

Vocabulary Activity

Place each word from the box below in the column that describes your knowledge of the word.
Summarize what you know about the word.

Vocabulary Words

mass magnetism physical state density
soluble thermal energy electric energy

Example

	This is a brand new word for me.	I have seen the word, but I do not know the meaning.	I think I know the meaning.	I know the meaning.
WORD		mass		
Summary				
WORD				magnetism
Summary				The pulling force of a magnet
WORD			physical state	
Summary			Solid, liquid or gas	
WORD	density			
Summary				
WORD	soluble			
Summary				
WORD				thermal energy
Summary				Heat energy
WORD			electric energy	
Summary			Energy that occurs when something is plugged into an outlet.	

Vocabulary Activity

Fill in the blanks with the appropriate answer. Write answers using the Celsius scale.

**Water:
Celsius Scale**

- The Boiling Point**
• What is the boiling point of water?
_____ 100°C _____
- The Freezing Point**
• What is the freezing point of water?
_____ 0°C _____
- The Melting Point**
• What is the melting point of water?
_____ 0°C _____

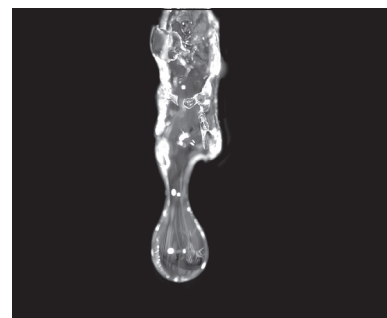
Use pictures to draw representations of boiling point, freezing point, and melting point.



Boiling Point = 100°C



Freezing Point = 0°C



Melting Point = 0°C

Vocabulary Activity

Look at the following vocabulary chart. Draw a picture to help you remember what the word means. Cut the squares apart and practice matching the words with the correct definitions and pictures.

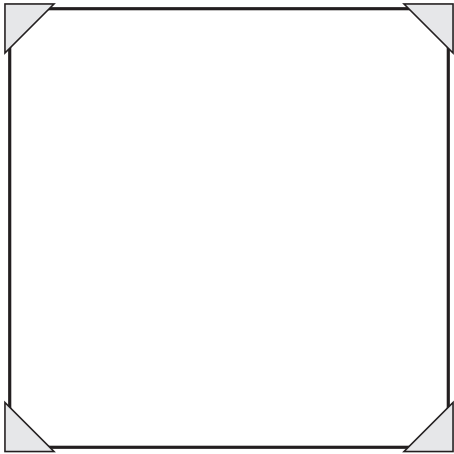
Mixture Mix-Up

Vocabulary Word	Definition	Picture
Mixture	A combination of two or more substances that keep their own properties.	Pictures may vary.
Magnetism	The pulling force of a magnet.	
Combine	To put two or more substances together.	
Separate	To take apart.	
Iron filings	A small piece of shaved iron.	
Physical property	A characteristic of a substance that can be observed or measured without changing the substance.	

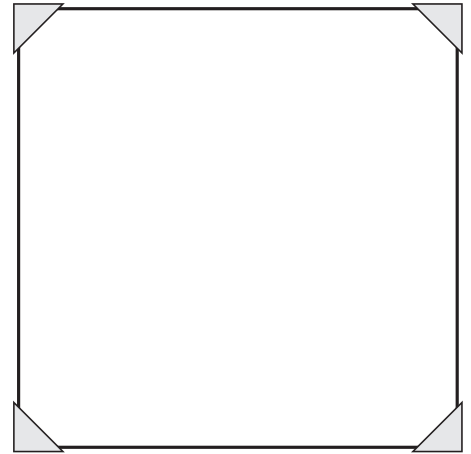
Vocabulary Activity

Picture this Solution

Use the spaces below to illustrate the meanings of the words.

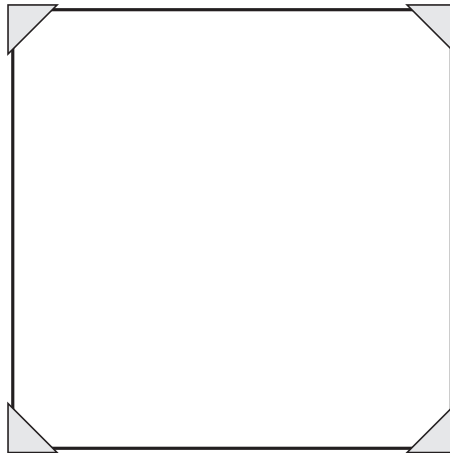


Solution

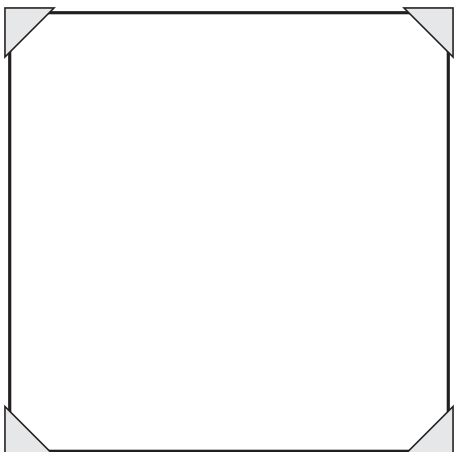


Dissolve

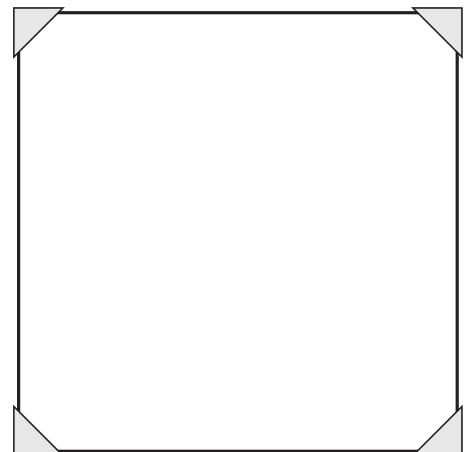
Illustrations may vary.



Homogenous



Solvent



Solute



Vocabulary Activity

Cut along the outside edges of the design. Then fold the triangular flaps along the dotted line. On the outside of the flap write the word. On the inside write a sentence using the word, and draw a picture describing the word.

heating and cooling
melting

freezing
evaporating

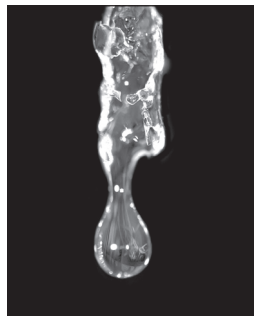
Heating and cooling cause changes to the physical state of matter.



Freezing occurs when a substance changes from a liquid to a solid.



The melting icicles dripped as they were heated by the Sun.



After several hours, the puddles in the yard began evaporating.



Vocabulary Activity

Write a vocabulary word in the top of each triangle, a definition in the middle, and examples of how the form of energy is used at the bottom. An example is done for you.

