



Table of Contents

Introduction	4
Meeting Standards	5
Life Science	
Unit 1: Carnivores	7
What Are Carnivores? — Carnivore Descriptions — Carnivore Features — Less Familiar Carnivores — Carnivore Math — Word Study	
Unit 2: Adaptations	13
What Are Adaptations? — Mammal Adaptations — Recognizing Adaptations — Animal Adaptation Types — Studying Adaptations — Animal Strengths and Weaknesses — Word Study	
Unit 3: Food Chains and Food Webs	20
What Are Food Chains and Food Webs? — Making Food Webs — Working with Food Chains and Trophic Levels — Trophic Levels Fact Sheet — Word Study	
Unit 4: The Biosphere	25
What Is the Biosphere? — Biome Descriptions — Thinking About Biomes — The Value of Tropical Rainforests — Arctic Tundra — What Are Wetlands? — Word Study	
Unit 5: Cycles in Nature	32
What Is the Carbon Cycle? — Carbon Cycle — Oxygen Cycle — What Is Oxygen? — Nitrogen Cycle — Cycles in Nature — Word Study	
Unit 6: The Water Cycle	39
What Is the Water Cycle? — How Water Travels — How Does Rain Happen? — Water Cycle Facts — Precipitation Math — Water Acrostic Puzzle — Word Study	
Unit 7: Human Body Systems	46
The Human Body — The Systems of the Human Body — The Circulatory System — Your Pulse Rate — Heartbeat Math — Word Study	
Unit 8: Plants	52
What Is Photosynthesis? — Plant Parts — Learning About Trees — What Are Geotropism and Phototropism? — Plant Word Scramble — Word Study	
Physical Science	
Unit 9: Laws of Motion	58
What Are the Laws of Motion? — Laws of Motion in Action — Inertia and Momentum: Math in Motion — Actions and Motions — Thinking About the Conservation of Momentum — Isaac Newton — The Importance of Isaac Newton — Word Study	
Unit 10: Light	66
The Speed of Light — The Truth About Light — Seeing Light — What Is Electromagnetic Radiation? — Word Study	
Unit 11: Magnetism	71
What Is Magnetism? — Working with Magnets — How Do Electromagnets Work? — Get Familiar with Magnets — Word Study	
Unit 12: Physics	76
What Is Physics, and Where Does It Work? — Identifying Forces in Physics — Physics in Action — The Importance of Physics — Physics Crossword Puzzle — Word Study	
Unit 13: Simple Machines	82
Simple Machines Make Work Easier — Examples of Simple Machines — Recognizing Simple Machines — Understanding Levers — Simple Machines in Common Tools — Simple Machines and Human Tools — Word Study	

Table of Contents *(cont.)*



Physical Science *(cont.)*

Unit 14: Temperature	89
What Is Temperature? — What Is Heat? — Fahrenheit Temperatures — Celsius and Fahrenheit Comparisons — Graphing Temperatures — Word Study	
Unit 15: Energy	95
What Is Energy? — Potential and Kinetic Energy — Forms of Energy — Understanding Energy Chains — Word Study	
Unit 16: Elements	100
Elements on Earth — Element Uses in Materials — Name That Element — Elements and Compounds — Word Study	
Unit 17: Molecules	105
Molecules in Motion — Molecule Magic — What Are Atoms? — Atoms and Molecules — Word Study	
Unit 18: Rainbows	110
What Are Rainbows? — What Is the Spectrum? — Making a Rainbow — Why Is the Sky Blue? — Why Sunsets Are Red — Word Study	

Earth and Space Science

Unit 19: Solar System	116
Take a Tour Through the Solar System! — Planet Peculiarities — Neptune: The Windy Planet — Computing Planetary Circumference — What Is Your Weight on Mars? — Distances in the Solar System — Asteroids: The Failed Planet — Word Study	
Unit 20: The Moon	124
The Moon in Motion — Waxing and Waning — Phases of the Moon — Moon Facts and Figures — Word Study	
Unit 21: Oceans	129
Rivers in the Ocean — Who Lives in the Ocean Zones? — Charting the Oceans — What Are Ocean Tides? — Marine Scientist Robert Ballard — Word Study	
Unit 22: Earthquakes	135
How Earthquakes Happen — Earthquakes Through the Years — What Is the Richter Scale? — Severe Earthquakes in a “Ring of Fire” — Living with Earthquakes — Word Study	
Unit 23: Volcanoes	141
The Exploding Earth — Types of Volcanoes — Volcano Terms — Volcano Features and Types — Hotspot Volcanoes — Volcanic Eruptions — Word Study	
Unit 24: Prehistoric World	148
Early Ages of Earth — What Are the Geological Ages? — The Age of Dinosaurs — Living in the Cenozoic Age Today — Name That Dinosaur — Paleontologists Jack Horner and Michael Novacek — Word Study	
Unit 25: Pangaea	155
Meet Pangaea or “All Land” — Drifting Continents — What in the World Is Plate Tectonics? — The Continents Keep On Drifting — Pangea Math — Word Study	
Unit 26: Climate	161
If You Don’t Like the Climate... — The Pros and Cons of Climate — Climate Clues — You and Your Climate — Reading Graphs: Temperature — Word Study	

