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Introduction

Each book in the *Power Practice*™ series contains over 100 ready-to-use activity pages to provide students with skill practice. The fun activities can be used to supplement and enhance what you are teaching in your classroom. Give an activity page to students as independent class work, or send the pages home as homework to reinforce skills taught in class. An answer key is provided for quick reference.

The practical activities, charts, diagrams, and definition pages in *Life Science* supplement and enrich classroom teaching to enhance students' understanding of vocabulary, functions, and processes fundamental to living organisms. This book features the following topics:

- Kingdom Animalia
- Kingdom Monera
- Kingdom Protista
- Kingdom Fungi
- Kingdom Plantae
- photosynthesis
- metamorphosis
- ecology
- Earth's biomes
- root systems
- and more!

Use these ready-to-go activities to “recharge” skill review and give students the power to succeed!

Life Processes

What is the difference between a living and nonliving thing? A living thing must carry out six basic life processes: get energy, use energy, get rid of waste, reproduce, grow, and respond to change. Nonliving things may be able to do one or two of these processes, but they cannot do all of them and are therefore nonliving. Use the phrases in the word box to label each example shown in the illustrations.

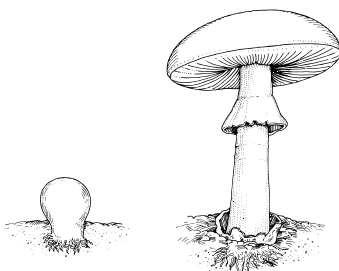
getting energy
growing

using energy
reproducing

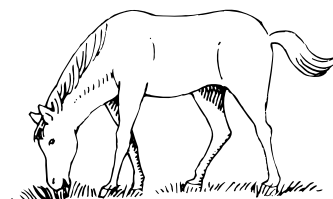
getting rid of waste
responding to change



1 _____



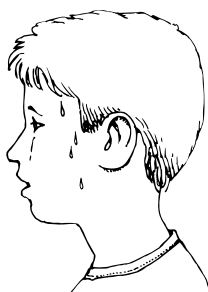
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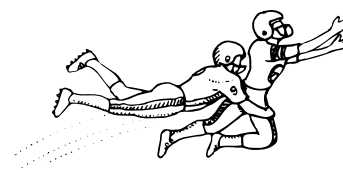
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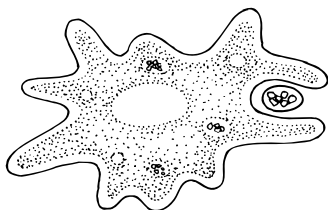
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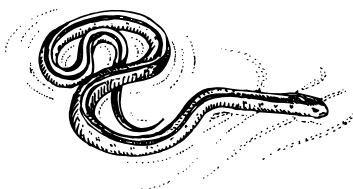
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6 _____



7 _____



8 _____



9 _____

The Carbon Dioxide-Oxygen Cycle

Matter is continuously cycled between the living and nonliving parts of an ecosystem and between ecosystems. Matter is recycled, no new matter is added to the earth and none is lost. One example of this is in the carbon dioxide-oxygen cycle. Match each term in the word box with its description.

carbon dioxide producers	oxygen consumers	photosynthesis aerobic	marine algae geologic activity	decomposers fossil fuels
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1 _____ Carbon is present in Earth's atmosphere in the form of this gas.

2 _____ The world's oceans hold most of the carbon in a dissolved form. These organisms use the carbon and release oxygen back into the atmosphere.

3 _____ Plants, also called this, use carbon dioxide to make their own food.

4 _____ This process, used by producers, releases oxygen into the atmosphere as a byproduct.

5 _____ These organisms cycle carbon through their bodies through the foods they eat. After they die and decompose, carbon is released back into the soil and atmosphere.

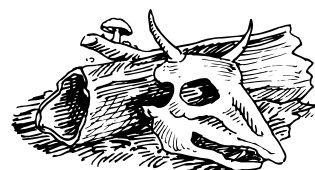
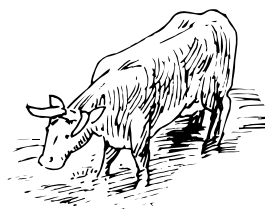
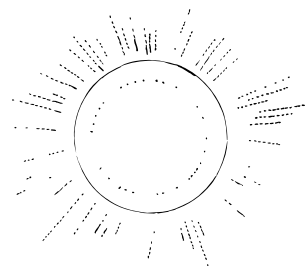
6 _____ The burning of these has put more carbon back into the atmosphere than can be cycled naturally.

7 _____ These organisms feed off of dead material and release the carbon back into the cycle.

8 _____ This type of respiration uses oxygen and produces carbon dioxide as a byproduct.

9 _____ Examples of this include volcanic eruptions and weathering of limestone rock, both of which release carbon into the atmosphere.

10 _____ The respiration of consumers uses this gas and releases carbon dioxide as a byproduct.

