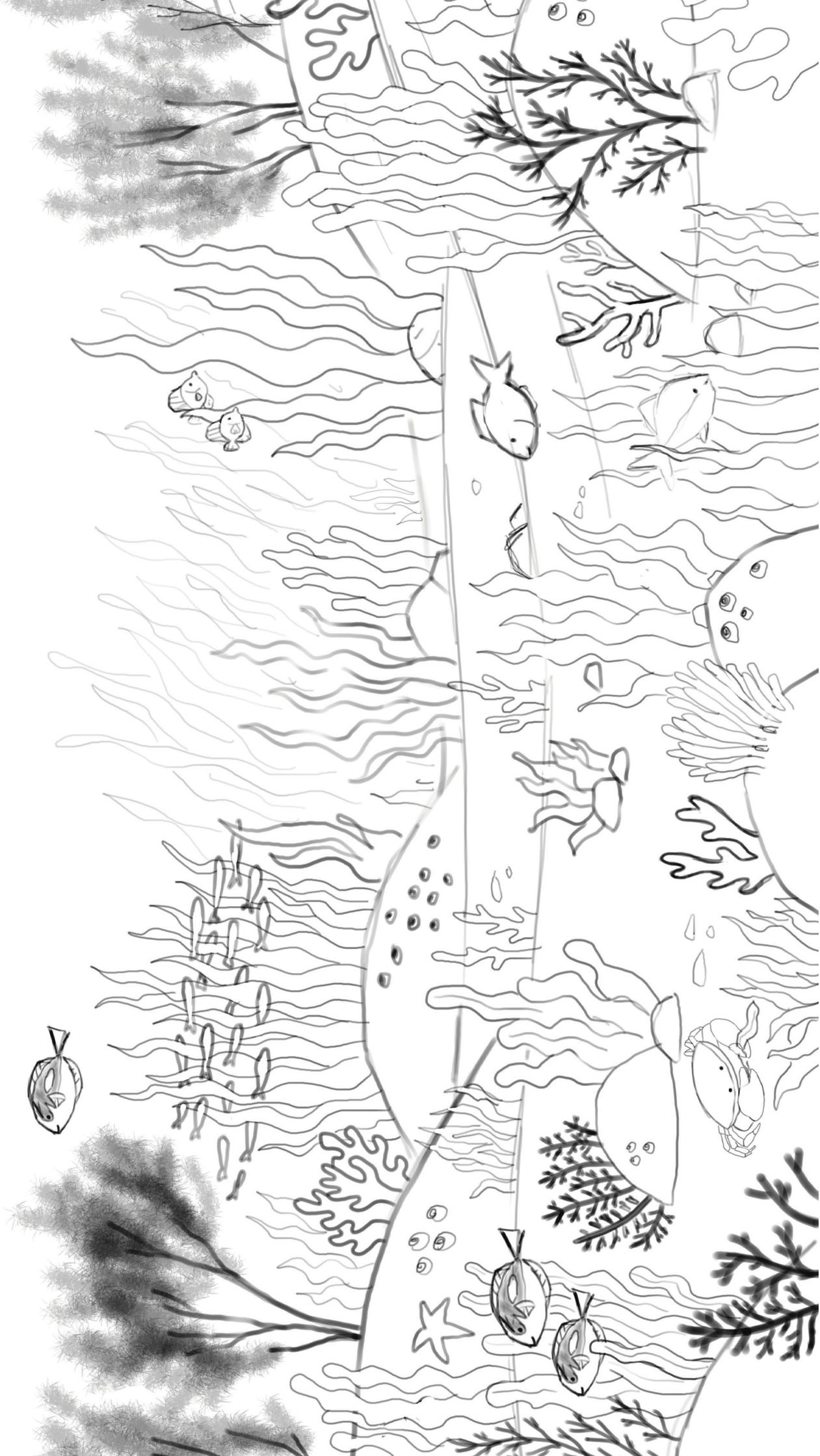
Below are 3 objects which represent different numbers.

Work out the sum based on what each object represents and write your answers in the boxes.



COLOR ME IN!

This coloring sheet is based on scene 2: Amazing Algae.



COLOR ME IN!

This coloring sheet is based on scene 5: The Food Chain.