Answer Key	167
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The lessons and activities included in *Daily Warm-Ups: Science, Grade 6* meet one or more of the following Common Core State Standards. (©Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.) For more information about the Common Core State Standards, go to <http://www.corestandards.org/> or visit <http://www.teachercreated.com/standards/>.

Reading: Informational Text	
Key Ideas and Details	Units
Standard 1: RI.6.1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	2–7, 9–11, 13, 14, 15, 17–26
Standard 2: RI.6.2. Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	4, 5, 6, 9–12, 17, 18, 22, 25
Standard 3: RI.6.3. Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).	3–7, 9–12, 17, 18, 20, 22, 23, 25, 26
Craft and Structure	Units
Standard 4: RI.6.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.	All
Integration of Knowledge and Ideas	Units
Standard 7: RL.6.7. Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.	All
Range of Reading and Level of Text Complexity	Units
Standard 10: RL.6.10. By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	All
Writing	
Text Types and Purposes	Units
Standard 1: W.6.1. Write arguments to support claims with clear reasons and relevant evidence.	1, 4, 5, 6, 9–13, 17–20, 22–26
Standard 2: W.6.2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.	All
Standard 3: W.6.3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.	1, 3–6, 8, 9, 12, 17–20, 22, 24, 25, 26



Production and Distribution of Writing	Units
Standard 4: W.6.4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.	All
Research to Build and Present Knowledge	Units
Standard 9: W.6.9. Draw evidence from literary or informational texts to support analysis, reflection, and research.	All
Science and Technical Subjects	
Key Ideas and Details	Units
Standard 1: RST.6-8.1. Cite specific textual evidence to support analysis of science and technical texts.	1, 3–7, 9–12, 18, 19, 20, 22, 23, 25, 26
Standard 2: RST.6-8.2. Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.	4, 5, 6, 9–12, 17, 18, 22, 25
Craft and Structure	Units
Standard 4: RST.6-8.4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.	All
Standard 6: RST.6-8.6. Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.	3, 5–9, 11, 13, 18–21
Standard 7: RST.6-8.7. Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).	1–11, 13, 14, 15, 18–26



Name: _____

Did you realize that animals and plants depend upon each other in order to survive in an ecosystem? They are also killed and eaten within the ecosystem. One species of animal eats some of the plants within the system and is, in turn, eaten by other animals. Some of these animals are then eaten by different animals. These levels of consumption are called *trophic levels*, and they create a food chain. A group of interrelated food chains is called a *food web*.

The trophic levels designate specific types of producers and consumers. Plants are always the producers and the basic level of a food chain. They use the light and energy from the Sun to produce food. Plants are eaten by animals called *primary consumers*. These primary consumers, those who eat the plants, are eaten by other animals called *secondary consumers*. The secondary

consumers, the meat-eaters, are eaten by *tertiary consumers*, which eat these meat-eating animals.

However, things are not always quite as clear as the names suggest. Some animals, like bears, may eat plants such as berries, small meat-eating animals, and larger secondary consumers, as well. Decomposers are another set of organisms. They decompose dead plants and animals and return the nutrients to the soil.

Most food chains are interlinked with each other because very few animals feed on just one thing. Birds may eat both plant food and insects and sometimes even smaller birds or eggs. Some rats and mice may eat a wide variety of plant food, insects, and some smaller rodents or eggs. Animals with a wide variety of food choices often have a greater opportunity for survival than those who are able to eat only one type of food.

What Did You Learn ?

- Which of the following is the highest level in a food chain described above?

(A) producers	(C) primary consumers
(B) tertiary consumers	(D) secondary consumers
- Which of the following is the lowest level in a food chain?

(A) producers	(C) primary consumers
(B) tertiary consumers	(D) secondary consumers
- What trophic level returns nutrients to soil from dead plants and animals?

(A) producers	(C) decomposers
(B) secondary consumers	(D) tertiary consumers
- Which level of consumers would a horse belong to?

(A) decomposers	(C) primary consumers
(B) tertiary consumers	(D) secondary consumers

What Am I ?

I am a group of animals that eat only plants.