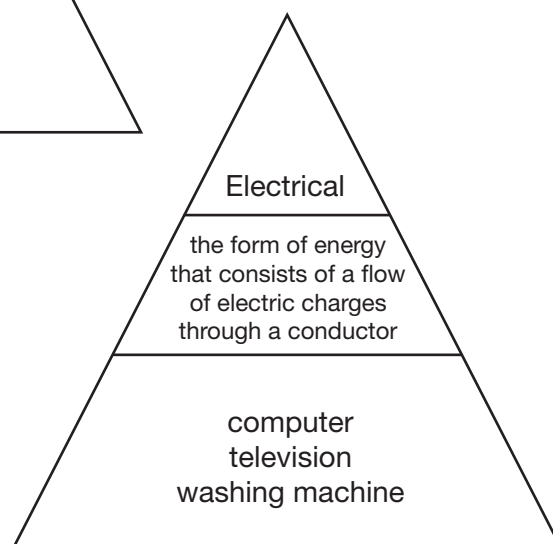
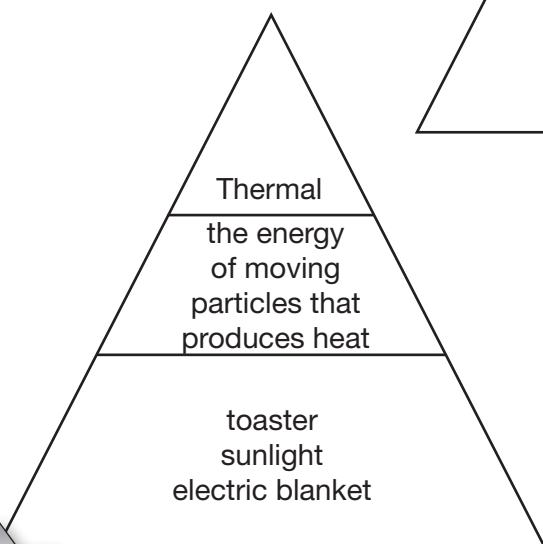
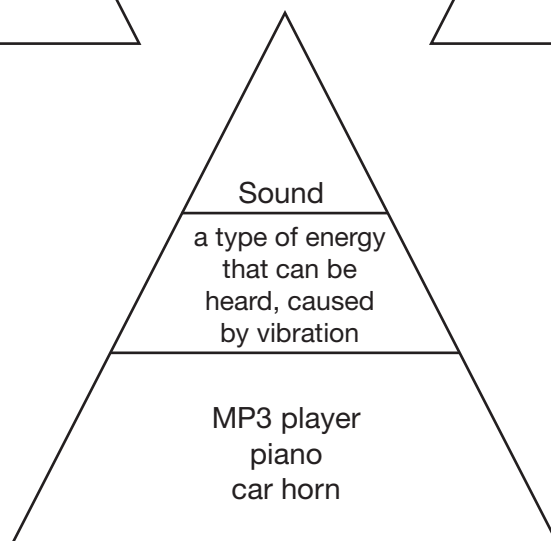
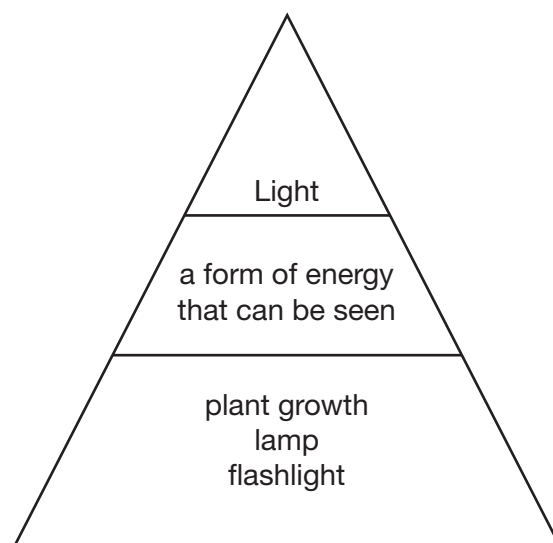
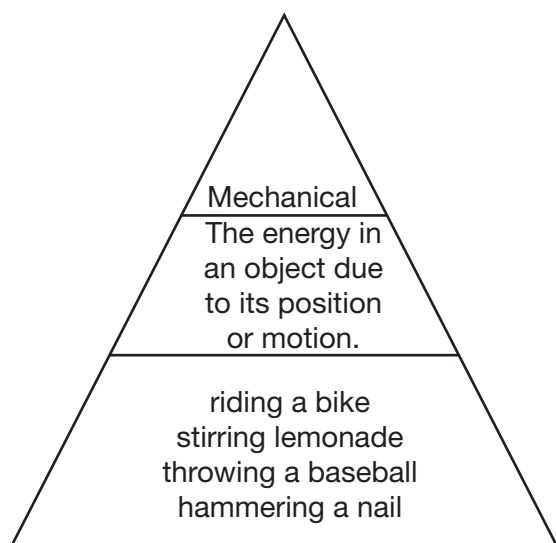
mechanical

light

thermal

electrical

sound

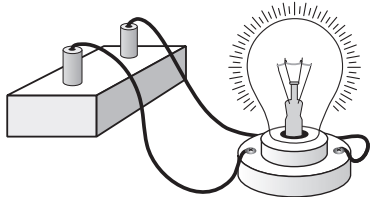


Vocabulary Activity

Design a board game to play with partners or groups. Create a title for the game. Play the game with the following cards. When playing the game, you must draw cards and answer correctly. The winner gets to keep the board game!

Board Game Questions

Board game designs may vary.

<p>What is electricity?</p>	<p>Explain how a circuit works.</p>	<p>How do electric currents produce light, sound, and heat?</p>
<p>How does electricity produce light?</p>	<p>What is an example of how electricity produces heat?</p>	<p>Name a source of sound produced by electricity.</p>
<p>Who investigated electricity by flying a kite?</p>	<p>Name three conductors of electricity.</p>	 <p>Name and locate the parts of a circuit.</p>
<p>How is static electricity produced?</p>	<p>What will happen if you rub a balloon against your hair?</p>	<p>Describe how electricity is used at school.</p>

Example shown below.

Vocabulary Activity

Create cartoon figures that can help you remember the meanings of the vocabulary words.

Vocabulary Words

light reflection refraction

Light

Name of character:

Bea M. Oflight

What does the character represent?

Bea M. Oflight represents a beam of light traveling in a straight line.

Explain how this character is a reminder of the meaning of light.

She always travels in a straight line and overcomes darkness throughout the world.



Refraction

Name of character:

Ben Dable

What does the character represent?

This character represents the ability of light to pass through objects and appear broken or bent.

Explain how this character is a reminder of the meaning of refraction.

This character has the ability to pass through transparent objects, appearing to look bent or broken. He is able to bend his body as he passes through objects.



Reflection

Name of character:

Sir Shines A. Lot

What does the character represent?

This character represents shiny reflective surfaces.

Explain how this character is a reminder of the meaning of reflection.

Evil bounces off of his shiny surface. When he comes into contact with kindness, it is reflected back.



Vocabulary Activity

Use the letters to create sentences and examples which describe forces.

Example shown below.

F

Friction is an example of a force.

O

Opposite poles attract with magnetic force.

R

Repel means two objects push away from each other.

C

Certain forces, such as gravity and magnetism, can move objects without touching.

E

Every action causes an equal and opposite reaction.



Vocabulary Activity

In each empty puzzle piece on the left, fill in the correct vocabulary word that matches the definition on the right. Then cut out the puzzle pieces and practice putting the puzzle back together.

Use the words in the box to fill in the empty puzzle pieces.

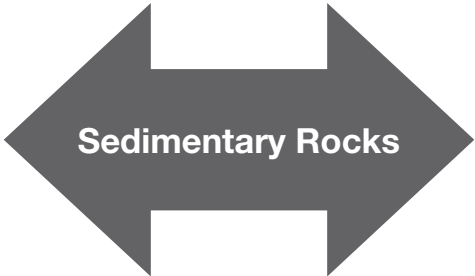
work	pull	motion
pulley	force	push

Force	a push or pull that causes an object to move, stop, or change direction	Push	a force that moves something away
Pull	a force that moves something closer	Motion	the movement of an object
Pulley	a simple machine made of a rope or chain and a grooved wheel	Work	energy applied to an object to make it move



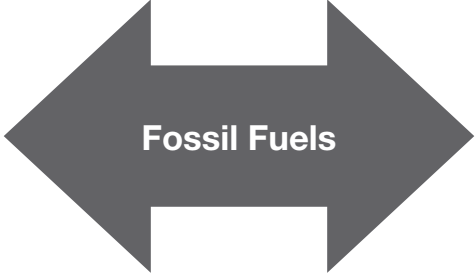
Vocabulary Activity

Describe each vocabulary word by completing the boxes below.

<p style="text-align: right;">Example</p> <p style="text-align: center;">Limestone Sandstone Shale</p> <p style="text-align: left;">Basalt Obsidian Marble</p> <p style="text-align: left;">Non-Example</p>	 <p style="font-weight: bold; font-size: 1.2em;">Sedimentary Rocks</p>	<p style="text-align: right;">Picture</p> <p style="text-align: center;">Pictures may vary.</p> <p style="text-align: left;">Layers Sediment Deposition Cementing Compacting</p> <p style="text-align: left;">Related Words</p>
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Use the word in a sentence.

As we drove down the highway, we could see layers of sedimentary rocks as we looked out of the car window.

<p style="text-align: right;">Example</p> <p style="text-align: center;">Coal Oil Natural Gas</p> <p style="text-align: left;">Biofuel Wind Energy Solar Energy</p> <p style="text-align: left;">Non-Example</p>	 <p style="font-weight: bold; font-size: 1.2em;">Fossil Fuels</p>	<p style="text-align: right;">Picture</p> <p style="text-align: center;">Pictures may vary.</p> <p style="text-align: left;">Nonrenewable Heat Pressure Pollution Carbon</p> <p style="text-align: left;">Related Words</p>
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Use the word in a sentence.

Fossil fuels, which are nonrenewable resources, add carbon to the air when burned.



Vocabulary Activity

Create a drawing of the landforms. Then describe the landforms and list examples of each.

