



Warm-Up 30

The Creatures of the Coral Reefs

Name: _____

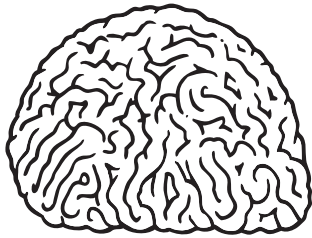
Coral reefs are made up of small animals covered in hard shells. These animals grow together. They form a community. A lot of animals live in and around this community.

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.

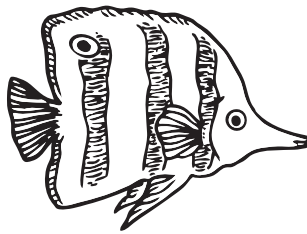
Brain Coral

This coral is shaped like the human brain.



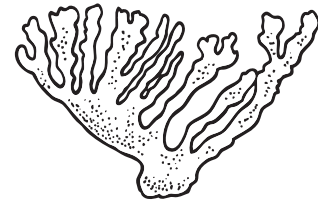
Butterfly Fish

This fish has a large, eye-shaped spot.



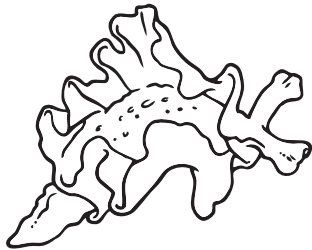
Elkhorn Coral

This coral looks like an elk's antlers.



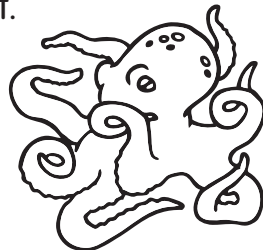
Lettuce Leaf Sea Slug

This green sea slug has no shell.



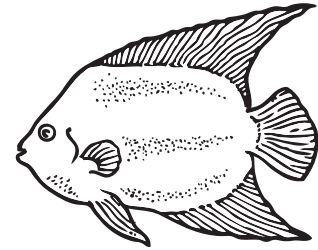
Octopus

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



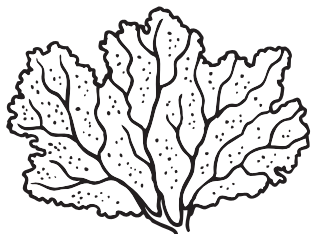
Queen Angelfish

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



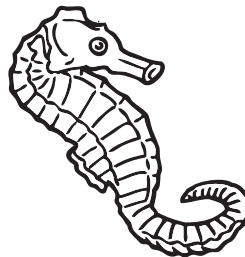
Seafans

These coral move like small fans in the water.



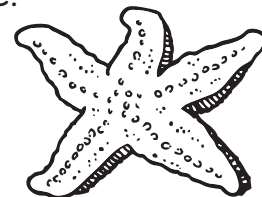
Sea Horse

This unique fish looks like a tiny horse.



Sea Star

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




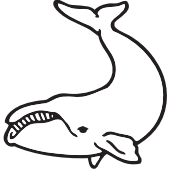

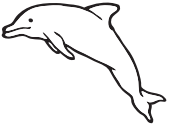


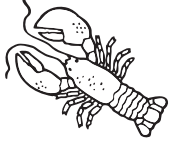



Warm-Up 34

Underwater-Animal Math

Name: _____

You probably know that an octopus has 8 arms. But did you know about these other animal numbers?

<p>A jellyfish</p>  <p>has 0 bones.</p>	<p>A baleen whale</p>  <p>has 2 blowholes.</p>	<p>A squid</p>  <p>has 3 hearts.</p>	<p>A dolphin</p>  <p>has 4 fins.</p>
<p>A zebrafish</p>  <p>has 5 stripes.</p>	<p>A shark</p>  <p>has 8 fins.</p>	<p>A lobster</p>  <p>has 10 legs.</p>	<p>A scallop</p>  <p>can have 100 eyes!</p>

Directions: Use the animal facts from above to solve these word problems.

1. number of stripes on a zebrafish + number of legs on a lobster =

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

2. number of fins on a dolphin + number of hearts in a squid =

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

3. number of fins on a shark – number of blowholes on a baleen whale =

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

4. number of legs on a lobster – number of arms on an octopus =

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

5. number of eyes on a scallop + number of bones in a jellyfish =

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$



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?



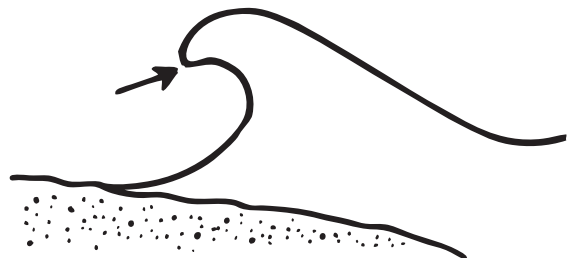
friction gravity wind

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

Answer Key



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

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
2. worm
3. bear
4. rabbit
5. snail
6. elephant
7. penguin
8. mouse
9. monkey
10. panda
11. armadillo
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