

Space, and Everything in It

	Everything in It			
Name:				
Space is huge. It contains our planet, which is called Earth. It is also where the sun, the moon, and the stars we see in the sky are. But that's only just a tiny bit of what is in space.	Our solar system isn't the only solar system in space. It is one of many in our galaxy, which is called the Milky Way. There are billions of stars and billions of planets in the Milky Way. And the Milky Way is only one galaxy. There are billions of galaxies in space!			
Think of how big our planet is. Earth is just one small part of a solar system. There are eight planets in our solar system, and Earth isn't even close to being the biggest.				
What Did You Learn				
Part 1 Directions: Write True or False next	to each sentence.			
1. Earth is part of a g	Earth is part of a galaxy called the Milky Way.			
2. Earth is the bigges	Earth is the biggest planet in our solar system.			
3. The Milky Way is the	The Milky Way is the only galaxy in space.			
4. The sun and the m	on are part of our solar system.			
5. There are billions of	There are billions of planets in our solar system.			
Part 2 Directions: Now look at the space terms in the box. Think about how big each of these things is in space. Write them in order from smallest to biggest.	Space Terms galaxy planet solar system			

big

bigger

biggest

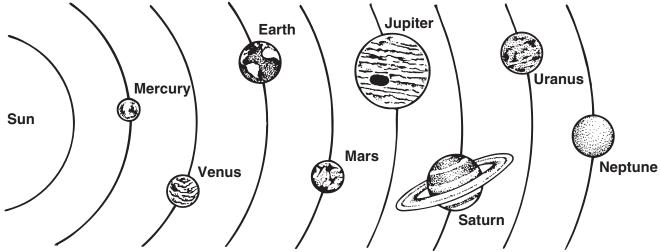
go around the e planets that e sun are colder.

The Sun and the Planets

Name:			
1 1GIIIC.			

There are eight planets in our solar system. These eight planets all go around the sun. Some are close to the sun. Some are very far from the sun. The planets that are closer to the sun are hotter. The planets that are farther from the sun are colder.

This diagram shows the sun and the eight planets in order:



Directions: Use the diagram above to answer these questions. Fill in the circle of each correct answer.

- 1. Mercury is the 1st planet from the sun. Earth is the _____ planet from the sun.
 - ② 2nd

® 3rd

© 4th

Warm-Up 131

- **2.** _____ is the planet farthest from the sun.
 - A Mercury

Saturn

- © Neptune
- 3. Which one of these planets would most likely be coldest?
 - Uranus

® Venus

© Mars

What Am I



I am the largest planet in our solar system. I am the fifth planet from the sun.



Earth's Next-Door Neighbors

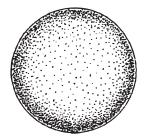
Earth is the third planet from the sun. Venus is the second, and Mars is the fourth. In our solar system, Venus and Mars are our Earth's neighbors. However, they are very different planets.

Of all the planets, Venus is the closest to Earth. It is almost the same size as Earth. No other planet is so close to being the same size as Earth. But Venus is very hot. It is the hottest planet in our solar system. The temperatures on Venus are over 800°F (over 400°C). This makes Venus far too hot to have any water.

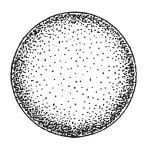
Mars is about half the size of Earth. It is often called the "Red Planet" because an element on its surface makes it look reddish. Mars has seasons that are much like Earth's. While Mars can be very cold, it can have high temperatures of about 70°F (20°C) in the summer. Scientists have even collected information that shows that fresh water once flowed on Mars.

Directions: Read each statement. If it is talking about Venus, color the planet **yellow**. If it is talking about Mars, color the planet **red**.

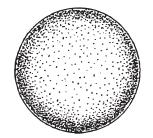
1. It is called the "Red Planet."



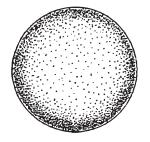
4. It is the second planet from the sun.



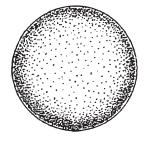
2. It is almost the same size as Earth.



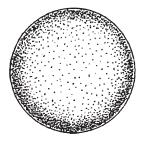
5. It has very hot temperatures.



3. It is much smaller than Earth.



6. It has seasons like Earth does.



Extra: Which planet seems like it would be better to live on, Venus or Mars? On the back of this paper, write your choice and explain why you chose it.



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
- plants
 sleep
- 5. magnet6. 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

Answer Key



The Sun and the Planets (page 137)

- **1.** B
- **2.** C
- **3.** A

What Am I?: Jupiter

Earth's Next-Door Neighbors (page 138)

- 1. Mars (red)
- 2. Venus (yellow)
- 3. Mars (red)
- 4. Venus (yellow)
- **5.** Venus (yellow)
- **6.** Mars (red)

Many, Many Moons (page 139)

- 1. C
- **2**. B
- 3. 14 moons should be colored
- **4.** C

Twinkle, Twinkle, Big Star (page 140)

- 1. star
- **2.** air
- 3. Earth

Stars with Hair? (page 141)

Three ingredients: ice, dust, rocks

What Do You See in the Stars? (page 142)

- 1. blue
- 2. Answers will vary.
- 3. Answers will vary.

Word Study (page 143)

- 1. yes
- **2.** no
- 3. ves
- **4.** no
- **5**. yes

Unit 17

The Third Planet from the Sun (page 144)

Part 1: blue = water; brown = land; white = clouds

Part 2: On <u>Earth</u>, plants produce <u>oxygen</u>. This gas helps create the <u>ozone</u> layer. This layer protects us from the rays of the sun.

A Look Inside Our Planet (page 145)

Part 1:

- 1. crust 3. outer core
- 2. mantle 4. inner core

Part 2:

THICK should be written inside the mantle.

LIQUID should be written inside the outer core.

A Puzzle Made of Moving Pieces (page 146)

Part 1: Picture B should be circled.

Part 2: tectonic plates

Our Ever-Changing Earth (page 147)

Section 1: earthquake, volcano

Section 2: Accept reasonable responses.

Section 3: erosion (water running across rock)

All the Days and Years on Earth (page 148)

Part 1: 1. 24 hours; 2. 365.25 days

What Is in the Air? (page 149)

- 1. nitrogen
- 2. oxygen
- **3**. C

Some Facts About Earth (page 150)

Part 1: B

Part 2: name: Mount Everest; continent: Asia;

height: 29,000 feet

Word Study (page 151)

Part 1

- **1.** dav
- 2. midnight
- 3. south
- 4. inside
- 5. below

Part 2

- 1. world
- **2.** 12 p.m.
- **3.** 365 days
- **4.** 24 hours
- **5.** 12 a.m.

Unit 18

Life on a Rocky Planet (page 152)

- **1**. B
- **2**. A
- **3**. C
- 4. Accept appropriate responses.

The Three Main Kinds of Rock (page 153)

Igneous: 3, 6, 8 Sedimentary: 2, 4, 5 Metamorphic: 1, 7