Landforms

Illustration	Description	Examples
<p style="text-align: center;">Sand dune</p> <p>Illustrations may vary.</p>	<p>A sand dune is a hill of sand created by the wind.</p>	<p>Crescentic Linear Star Dome Parabolic</p>
<p style="text-align: center;">Delta</p> <p>Illustrations may vary.</p>	<p>A delta is soil which is deposited at the mouth of a river, usually in a fan-shape.</p>	<p>Mississippi River Delta Nile River Delta Ganges River Delta</p>
<p style="text-align: center;">Canyon</p> <p>Illustrations may vary.</p>	<p>A canyon is a valley between steep cliff sides formed by running water, such as a river or stream.</p>	<p>Grand Canyon Bryce Canyon Palo Duro Canyon</p>



Vocabulary Activity

Using the vocabulary words write a word in the first section. Next, write the definition of the word. In the third column, write a sentence using the vocabulary word. In the final column, draw a picture that represents the word.

When you are finished, cut out the completed squares. Mix the squares and then reassemble the rows. After completing, store your puzzle in a plastic bag.

Vocabulary Words

wind solar hydroelectric
geothermal biofuels

Word	Definition	Sentence	Picture
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Wind	the movement of air	Wind energy is a clean form of energy.	Pictures may vary.
Solar	relating to the Sun	Solar energy can be used to cook food in a solar cooker.	Pictures may vary.
Hydroelectric	electrical energy produced using the power of moving water	hydroelectric power can be generated by building a dam on a river.	Pictures may vary.
Geothermal	heat energy from inside Earth	Geysers and hot springs are examples of geothermal energy.	Pictures may vary.
Biofuels	a type of fuel made from organic matter that contains stored energy	Using ethanol in gasoline powered engines is one way biofuel is used as an alternative energy resource.	Pictures may vary.



Vocabulary Activity

Research the following words, describe their meanings, and give examples of each.

Fossilization	
<p>Definition</p> <p>the process by which remains of organisms are preserved as fossils</p>	<p>Examples</p> <p>Mineral fossilization Whole body fossilization Trace fossilization Imprint fossilization</p>
Fossil	
<p>Definition</p> <p>the traces or remains of ancient organisms preserved in rock</p>	<p>Examples</p> <p>Cast Mold Amber Ice</p>
Evidence	
<p>Definition</p> <p>information or proof which helps form a conclusion</p>	<p>Examples</p> <p>Seashells Type of leaf structure Spacing of footprints Location of similar fossils</p>
Paleontologist	
<p>Definition</p> <p>a scientist who studies ancient life using fossils</p>	<p>Examples</p> <p>Earl Douglas Othniel Marsh Henry Osborne Mary Anning</p>
Model	
<p>Definition</p> <p>a copy or replica of an object</p>	<p>Examples</p> <p>Diorama Globe Model airplane</p>
Environment	
<p>Definition</p> <p>the surroundings of an organism</p>	<p>Examples</p> <p>Desert Rainforest Marine</p>



Vocabulary Activity

Cut out the clouds and create riddles to describe each weather condition. Take turns reading the riddles with a partner and guessing the weather vocabulary terms.

Examples shown below.
Actual riddles may vary.

Riddles

Wind

This weather condition might
blow you away!

Atmosphere

Which term is like a blanket
for Earth?

Precipitation

This weather condition might get a
little drippy at times.

Weather

I am something that occurs every day.
What am I?

Climate

What is the term that is also something
you can do with a tree?
(climb it = climate)

Troposphere

I am not the highest level of Earth's
atmosphere. I am the lowest.
What am I?



Vocabulary Activity

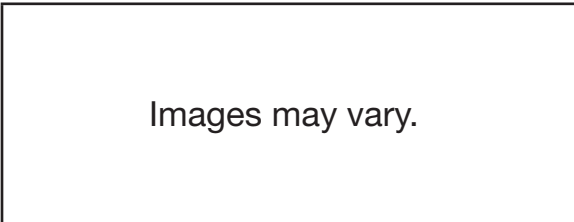
Describe the importance of each step of the water cycle. Then draw an image to support the description.

Ocean

Description

large bodies of saltwater that cover about 70% of Earth

Image



Condensation

Description

process in which gas becomes liquid

Image

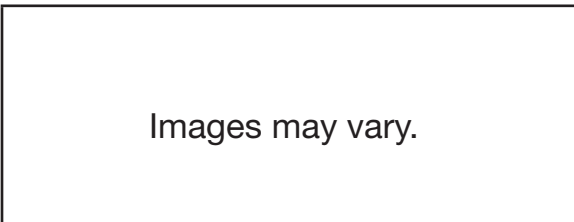


Sun

Description

our closest star and center of our solar system

Image

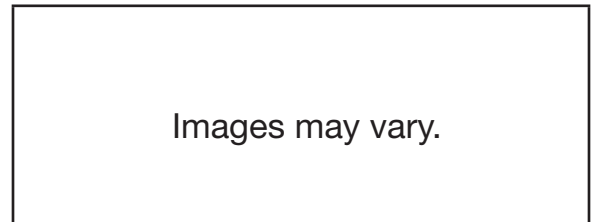


Precipitation

Description

any form of water that returns to Earth from the atmosphere

Image

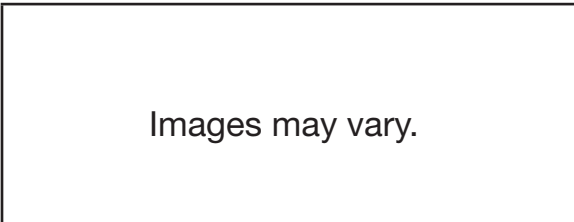


Evaporation

Description

the process by which liquid becomes gas

Image

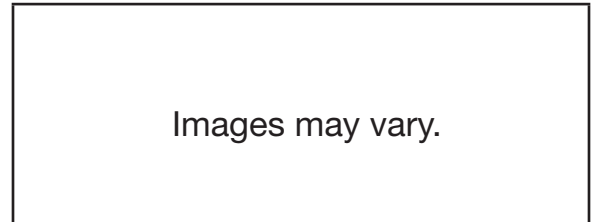


Collection

Description

the process in the water cycle where water collects in rivers, lakes, oceans, and underground