Name: _____

What is photosynthesis? How does it work? Who needs it? An astronaut looking at Earth from space sees a green and blue planet. The oceans provide the blue, and billions of plants provide the green view of land. The Sun is the source of energy in the form of light and heat. Photosynthesis is the process by which plants make food. The word means “putting together with light.” Photosynthesis occurs inside the leaves of a plant. The leaves contain a green substance called *chlorophyll*. This substance traps and absorbs the blue and red parts in sunlight and converts them into a form of energy within the plant. Other pigments of different colors in some plants capture the light as well. Plants with different colors, such as seaweed, use these pigments to capture sunlight, as well as chlorophyll. Their leaves may be a different color.

Water is absorbed by the roots of the plant and carried up the stem to the leaves. The *stomata*, which are tiny holes in the underside of leaves, absorb carbon dioxide from the air. The water, carbon dioxide, and energy created by the sunlight and chlorophyll are converted into a simple form of sugar called *glucose*. This occurs in a series of chemical reactions fueled by the trapped sunlight. The plant stores this glucose as food to fuel the cells. It also uses glucose to make starch and cellulose. Oxygen is also released from the leaves during the day. At night, oxygen is taken in and carbon dioxide is released. Water also evaporates through the stomata on the underside of the leaves.

So photosynthesis is the process by which plants make food. This is the basic food for animals and humans. We all need photosynthesis for life to survive on the planet.

What Did You Learn ?

- Which word means “putting together with light”?
Ⓐ chlorophyll
Ⓑ stomata
Ⓒ photosynthesis
Ⓓ both A and B
- What color is chlorophyll?
Ⓐ purple
Ⓑ brown
Ⓒ green
Ⓓ red
- Which of the following is not used in photosynthesis?
Ⓐ water
Ⓑ sunlight
Ⓒ chlorophyll
Ⓓ carbon monoxide
- What does the chemical reaction in a plant leaf produce?
Ⓐ glucose
Ⓑ sunlight
Ⓑ nitrogen
Ⓓ chlorophyll

What Am I ?


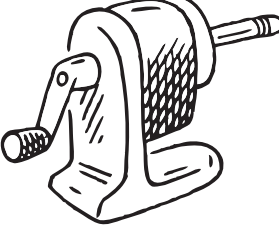

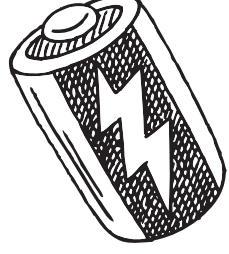

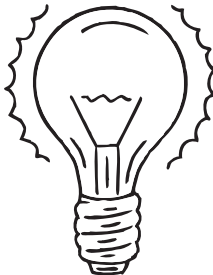
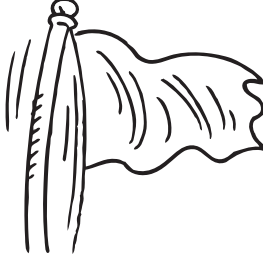
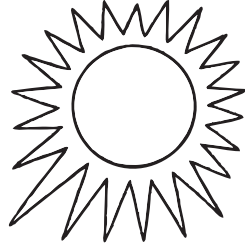
I am the process by which food is made in plants with the help of light.



Name: _____

Directions: Determine which form of energy is being described in each part below. Two answers may apply in some actions.