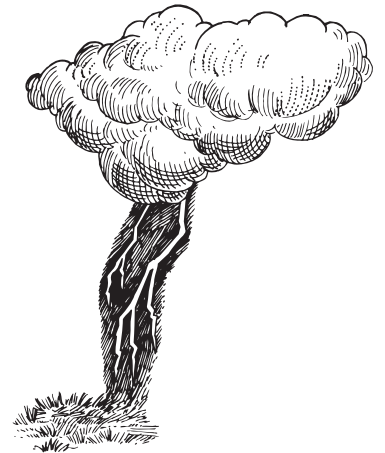


The Nitrogen Cycle

Another important cycle is the nitrogen cycle. Nitrogen is necessary for life. It is found in all proteins that cells use for growth. The amount of nitrogen stays the same as it is cycled through living and nonliving things. Match each term in the word box to its description.

lightning bacteria	leaching atmosphere	ammonia decomposition	legumes nitrification	amino acids animals
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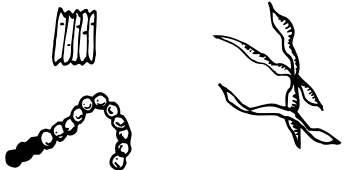
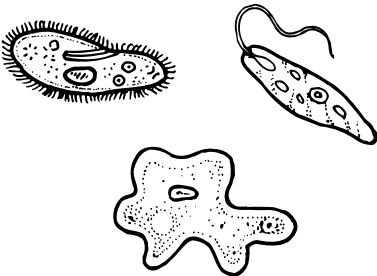
- 1 _____ Nitrogen is a building block of these, a component of protein in all living things.
- 2 _____ 80% of this consists of nitrogen, making it the largest reservoir of this element on Earth.
- 3 _____ Only certain bacteria, volcanic action, and this can break down nitrogen in the air and convert it into a form that enters food webs.
- 4 _____ Nitrogen is fixed into the soil for plants to use through the activities of this.
- 5 _____ Plants use nitrogen in the soil as they grow. Directly or indirectly, plants are the only nitrogen source for these.
- 6 _____ During this process bacteria and fungi break down wastes and remains of organisms into ammonia.
- 7 _____ This process occurs when water in the soil moves out of an area, taking the dissolved nitrogen and other nutrients with it.
- 8 _____ This plant crop is able to fix nitrogen from the atmosphere into the soil.
- 9 _____ During this process bacteria convert nitrogen in the soil and release it back into the atmosphere.
- 10 _____ When plants and animals die, their nitrogen compounds are broken down into this.



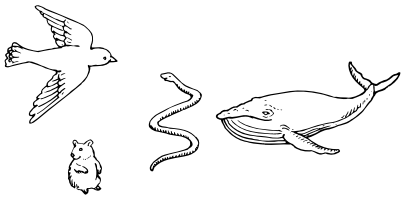


The Five Kingdoms

Scientists classify all living things into five different groups. These groups are called kingdoms. Use the terms in the word box to label the kingdom and common name for each group.

Animalia plants molds, mushrooms, lichen	Plantae bacteria	Monera single-celled organisms	Fungi organisms	Protista animals
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<p>1 Kingdom: _____</p> <p>Common Name: _____</p>	<p>2 Kingdom: _____</p> <p>Common Name: _____</p>
	

<p>3 Kingdom: _____</p> <p>Common Name: _____</p>	<p>4 Kingdom: _____</p> <p>Common Name: _____</p>	<p>5 Kingdom: _____</p> <p>Common Name: _____</p>
		

Classification of Living Things

Within a kingdom, the species are connected in some way. In the two largest kingdoms, Plantae and Animalia, the diversity among the species can be great. Each kingdom can be further divided into smaller and more precise categories until only a single species is represented. Use the terms in the word box to complete the chart.

conifers	bacillis	lichens	bread molds	monocots
ferns	mushrooms	salmonella	mammals	reptiles
truffles	amoeba	streptococcus	paramecium	birds
yeast	protozoa	euglena	amphibians	dicots
insects	algae	spirochetes	lactobacillus	horsetails


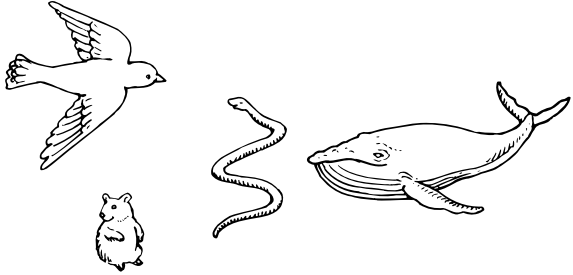
Kingdom Monera	Kingdom Protista
Examples:	Examples:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Kingdom Fungi	Kingdom Plantae	Kingdom Animalia
Examples:	Examples:	Examples:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Plant or Animal?

Two of the largest groups of all living things are the plant and animal kingdoms. These two kingdoms have distinct characteristics while having others in common. Use the phrases in the word box to complete the chart. Some phrases are used more than once.

living organisms	formed from cells	cells have chlorophyll
cells have no chlorophyll	makes own food	moves from place to place
obtains food from outside sources	has limited movement	reproduces its own kind
depends on sun's energy		

Plant	Animal
	
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