Image

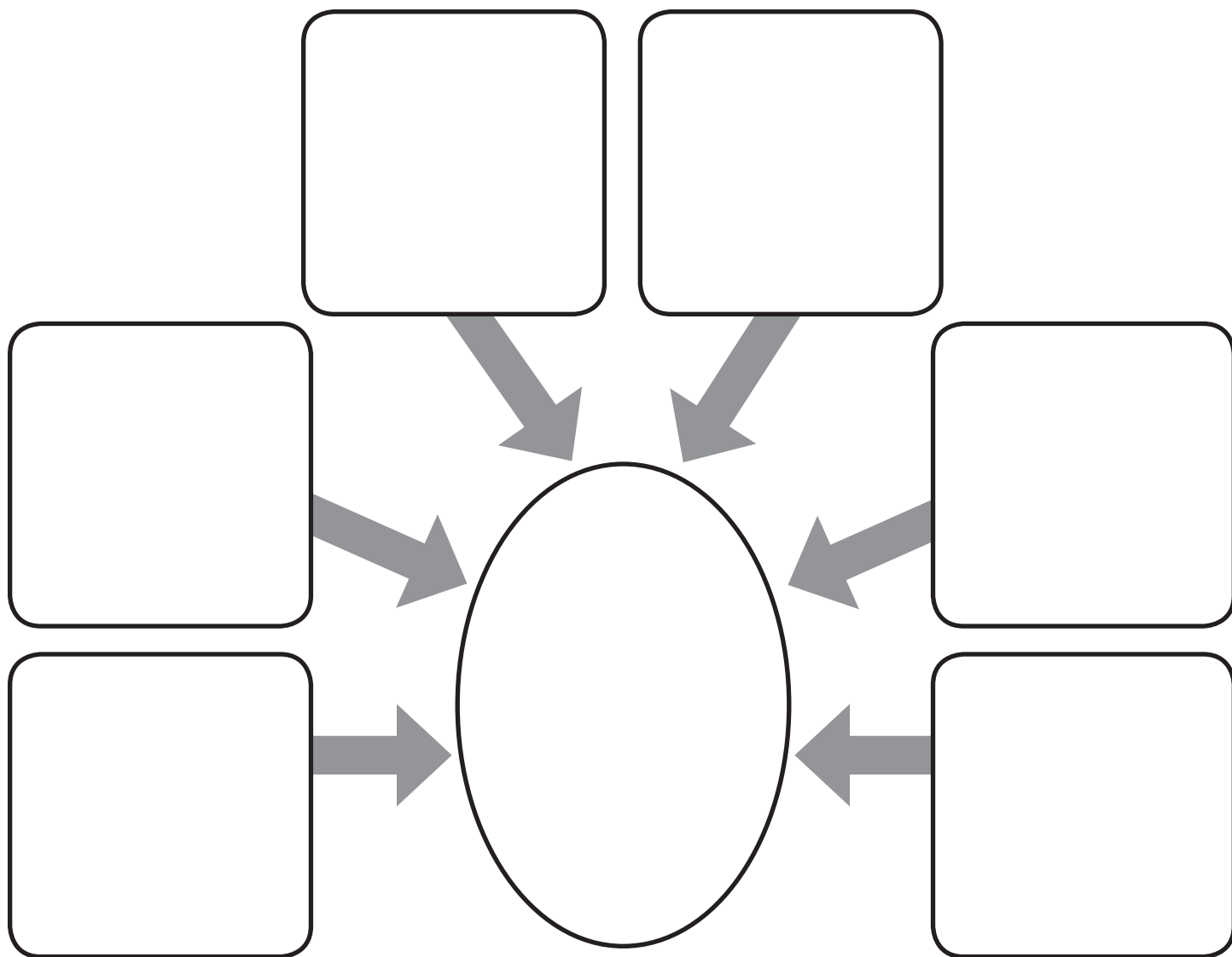


Vocabulary Activity

With a partner, create a vocabulary poster describing Earth's rotation on its axis. Explain facts about the cycle of day and night, the Sun's apparent movement across the sky, and facts about Earth's rotation. Display posters around the classroom and have a picture walk to see what classmates have created. Include these vocabulary words on your poster: day, night, rotation, axis, apparent movement, and Sun.

Use the organizer below to brainstorm ideas for the poster.

Ideas may vary.



Notes:



Vocabulary Activity

Write the words which describe the physical characteristics of the Sun, Moon, or Earth.
The first one has been done for you.

Words

1. Cr a t e r s
2. Hi l l
3. Ai r
4. Ro t a t e
5. At m o s p h e r e
6. Cl o u d
7. Tr e e
8. Ec o s y s t e m
9. Ro c k
10. Ic e
11. Su n s p o t s
12. Ti d e s
13. Is l a n d
14. Co r e
15. Sn o w

Physical Characteristics

1. Large holes formed by meteorites, found on the Moon and Earth
2. A high area of land, often round, but not as high as a mountain, found on the Moon and Earth
3. Natural resource people breathe, found only on Earth
4. The motion the Sun, Earth, and Moon make when they turn on their axis
5. The layer of air that surrounds Earth
6. Group of water droplets or ice crystals floating in the air found on Earth but not the Sun or Moon
7. Only found on Earth; a plant which has leaves, branches, and wood
8. Only found on Earth; all living and nonliving things in a certain environment
9. Found on the Moon and Earth; a hard, nonliving thing made of minerals
10. The solid form of water found on both Earth and the Moon
11. Cooler, dark spots on the Sun's surface
12. Caused by the pull of gravity from the Moon and Sun; the regular rise and fall of ocean levels on Earth
13. Found only on Earth; a land area completely surrounded by water
14. The innermost layer of Earth and the Sun
15. A form of precipitation found only on Earth



Vocabulary Activity

Create a bingo card using the words provided. Mix up the order of the words. Then create word cards with definitions, questions, and sentences that describe each word. Cut out the word cards and play bingo in groups or with the whole class.

permeability	porosity	percolation	retain
sandy	loam	silt	clay
potting soil	gravel	sediment	humus
particle size	soil texture	erosion	weathering

Bingo Card

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Bingo cards and clues on word cards may vary. Only use one student's word cards when playing the game with the class.

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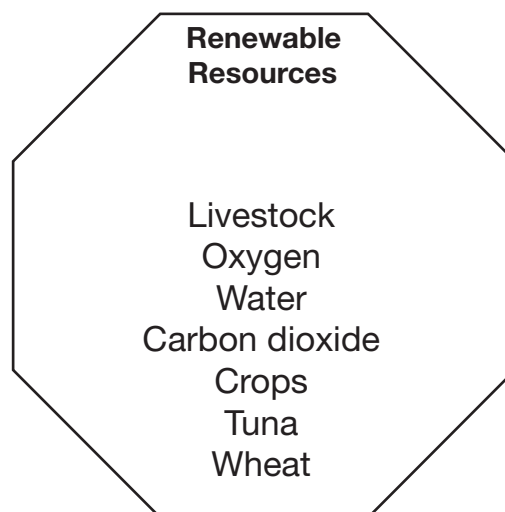
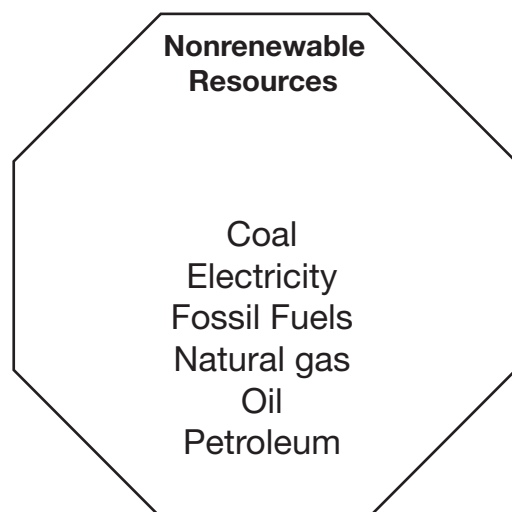
Word Cards



Vocabulary Activity

Stop and think when you use natural resources. In the signs below, classify each word in the box as nonrenewable or renewable.

livestock oxygen water coal carbon dioxide crops
electricity fossil fuels natural gas tuna oil wheat petroleum



Choose a resource from above that you use often. Explain how the resource is used. List ways the resource could be conserved.

Every day I ride to school in a car that burns oil. One way I could conserve petroleum, or oil, would be to ride my bike to school. Another way I could conserve oil would be to carpool with other people who live in my neighborhood.

Draw a visual representation for the words renewable and nonrenewable in the boxes below.

Renewable

Representations may vary.

Nonrenewable

Representations may vary.

Vocabulary Activity

Unscramble each word below using the terms in the vocabulary box. Write the definition for each word in the space below the box.

Vocabulary Box

weather map	meteorologist	low pressure	cold front
forecast	warm front	high pressure	precipitation

1. wol speerusr _____	low pressure
2. ramw nroft _____	warm front
3. gmelotetsorio _____	meteorologist
4. actsefor _____	forecast
5. dcol ortfn _____	cold front
6. gihh surperes _____	high pressure
7. iaetptrnoici _____	precipitation
8. eahtrew pam _____	weather map

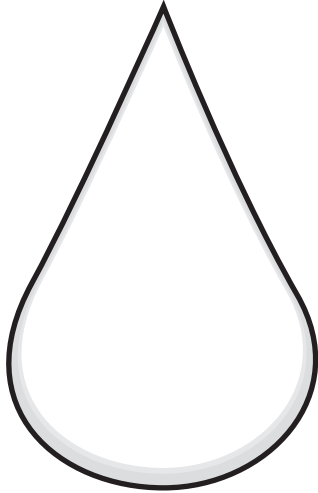
Definitions

1. an area where the atmospheric pressure is lower than the pressure of the surrounding areas _____
2. the leading edge of a warmer air mass _____
3. a scientist who studies weather, climate, and Earth's atmosphere _____
4. a prediction of the weather _____
5. the leading edge of a cooler air mass _____
6. an area where the atmospheric pressure is greater than the pressure of the surrounding areas _____
7. any form of water falling from the clouds to Earth _____
8. a chart showing the weather conditions of a large area _____

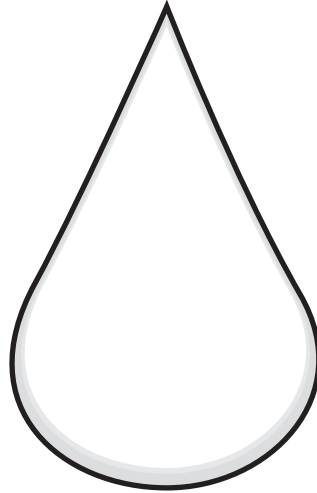


Vocabulary Activity

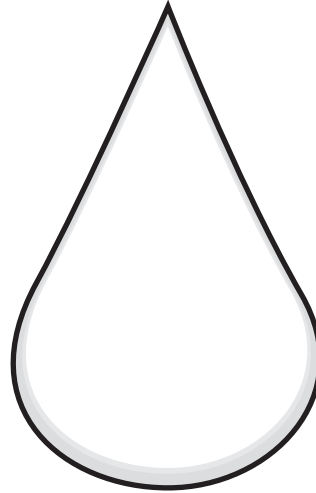
In each droplet, illustrate the vocabulary word. Then write a paragraph using all the words. Underline each vocabulary word in the paragraph. Illustrations may vary.