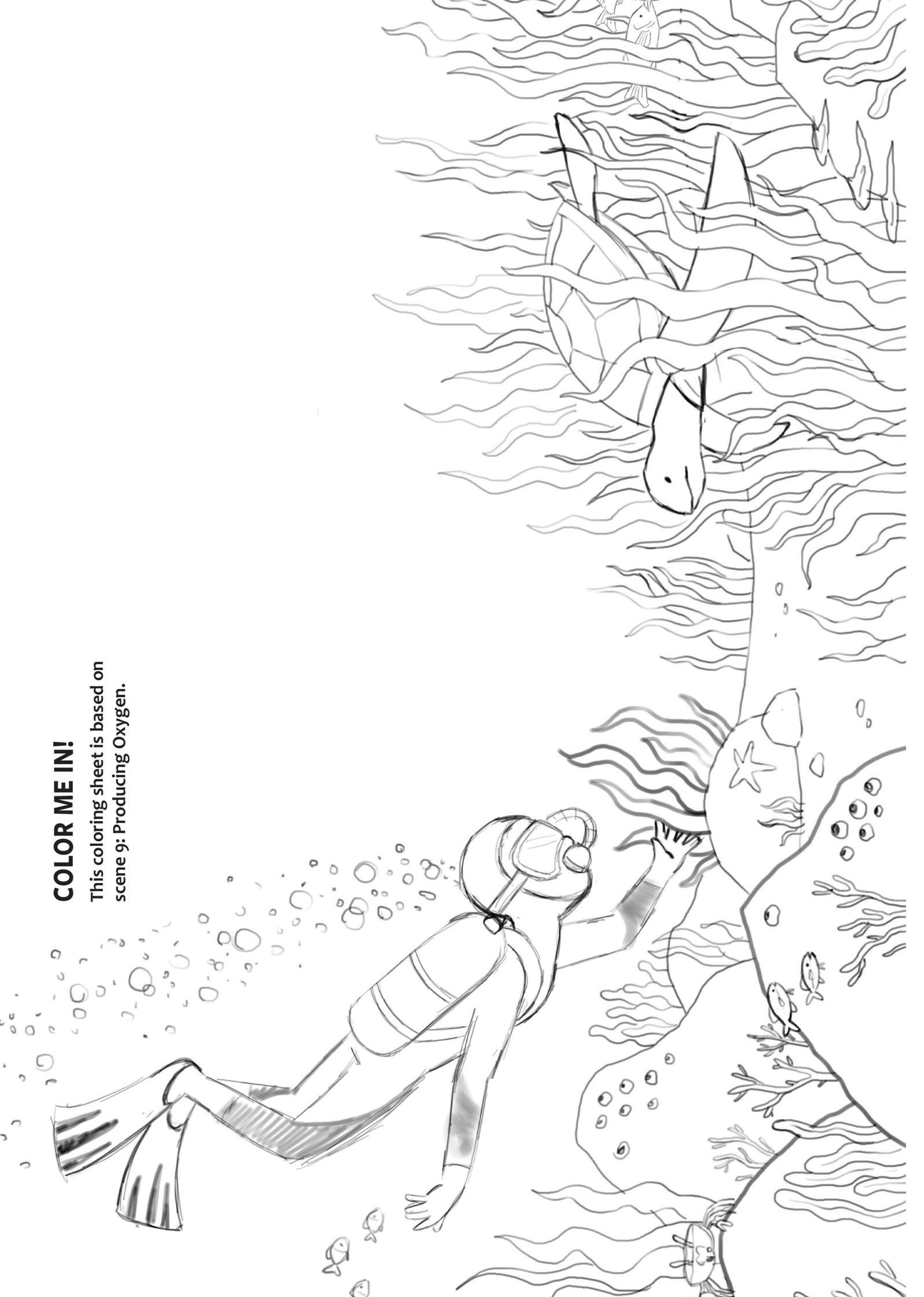
COLOR ME IN!

This coloring sheet is based on scene 7: Shielding the Coastline.



