



## Warm-Up 30

### The Creatures of the Coral Reefs

Name: \_\_\_\_\_

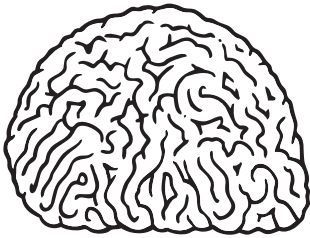
Coral reefs are made up of small animals covered in hard shells. These animals grow together. They form a community. A lot of animals live in and around this community.

**Directions:** Read about some types of coral and other animals who live in the reefs.

- Color the whole box **purple** if the animal is a type of coral.
- Color the whole box **blue** if the animal is a type of fish.
- Color the whole box **red** if the animal is not a fish or a type of coral.

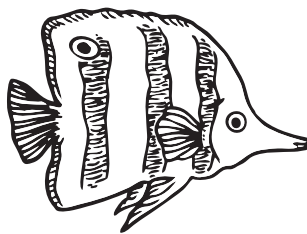
#### Brain Coral

This coral is shaped like the human brain.



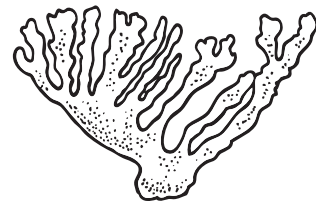
#### Butterfly Fish

This fish has a large, eye-shaped spot.



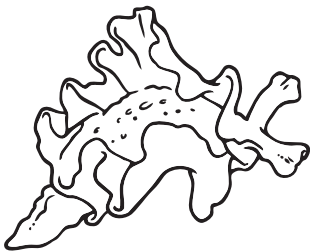
#### Elkhorn Coral

This coral looks like an elk's antlers.



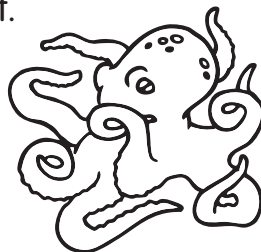
#### Lettuce Leaf Sea Slug

This green sea slug has no shell.



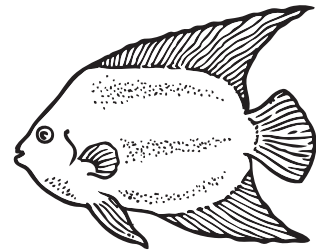
#### Octopus

This animal has eight legs and can hide in the reef.



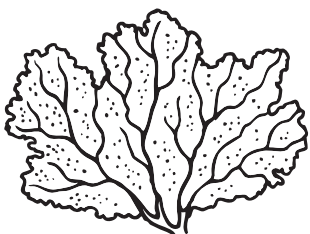
#### Queen Angelfish

This fish's flat body helps it fit in reefs.



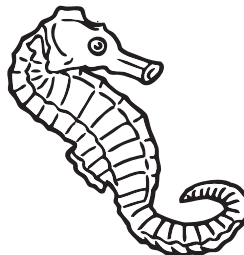
#### Seafans

These coral move like small fans in the water.



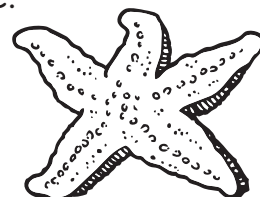
#### Sea Horse

This unique fish looks like a tiny horse.



#### Sea Star

This is not a fish. It can regrow an arm if it loses one.





## Warm-Up 118

### The Science of Making Waves

Name: \_\_\_\_\_

Have you been to the beach and watched waves rolling in toward the shore? What makes those waves? Why do they rise and fall like they do? There are many forces that cause waves to look and act the way that they do.

Wind is one force that makes waves. Wind blows across the surface of the ocean. The wind tries to drag the surface of the water with it. The water pressure below the surface pushes the water up, too. What makes the water come back down? Gravity does. Gravity is a force that pulls things back toward Earth.

As the wave gets closer to the shore, friction also helps make waves. Friction is a force that slows down motion. The friction of the water rubbing against the sand slows the water down near the bottom. The water near the top is not slowed down as much. It keeps going fast. It rises up. Then, gravity starts to pull it down. The top of the wave curls and falls back down to the ground. Have you ever had a wave fall right on top of you?

**Directions:** Look at each picture. Read each question. Circle your answer.

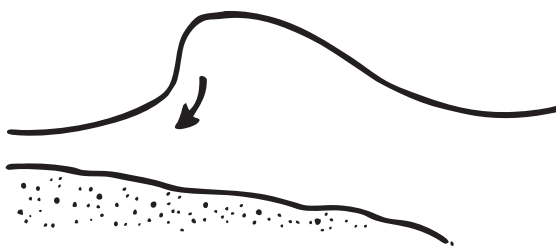
1. The surface of the water is being pulled up.  
Which force is causing this?

friction      gravity      wind



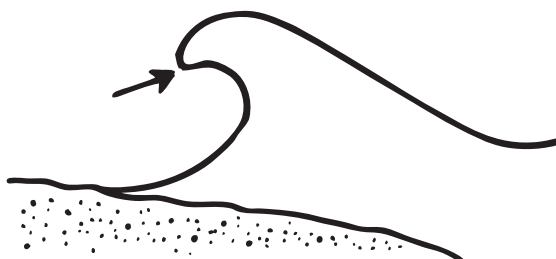
2. The bottom of the water is slowing down as it gets close to shore. Which force is causing this?