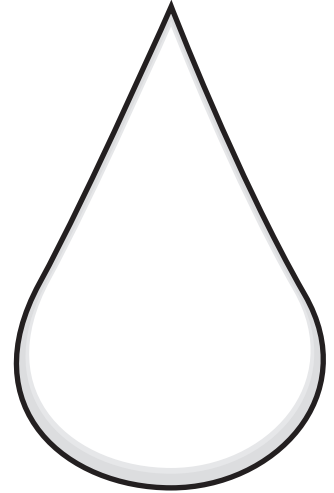
evaporation



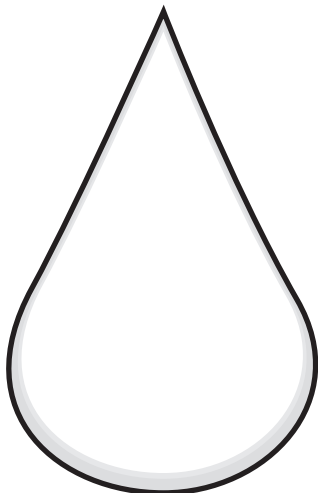
condensation



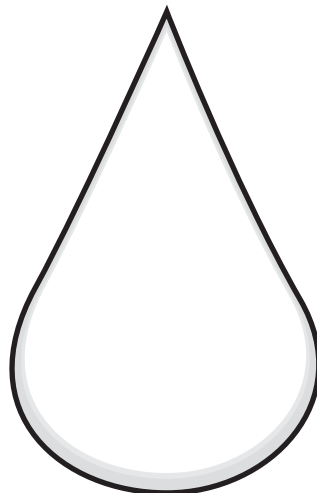
transpiration



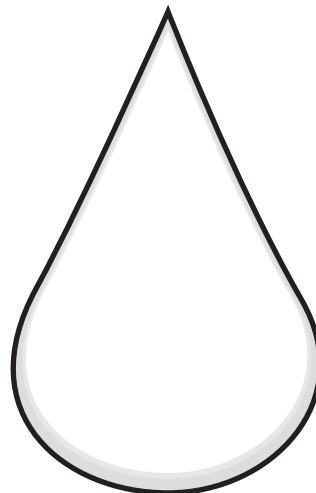
runoff



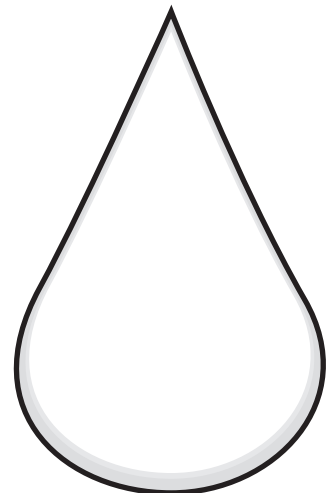
collection



groundwater



precipitation



accumulation

Early one morning I looked out of the window and saw precipitation falling from the sky. As I watched, the water began to form runoff as it flowed down a hill. The accumulation of water was greatest at the bottom of the hill, where it created a large puddle. Other collection was occurring under the swing set, where water pooled beneath each swing. Soon the rain subsided, and I knew the water that had not found its way to other bodies of water was soaking into the ground, forming groundwater. As the Sun began to rise in the eastern sky, I knew that evaporation, transpiration, and condensation would keep the water cycle going continuously. I smiled to myself as I drank a glass of water before I headed to school to start my day.

Vocabulary Activity

Use the words in the box to create clues for each card. Write a word on the back of each card. Then write 3 clues for the word on the front of the card, under the card number. Cut out the cards.

In groups or partners, compete to win the most points. One at a time, pick a number card. The opposite team members read the first clue. If the answer is guessed correctly, the player receives 3 points. If the player does not know the answer, the second clue is read. The player receives 2 points if answered correctly. Questions answered correctly after the third clue receive 1 point. Switch teams after each set of questions. The team with the most points wins! Some example clue cards are shown below.

Vocabulary Words

shadows tides high tide low tide spring tide neap tide seasons
 winter spring summer autumn new moon waxing crescent first quarter
 waxing gibbous full moon gravity waning gibbous third quarter waning crescent

<p>Card #1</p> <ol style="list-style-type: none"> 1. These are shortest around 12:00 p.m. 2. Peter Pan lost his. 3. They occur when light is blocked by another object. 	<p>Card #2</p> <ol style="list-style-type: none"> 1. People who fish from boats pay attention to this pattern. 2. These changes occur daily. 3. They are the regular rise and fall of ocean levels. 	<p>Card #3</p> <ol style="list-style-type: none"> 1. One of the four seasons 2. It is the season following fall. 3. It is the coldest season. 	<p>Card #4</p> <ol style="list-style-type: none"> 1. One of the Moon phases 2. It comes between the Gibbous Moon Phases. 3. When this phase occurs, the entire side of the Moon facing Earth is visible.
Card #13	Card #14	Card #15	Card #16
Card #17	Card #18	Card #19	Card #20



Vocabulary Activity

Sudden Changes on Earth

Classify each of the vocabulary words in the box with the correct natural disaster. Some words may be classified in more than one place.

aftershock ash change eruption debris fault flood lava
magma rapid seismograph tectonic plates tsunami volcanic

Earthquake

Aftershock
Change
Rapid
Debris
Fault
Seismograph
Tectonic Plates
Tsunami

Volcano

Ash
Change
Rapid
Eruption
Debris

Lava
Magma
Seismograph
Tectonic Plates
Volcanic

Landslide

Change
Rapid
Debris
Flood

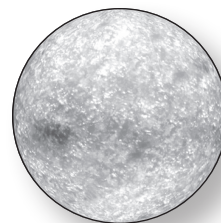


Vocabulary Activity

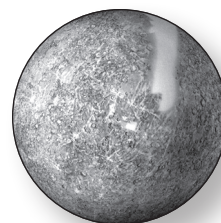
The object of the game is for a player to collect all the planets in order. The first card played is the Sun. Then, play the planet cards one at a time beginning with Mercury and ending with Neptune. The player who lays down the Sun and the correct order of the planets first wins!

Deal each player 3 cards. If Player One has a Sun card, he/she lays down the Sun card and draw another card. Player Two does the same thing. (If no Sun card is in their pile, they must draw from the card pile and it is the next player's turn.) Players take turns laying down one card at a time.

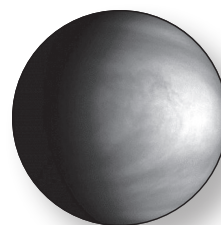
The player who wins should have the cards in the order shown here.



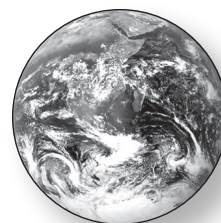
Sun



Mercury



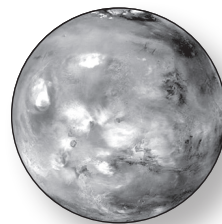
Venus



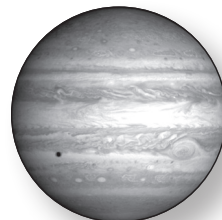
Earth



Name _____



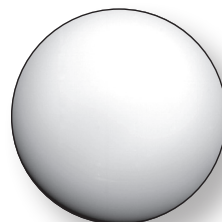
Mars



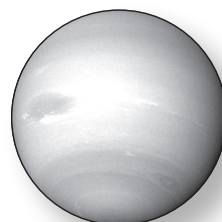
Jupiter



Saturn



Uranus



Neptune



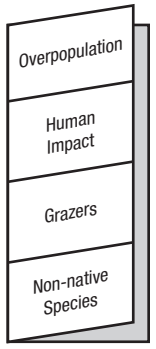
Vocabulary Activity

Define and illustrate each vocabulary word in the boxes below.

living		nonliving	
Definition	Illustration	Definition	Illustration
something that grows, changes, and makes other living things	Illustrations may vary.	an object that is not alive	Illustrations may vary.
ecosystem		survive	
Definition	Illustration	Definition	Illustration
all living and nonliving things in a certain environment	Illustrations may vary.	to stay alive	Illustrations may vary.
competition		interact	
Definition	Illustration	Definition	Illustration
a contest between organisms for food, territory, or other resources	Illustrations may vary.	to work together	Illustrations may vary.
interdependence		species	
Definition	Illustration	Definition	Illustration
when organisms depend on each other for survival	Illustrations may vary.	the smallest group of organisms of the same kind that are able to produce offspring	Illustrations may vary.