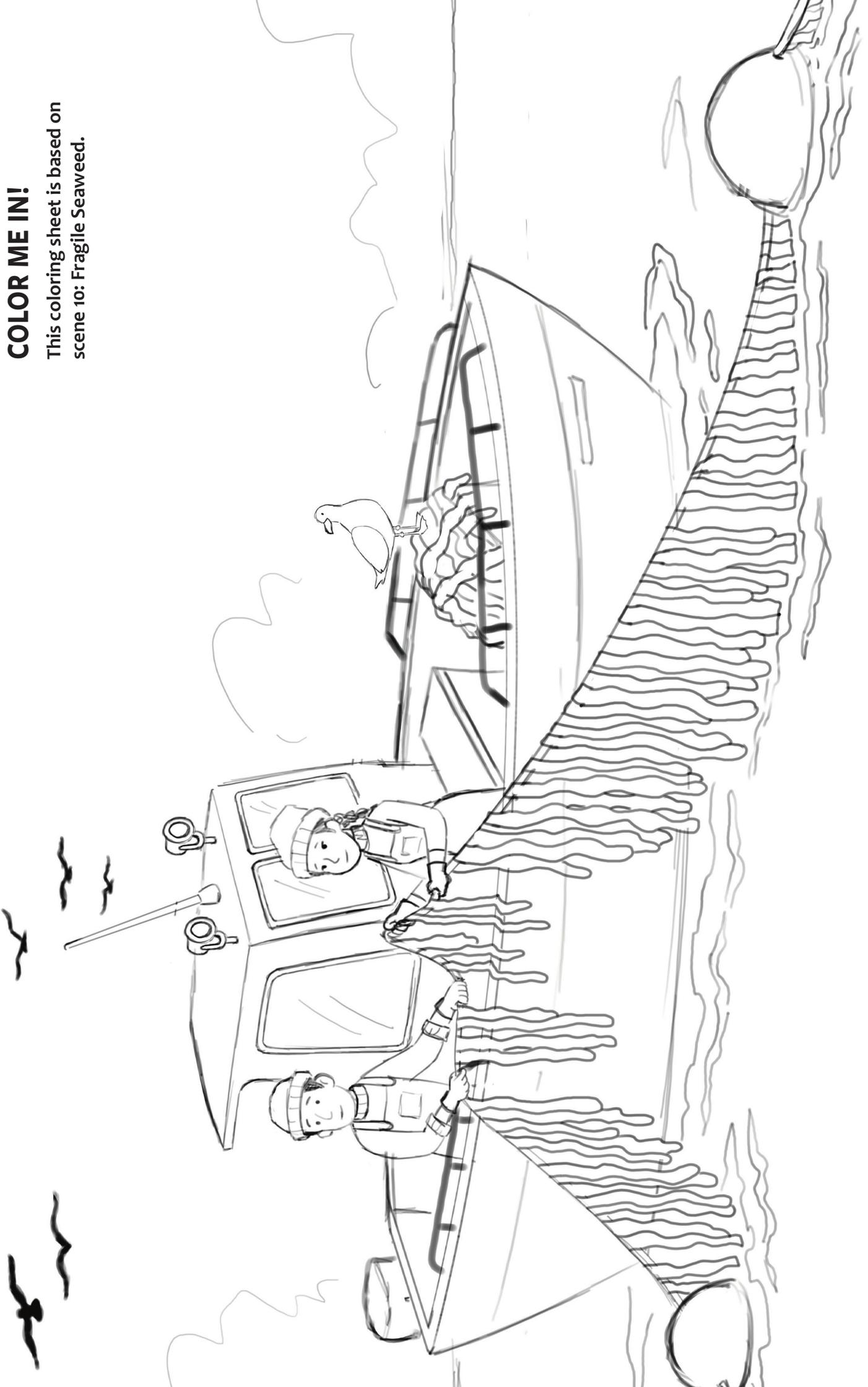
COLOR ME IN!

This coloring sheet is based on scene 9: Producing Oxygen.