friction      gravity      wind



3. The top of the water is curling and falling back to Earth. Which force is causing this?

friction      gravity      wind





## The Creatures of the Coral Reefs (page 36)

Brain Coral — purple  
 Butterfly Fish — blue  
 Elkhorn Coral — purple  
 Lettuce Leaf Sea Slug — red  
 Octopus — red  
 Queen Angelfish — blue  
 Seafans — purple  
 Sea Horse — blue  
 Sea Star — red

## One Feared Fish (page 38)

1. These descriptions should be crossed out:  
 plant-eaters; dull, flat teeth; eyes like other fish;  
 not good at hunting; won't attack humans
2. B
3. 3,000

## There's No Place Like Home (page 39)

Point A — fresh  
 Point B — salt  
 Point C — fresh

## Underwater-Animal Math (page 40)

1.  $5 + 10 = 15$
2.  $4 + 3 = 7$
3.  $8 - 2 = 6$
4.  $10 - 8 = 2$
5.  $100 + 0 = 100$

## Word Study (page 43)

1. C      3. D
2. B      4. A

## Unit 5

### This Land Is Our Land...and Theirs, Too (page 44)

1. A
2. C
3. cat, 3; elephant, 6; horse, 5; mouse, 2;  
 person, 4; spider, 1

### Getting Around on Land (page 45)

Accept reasonable responses.

### Mammals and More (page 46)

Mammals (brown)— dog, pig, cow, mouse  
 Reptiles (green)— crocodile, lizard, snake  
 Amphibians (yellow)— frog, newt, salamander  
 Invertebrates (orange)— worm, spider, fly  
 The word *reptile* should be circled.

## All Kinds of Coverings (page 47)

Feathers: ostrich, peacock, turkey  
 Fur: lion, polar bear, wolf  
 Scales: lizard, snake  
 Shells: snail, turtle

## Which Land Animal Is Which? (page 48)

1. frog      4. tortoise
2. slug      5. mouse
3. crocodile

## Trace the Snakes...If You Dare! (page 49)

Snake #1 — Cobra (red)  
 Snake #2 — Rattlesnake (green)  
 Snake #3 — Black Mamba (black)  
 Snake #4 — Boa Constrictor (orange)

## The Trouble with Long Legs (page 50)

1. C
2. Helpful: kicking enemies  
 Not Helpful: drinking water, walking
3. A and D

## Word Study (page 51)

- |             |               |
|-------------|---------------|
| 1. lion     | 7. penguin    |
| 2. worm     | 8. mouse      |
| 3. bear     | 9. monkey     |
| 4. rabbit   | 10. panda     |
| 5. snail    | 11. armadillo |
| 6. elephant | 12. porcupine |

## Unit 6

### How Do They Get Up There? (page 52)

1. D
2. A
3. C

### Part 2

The arrow should be pointing down.

### Taking Turns at the Front (page 53)

Blue circle — around the last two birds

Red square — around the bird in front

More birds — two birds drawn behind the back row

### Some Birds Cannot Fly (page 54)

1. false, flying, flightless
2. true
3. false, flier, swimmer
4. true
5. false, animal, bird
6. false, Africa, Australia
7. true
8. false, fewer, more



## Word Study (page 119)

1. ape
2. car
3. ox
4. tea
5. one
6. ice
7. air
8. table
9. tree

## Unit 14

### Everything Is in Motion (page 120)

1. D
2. A
3. D

Challenge: False, but accept all responses that show critical thinking.

### What's Truly on the Move? (page 121)

1. true (colored car)
2. false (x)
3. false (x)
4. true (colored car)
5. true (colored car)

### What Goes Up Must Come Down (page 122)

1. C
2. C
3. A
4. B

### Red Light, Green Light (page 123)

1. green
2. red
3. red
4. green

### The Science of Making Waves (page 124)

1. wind
2. friction
3. gravity

### The Push and Pull of Force (page 125)

1. pull
2. push
3. push
4. pull
5. pull
6. push

## The Most Simple of Machines (page 126)

1. lever
2. wedge
3. wheel
4. inclined plane

## Word Study (page 127)

Verbs: played, hit, stole, pitched, caught, cheered

## Unit 15

### Our Lives Are Full of Energy (page 128)

Part 1: All pictures should be circled.

Part 2: Picture should be of the sun.

### Plugging in to Electricity (page 129)

The word "current" should be circled because the picture shows electricity that moves from one place (the wall socket) to another (the refrigerator).

### Have You Heard About This? (page 130)

1. B
2. C
3. A

### Lightning, Then Thunder (page 131)

Story #2, because the narrator saw the crash first and then heard it.

### You and Your Shadow (page 132)

- |        |        |
|--------|--------|
| 1. yes | 3. no  |
| 2. no  | 4. yes |

### Attracted or Not? (page 134)

Colored: paper clip, fish hook, screw, spoon

Crossed out: pencil, football, glass, book

## Word Study (page 135)

- |           |           |
|-----------|-----------|
| 1. sound  | 4. fossil |
| 2. plants | 5. magnet |
| 3. sleep  | 6. heat   |

## Unit 16

### Space and Everything in It (page 136)

#### Part 1

- |          |          |
|----------|----------|
| 1. true  | 4. true  |
| 2. false | 5. false |
| 3. false |          |

#### Part 2

big = planet

bigger = solar system

biggest = galaxy