Vocabulary Activity



Cut the paper below on the dotted line. Fold lengthwise with the words on top. Cut each solid line so there are four flaps that can be lifted. On the underside of each flap, explain what each word means. On the solid flap, draw a picture of what the word means.

Sample of inside shown below.

<p>Illustrations may vary.</p>	<p>Overpopulation - a situation that occurs when a population becomes too great in number for the area they occupy, so that resources become scarce</p>
<p>Illustrations may vary.</p>	<p>Human Impact - the effects humans have on the environment</p>
<p>Illustrations may vary.</p>	<p>Grazers – herbivores that usually feed on grass</p>
<p>Illustrations may vary.</p>	<p>Non-Native Species - a species introduced to an area in which it would not naturally be found</p>



Vocabulary Activity

Unscramble each of the clue words. Copy the letters in the numbered cells to other cells with the same number.

X O N E G Y

O X Y G E N

2

L E Y C C

C Y C L E

3

N O R A B C D O X D E I I

C A R B O N

13

D I O X I D E

5

M A A N I S L

A N I M A L S

9

L A N P T S

P L A N T S

11

6

D Y A

D A Y

15

R U H N O E G E E S G S A

G R E E N H O U S E

12

G A S

4

P O S H E R M E A T

A T M O S P H E R E

14

10

8

U S N

S U N

16

M I N N E N T O E R V

E N V I R O N M E N T

1

17

T N H I G

T H I N G

7

O X Y G E N

1

2

3

4

5

6

I S

7

8

I M P O R T A N T

9

10

11

12

13

14

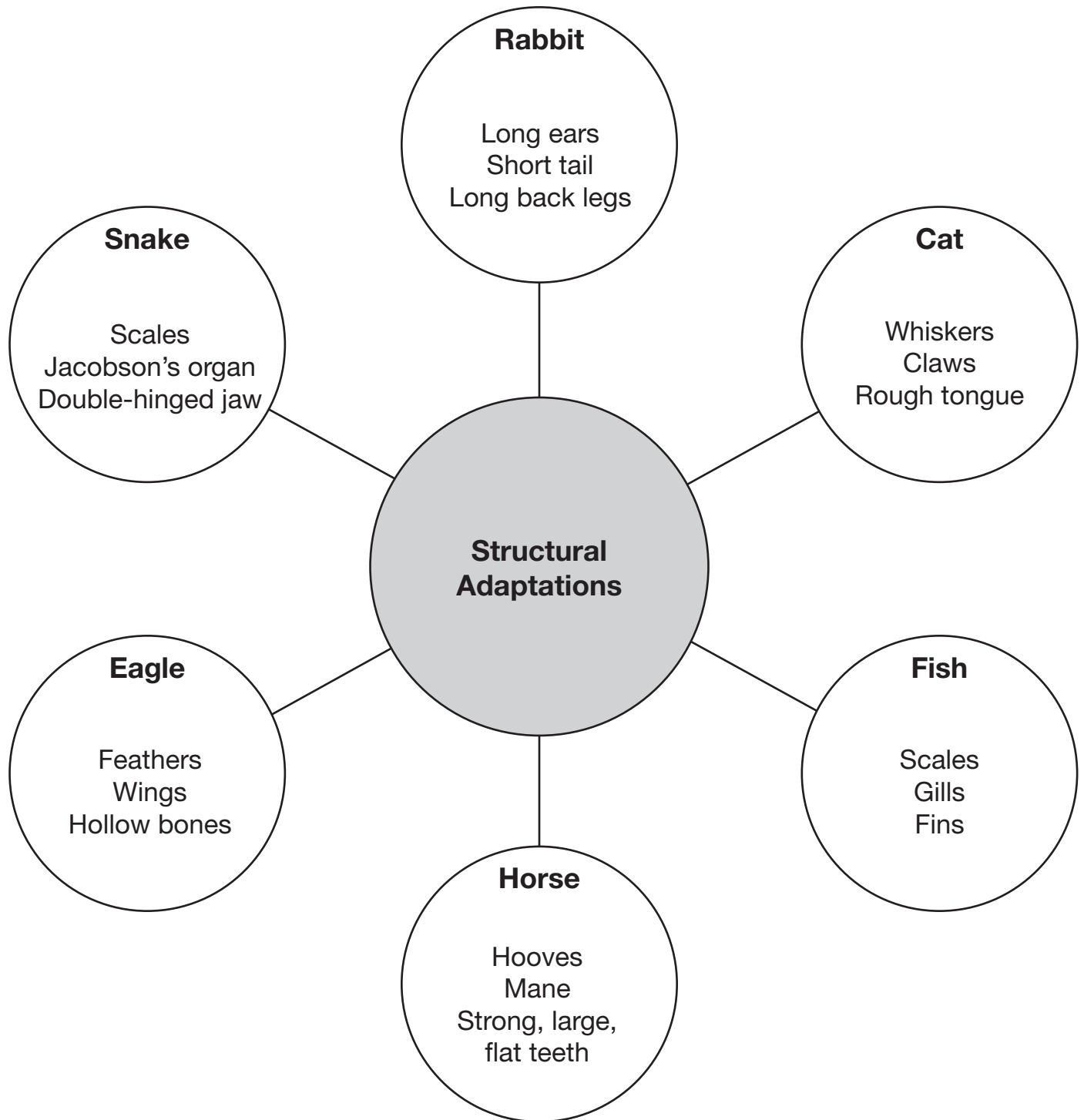
15

16

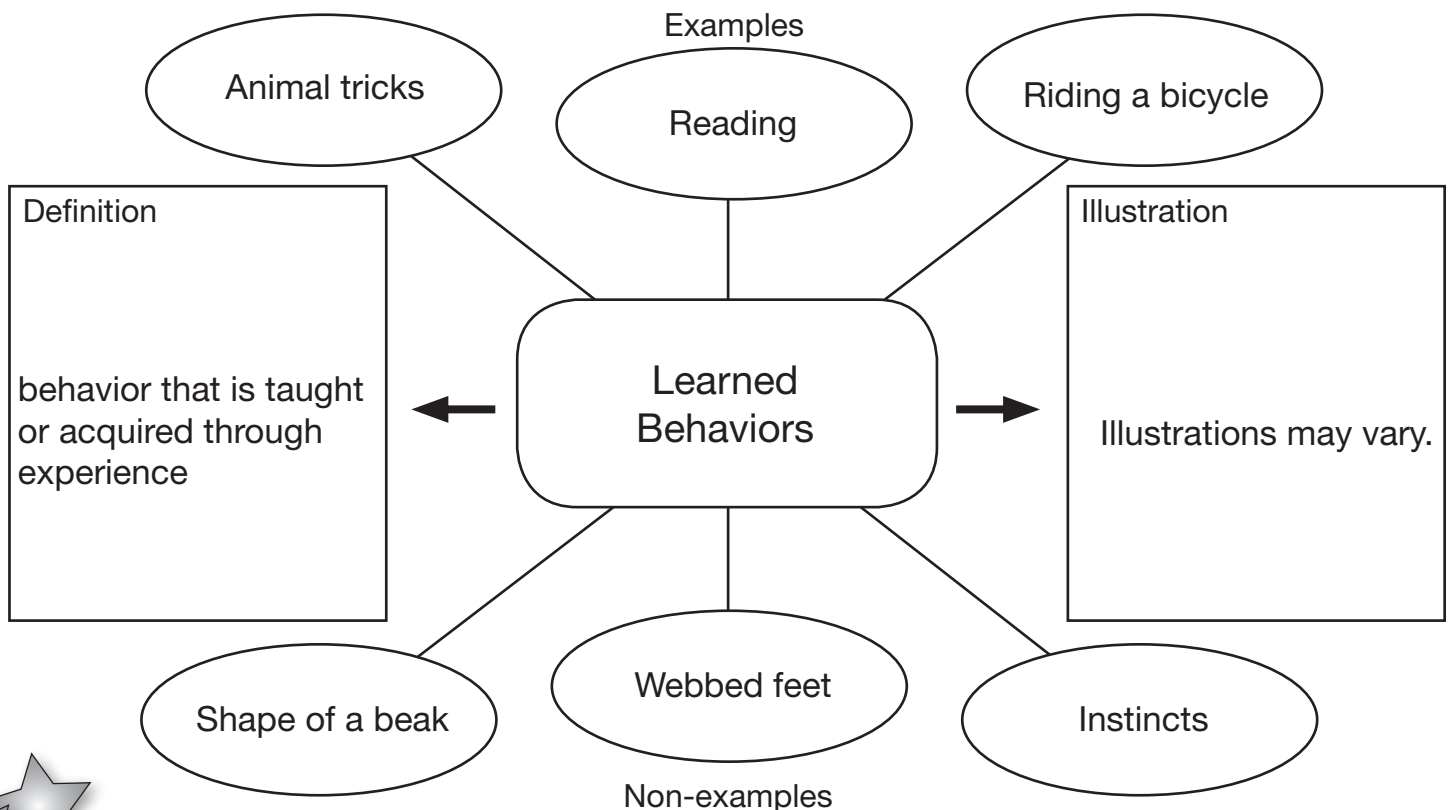
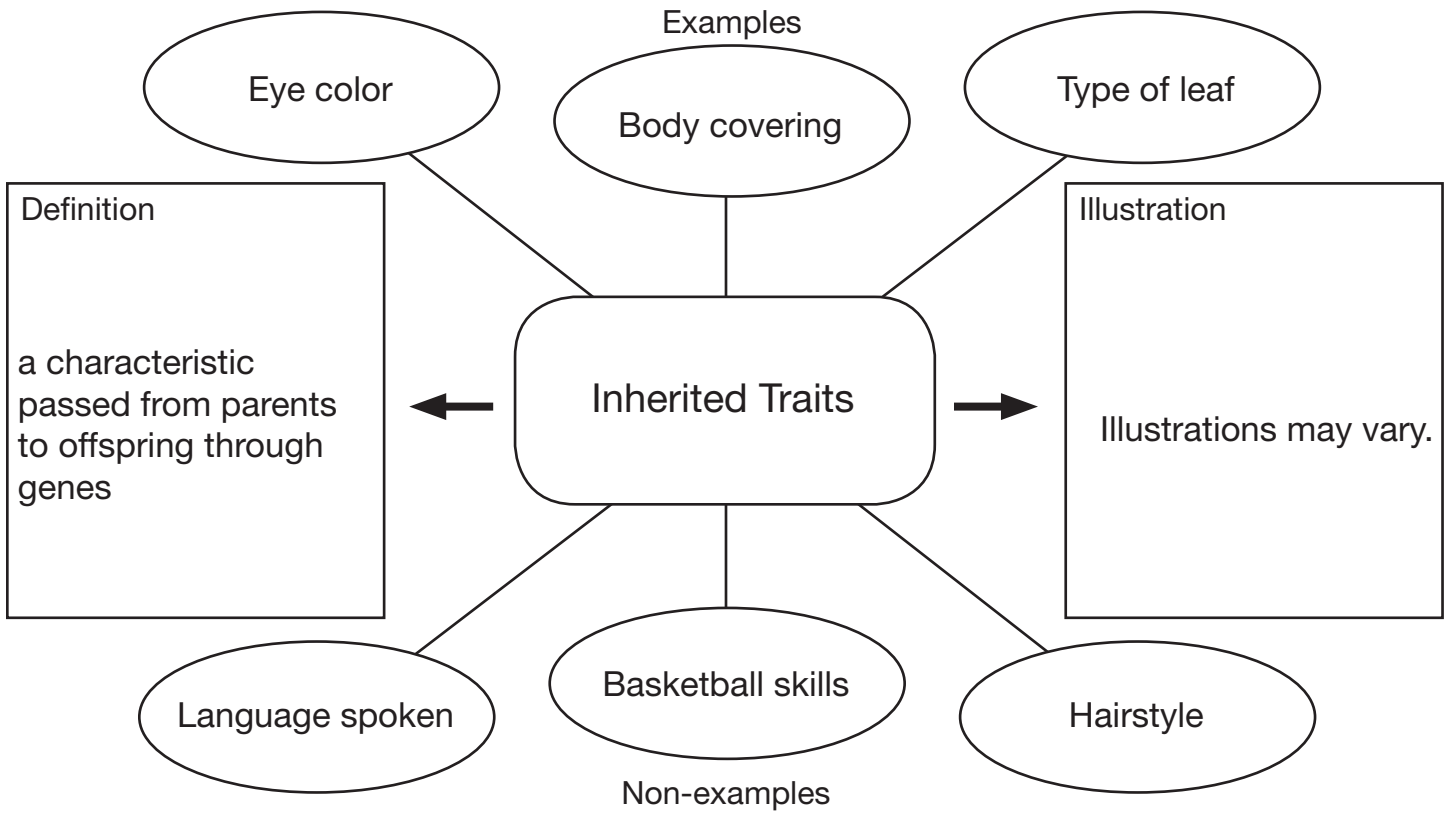
17

Vocabulary Activity

In each of the bubbles below, list structural adaptations for the animals given.