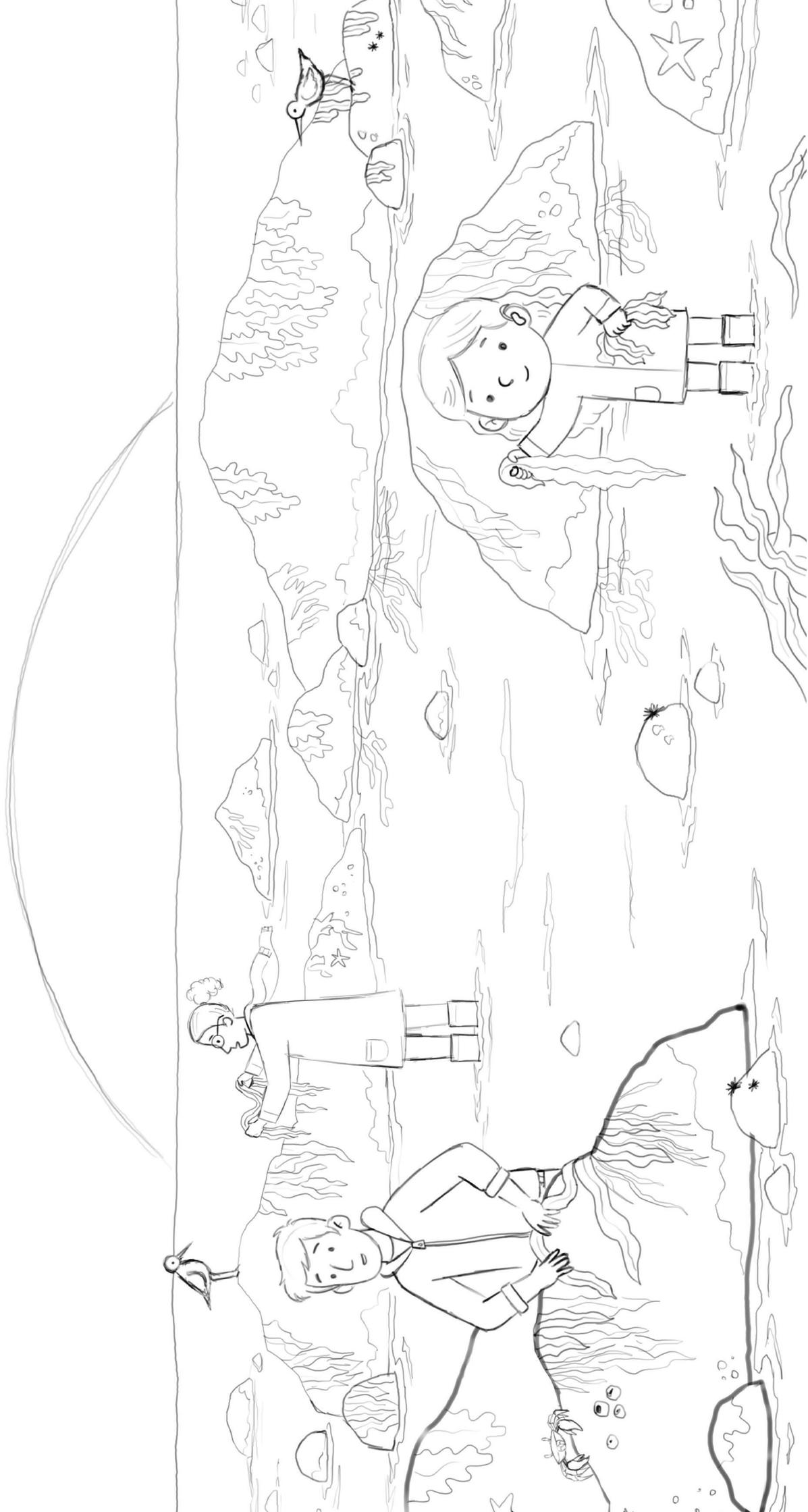
COLOR ME IN!

This coloring sheet is based on scene 10: Fragile Seaweed.