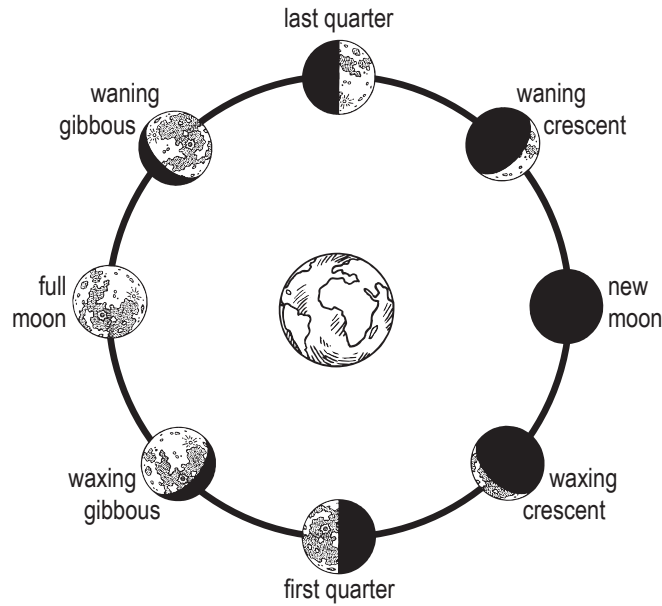
Energy Forms

 sound	 mechanical	 chemical	 electrical
 heat	 light	 wind	 solar

- | | |
|--|--|
| <p>1. _____ digesting food</p> <p>2. _____ boiling water</p> <p>3. _____ tornado</p> <p>4. _____ mixing vinegar and baking soda</p> <p>5. _____ cooking a small piece of bread in the sun</p> <p>6. _____ getting a suntan</p> <p>7. _____ making a lightbulb light with a battery</p> <p>8. _____ using a doorbell</p> <p>9. _____ pedaling a bicycle</p> <p>10. _____ using a pinwheel</p> | <p>11. _____ starting a fire in the fireplace</p> <p>12. _____ turning on an electric lamp</p> <p>13. _____ screaming while watching a football game</p> <p>14. _____ whistling</p> <p>15. _____ a speeding train</p> <p>16. _____ singing your favorite song</p> <p>17. _____ cooking a steak</p> <p>18. _____ flying a small plane</p> <p>19. _____ cooking breakfast</p> <p>20. _____ driving a car</p> |
|--|--|



Name: _____



The moon is constantly seen from Earth through one of the phases shown above.

The moon goes through one complete cycle in about 30 days (exactly 29 days and 13 hours).

Directions: Use the information above to answer these questions.

1. In what phase is the moon not seen from Earth? _____
2. In which two phases is the least amount of the moon visible at night?

3. In which phase is the moon fully visible as a round ball? _____
4. In which two phases is the moon partially visible as a squashed or humped ball of light?

5. In what phase is it easiest to see at night for traveling? _____
6. Which moon phase do you like most? Why? What can you do best when the moon is in this phase?

7. About how many days does the moon remain in each phase? _____
8. What is the moon going to look like tonight? (Check your answer tonight.)

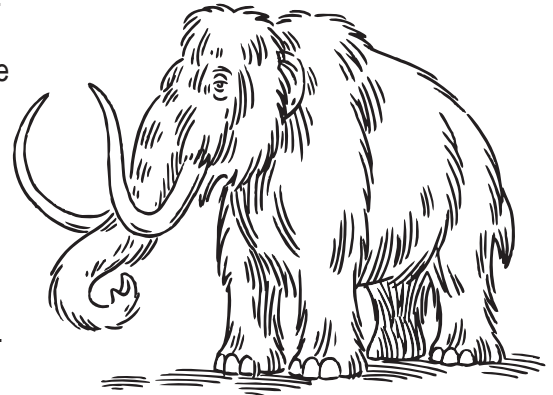
Living in the Cenozoic Age Today



Name: _____

The Cenozoic Age is the present period of time featuring mammals. It is also the period of development for humans as a species. The mass destruction of dinosaurs occurred in the K-T Extinction Event about 65 million years ago. Earth went through a series of shorter periods and climate changes. In the first ten million years of the age, flowering plants developed into many species. Insects, which pollinated plants, became widespread. In the years from 55 million years ago to 25 million years ago, many species of mammals developed rapidly. The primates—which include monkeys, apes, and humans—acquired more members. Giant flightless predator birds became plentiful. Some early mammal forms became extinct. The climate remained warm.

About 25 million to five million years ago, the climate became cooler. Forests began to decrease in size throughout the world. Hoofed mammals, such as deer, became more plentiful. The first human-like creatures developed. In the next three million years, the global climate was cold and dry. The land animals were similar to modern mammals. About two million years ago, a period of severe global cooling occurred. Ice ages featured glacial cold spells as well as some warmer periods between the glaciers. They were common for more than one-and-a-half million years. Some ice-age mammals, such as saber-toothed tigers and woolly mammoths, became extinct. Just 18,000 year ago, glaciers covered most of Europe and North America and even Hawaii. The last few thousand years have witnessed the rapid warming of Earth and the spread of humans over most of the continents.



Working with Ice Age Terms

Directions: Match the words on the left with the definitions on the right. Use the context of the paragraph to help with unfamiliar words.

- | | | |
|-------|-------------------|--|
| _____ | 1. flightless | a. an animal that preys on other animals |
| _____ | 2. mammals | b. animals that feed their offspring milk |
| _____ | 3. global | c. no members of the species survive |
| _____ | 4. ice age | d. a period of intense cold and glaciers |
| _____ | 5. K-T event | e. large mammals with hard coverings on their feet |
| _____ | 6. hoofed mammals | f. the last period or age of Earth, including now |
| _____ | 7. predator | g. massive plates of ice that cover huge areas |
| _____ | 8. extinct | h. unable to fly (even with wings) |
| _____ | 9. glaciers | i. worldwide |
| _____ | 10. Cenozoic Age | j. a massive catastrophe 65 million years ago |