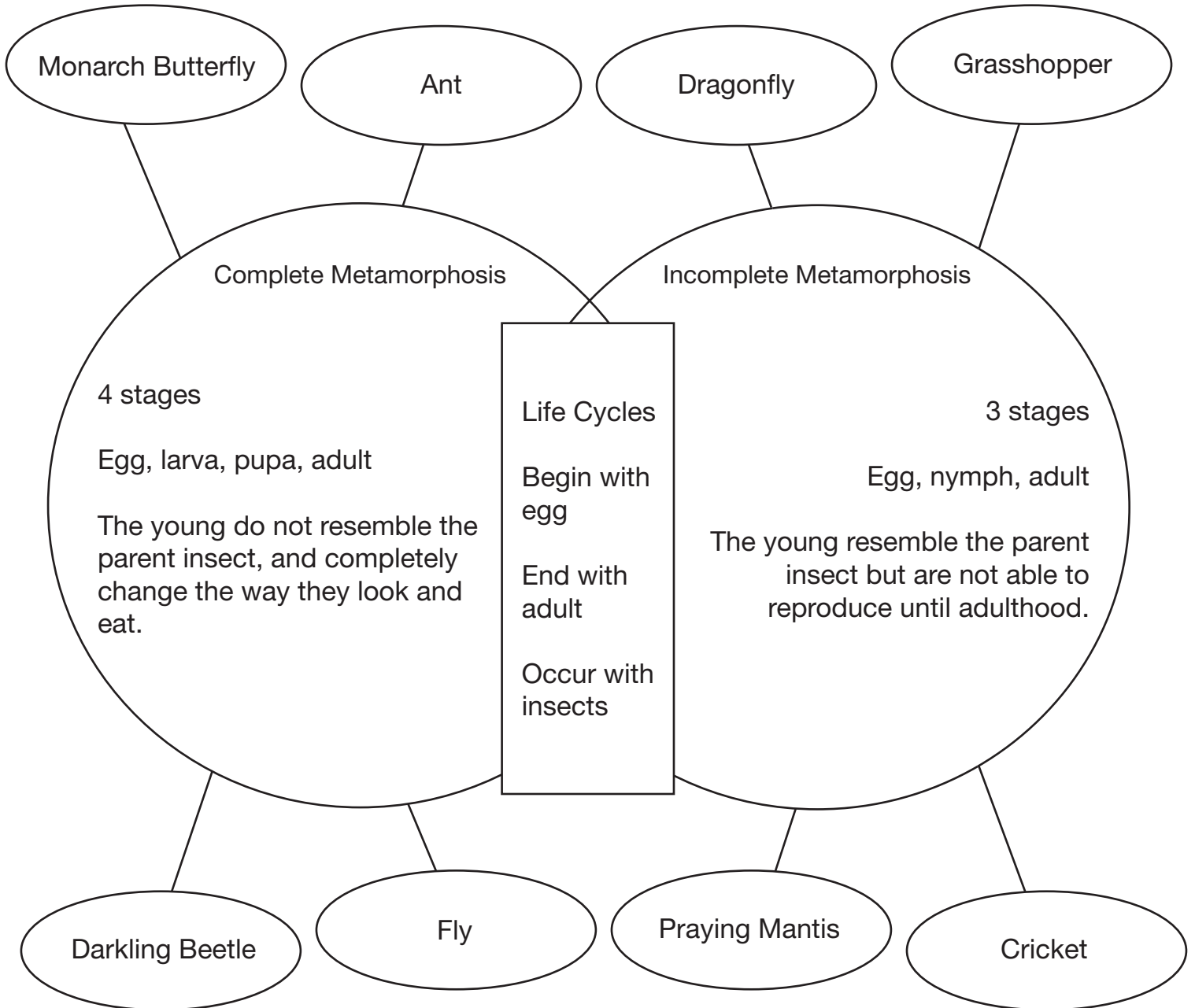


Vocabulary Activity



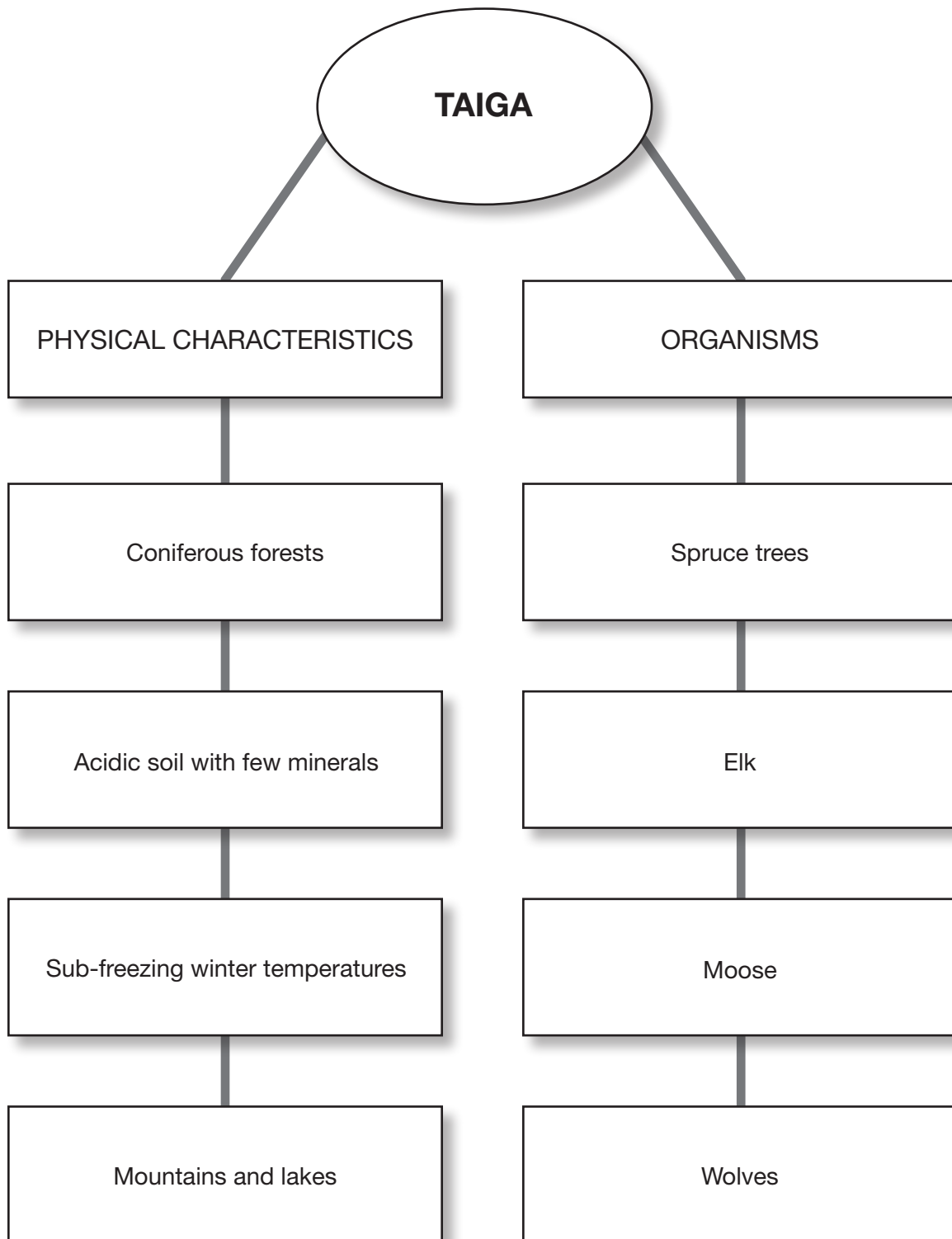
Vocabulary Activity

Fill in the Venn diagram to compare and contrast complete and incomplete metamorphosis. In the ovals above and below the Venn, give four examples of insects which go through each change.



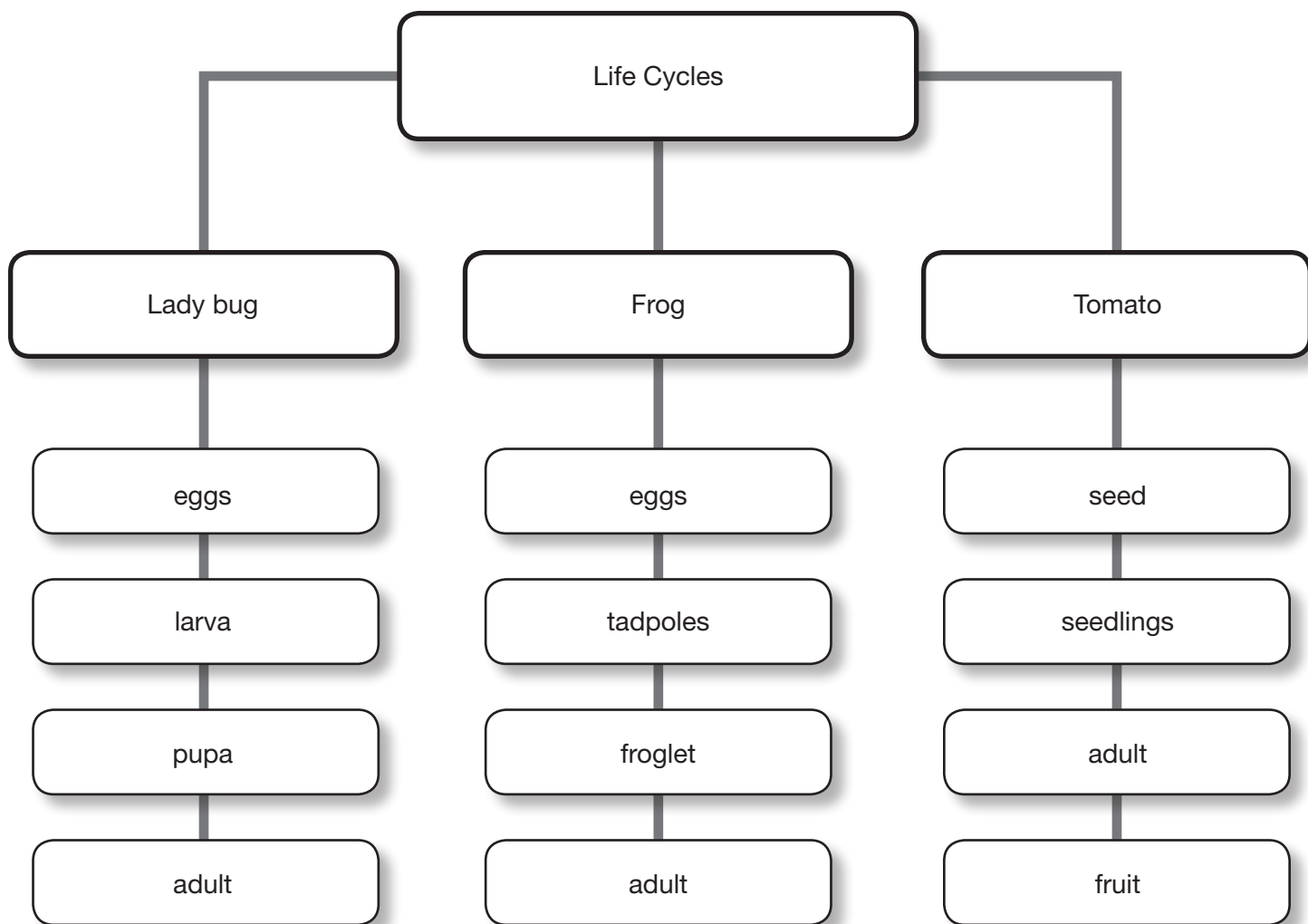
Vocabulary Activity

In the boxes below, list four examples of physical characteristics of the Taiga and name four organisms that live there.



Vocabulary Activity

Using the words in the box at the bottom of the page, decide the correct sequence for the words, and place in the graphic organizer.



- | | | | |
|-------------|-------|-----------|----------|
| eggs | seed | eggs | tadpoles |
| froglet | larva | seedlings | adult |
| lady bug | frog | flowers | fruit |
| Life Cycles | adult | pupa | tomato |