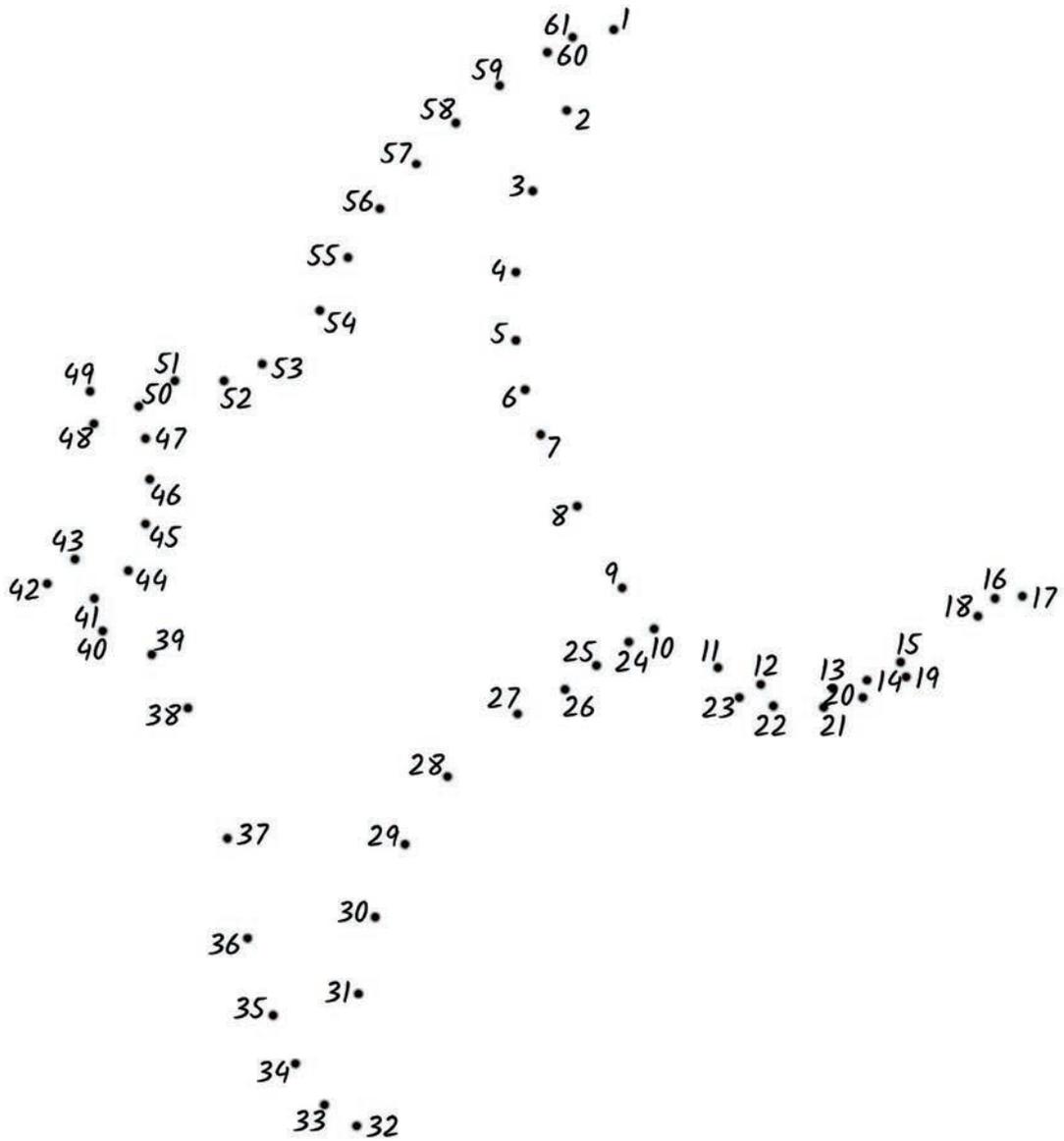
COLOR ME IN!

This coloring sheet is based on scene 13: Nature's Unsung Hero.



DOT-TO-DOT

Starting from 1, draw a line connecting the numbers to create a picture. Why not color it in afterwards?



YOUNG PSYCHOLOGISTS' ACTIVITY ANSWERS

Find the answers to the activities on the following pages.

ACTIVITY ANSWERS

Check your answers against the correct answers below!

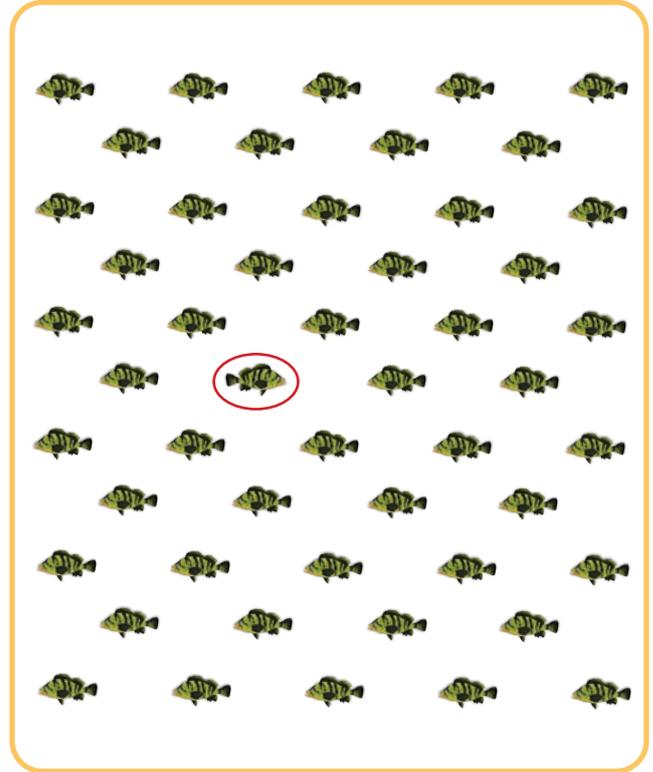
ASTONISHING OCEANS ANSWERS

The answers below are for the “true or false” activity on page 4.

	SENTENCE	TRUE	FALSE
1	Seaweed is vulnerable to rising temperatures in the oceans.	TRUE	
2	Seaweed is at the top of the food chain.		FALSE
3	Seaweed can be used as an ingredient in popcorn.	TRUE	
4	Kelp grows quicker than some trees.	TRUE	
5	The scientists who study seaweed are called seaweedologists.		FALSE

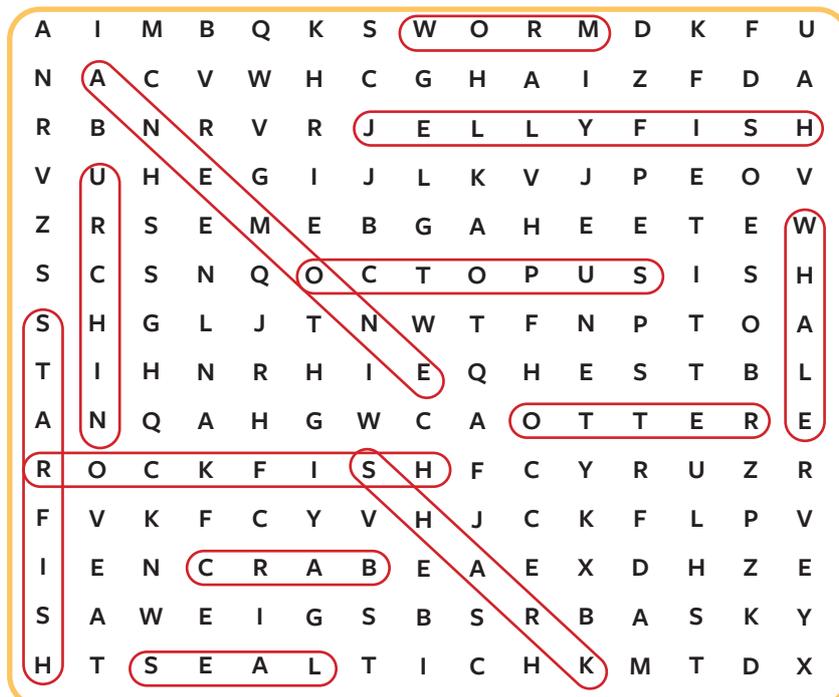
SNEAKY FISH ANSWERS

The answers below are for the “odd one out” activity on page 5.



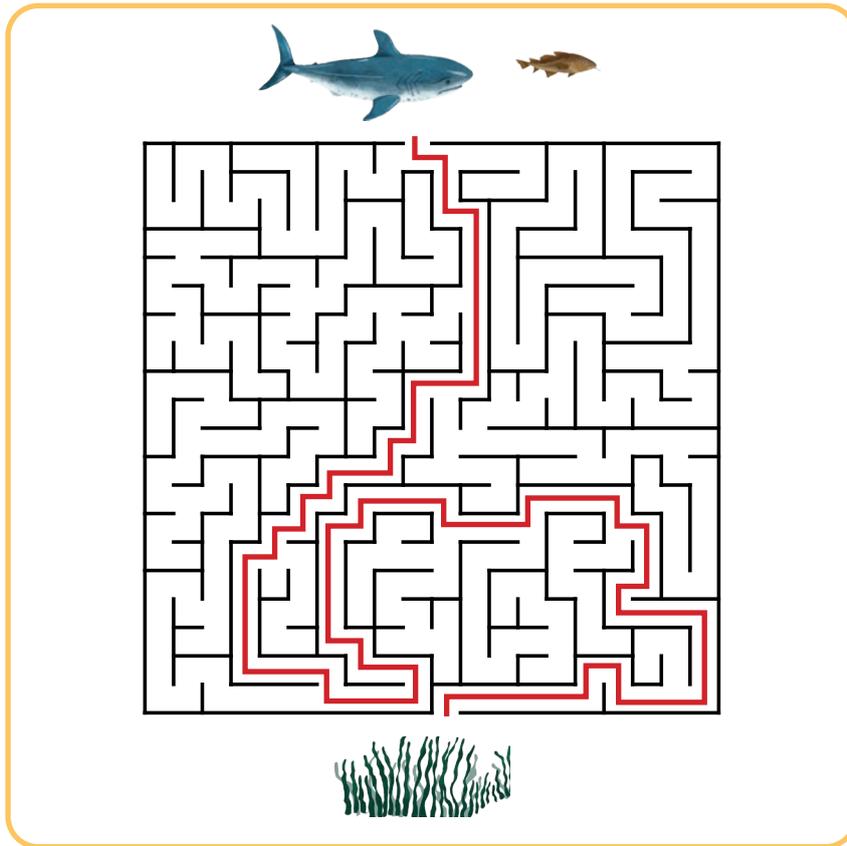
HOME SWEET HOME ANSWERS

The answers below are for the “word search” activity on page 6.



MAKING AN ESCAPE ANSWERS

The answers below are for the “maze” activity on page 7.



SEAWEED SNACKS

The answers below are for the “spot the difference” activity on page 10.



DEEP DIVE ANSWERS

The answers below are for the “label the parts” activity on page 11.



ACTIVITY ANSWERS

Check your answers against the correct answers below!

BUMPY SEAS ANSWERS

The answers below are for the “word scramble” activity on page 12.

OPEORLLPR _____ **PROPELLOR**

TNE _____ **NET**

NNGEIE _____ **ENGINE**

EDCK _____ **DECK**

HTILGS _____ **LIGHTS**

IARNLIG _____ **RAILING**

URRDDE _____ **RUDDER**

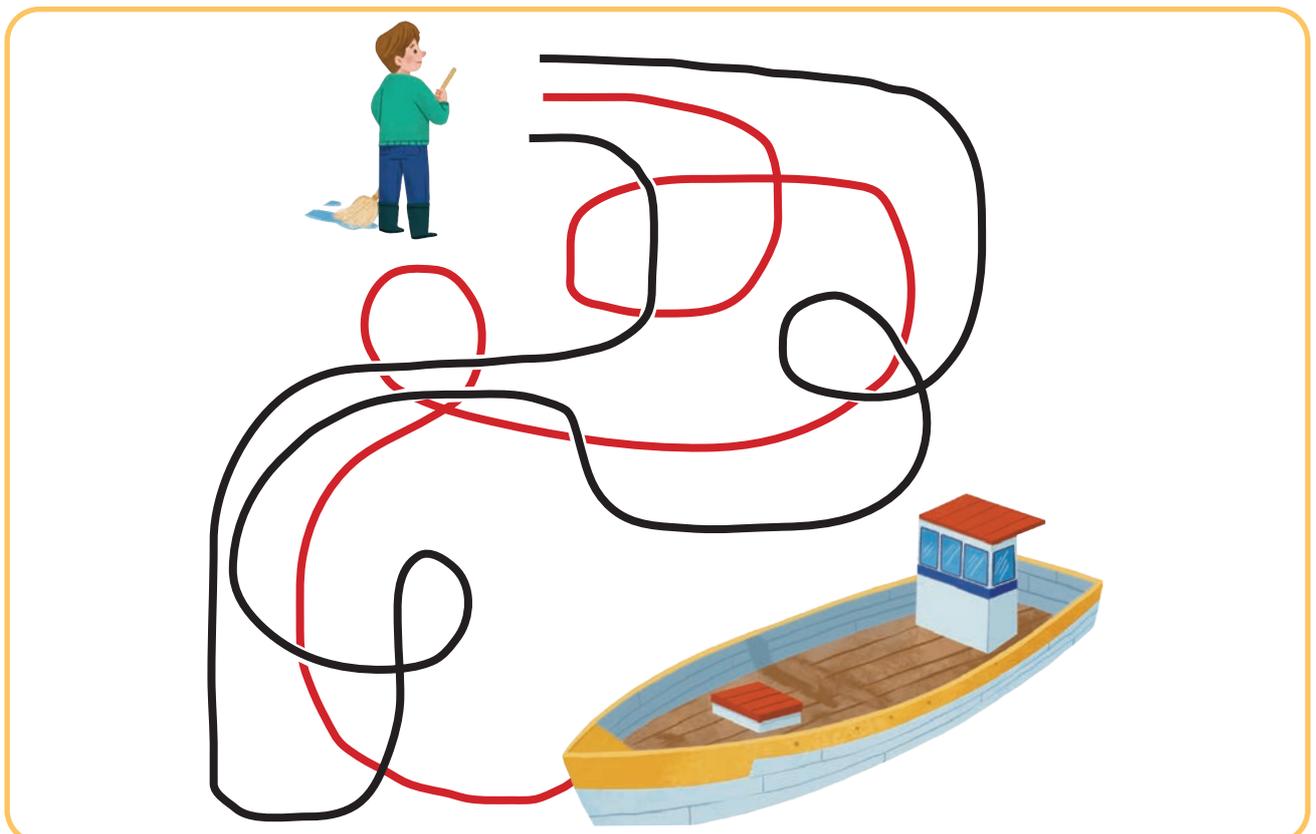
EXTREME WEATHER ANSWERS

The answers below are for the “fill in the blanks” activity on page 13.

1. A **heatwave** occurs when temperatures are a lot higher than normal over two or more days. Climate change is causing these to become more common.
2. A **flash flood** can happen very quickly when a lot of rain falls faster than the ground can absorb it.
3. Hurricanes are known for their incredibly fast winds. The middle of a hurricane, which is calm compared to the area around it, is called an **eye**.
4. When the weather has been very dry with little to no rain, there is a higher risk of **wildfires** because of all the dry wood and soil.
5. When the temperature increases, the atmosphere is able to hold more water. This can lead to **rainfall** becoming heavier and more intense.

GOING FISHING ANSWERS

The answers below are for the “line maze” activity on page 14.

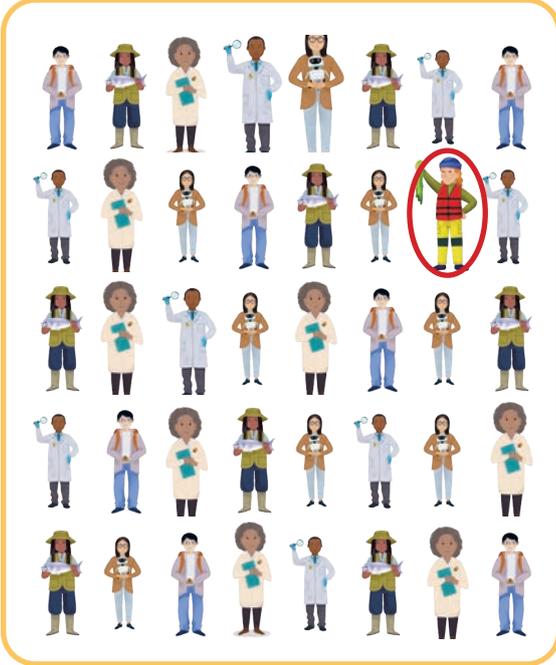


EXTRA ACTIVITY ANSWERS

Check your answers against the correct answers below!

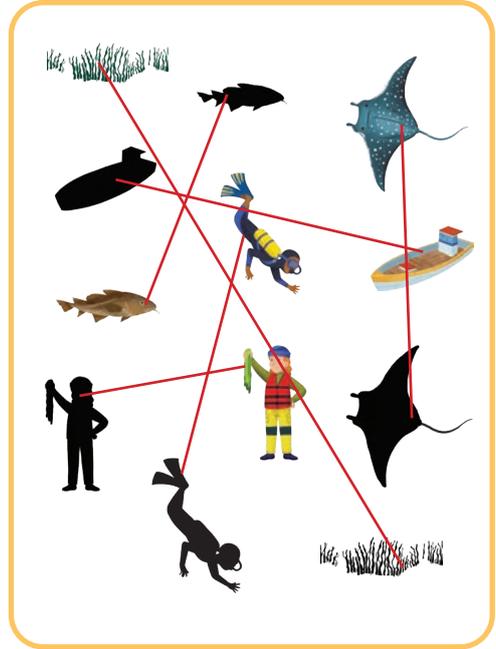
FIND THE SCIENTIST

The answers below are for the activity on page 18.



MATCH THE SHAPE

The answers below are for the activity on page 19.



SIMPLE SUMS

The answers below are for the activity on page 20.

$$\begin{aligned} & \text{Scientist} + \text{Scientist} + \text{Shark} = \boxed{11} \\ & \text{Manta Ray} + \text{Shark} + \text{Scientist} = \boxed{9} \\ & \text{Manta Ray} + \text{Scientist} - \text{Scientist} = \boxed{2} \\ & \text{Shark} + \text{Shark} - \text{Manta Ray} = \boxed{4} \end{aligned}$$