BATTLE CREEK AREA
Mathematics & Science Center

Student Journal
2ES

Earth's Land and Water

A Second Grade Unit
supporting the
Michigan Science K-7 Content Expectations

Name: _____

Updated January, 2009

Name _____

Date _____

JOURNAL

The Surface of the Earth

1

1. Draw a picture of what the planet Earth looks like from space. Color the land green and the water blue.

2. Write why astronauts call the planet Earth the "big blue marble."

JOURNAL

Land on Earth

Name _____

Date _____

2

1. Draw a line to match each picture to the correct term of that surface feature.

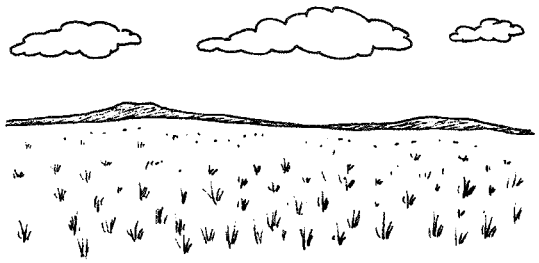
hill

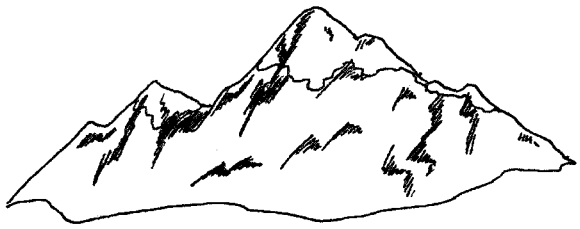
plain

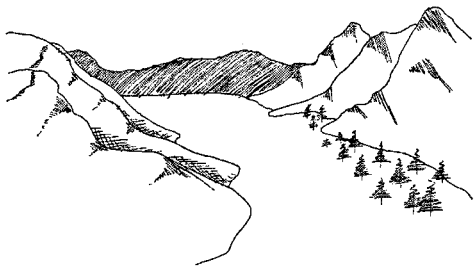
plateau

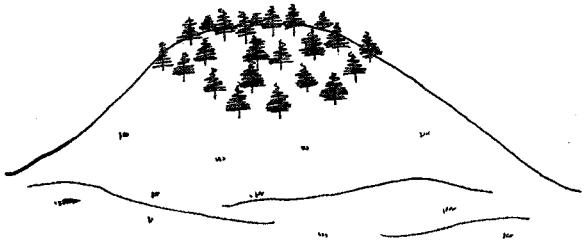
valley

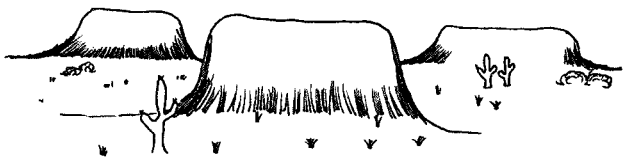
mountain











Name _____

Date _____

2. Choose one surface feature you would like to visit and describe what you think you might see.

ACTIVITY

Major Landforms

Name _____

Date _____

3

Complete the Landforms Chart: Draw a picture of the landform and write a description of the landform.

Landform	Draw the Landform	Write a Description of the Landform
mountain		
hill		
valley		

Name _____

Date _____

ACTIVITY

Major Landforms (cont.)

3

Complete the Landforms Chart: Draw a picture of the landform and write a description of the landform.

Landform	Draw the Landform	Write a Description of the Landform
plain		
plateau		

JOURNAL

Major Landforms (cont.)

Name _____

Date _____

3

1. Draw a picture of a mountain, plateau, and hill.

Write how they are alike and how they are different.

Name _____

Date _____

2. Draw a picture of a plain and valley.

Write how they are alike and how they are different.

Name _____

Date _____

Where Does A Raindrop Go? Path 1

1	2
3	4

Name _____

Date _____

Where Does A Raindrop Go? Path 2

1	2
3	4
5	6

Major Bodies of Water on Earth (cont.)

Name _____

Date _____

3. Draw a picture of the water as it drips on the landforms.

Name _____

Date _____

JOURNAL

Major Bodies of Water on Earth (cont.)

4

4. Write how the dripping water on the landforms shows how bodies of water are formed.

ACTIVITY

Snow and Ice Melt on the Mountain

Name _____

Date _____

5

1. Draw a picture of the sand tray and ice for this investigation.

2. Write the question the class is investigating.

3. Write what you think will happen.

Name _____

JOURNAL

Snow and Ice Melt on the Mountain (cont.)

5

1. Complete the chart and write the properties of water as a liquid. Give examples of water found on Earth as a liquid.

Properties of Water as a Liquid	Examples of Water as a Liquid

Name _____

Date _____

2. Complete the chart and write the properties of water as a solid. Give examples of water found on Earth as a solid.

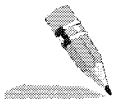
Properties of Water as a Solid	Examples of Water as a Solid

Name _____

Date _____

Snow and Ice Melt on the Mountain (cont.)

3. Write what happens when the snow and ice on the top of mountains melt in the springtime.



4. Write what would happen if there was too little snow and ice on top of the mountains.

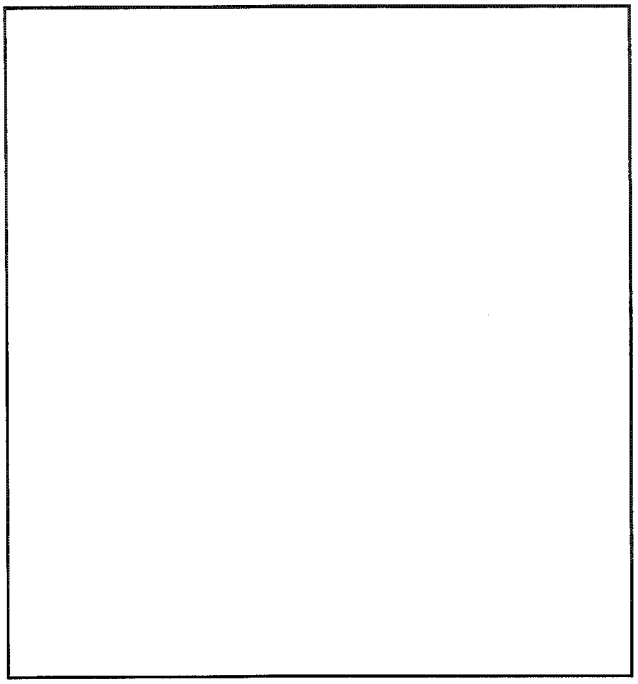
ACTIVITY

Plants Make the Difference

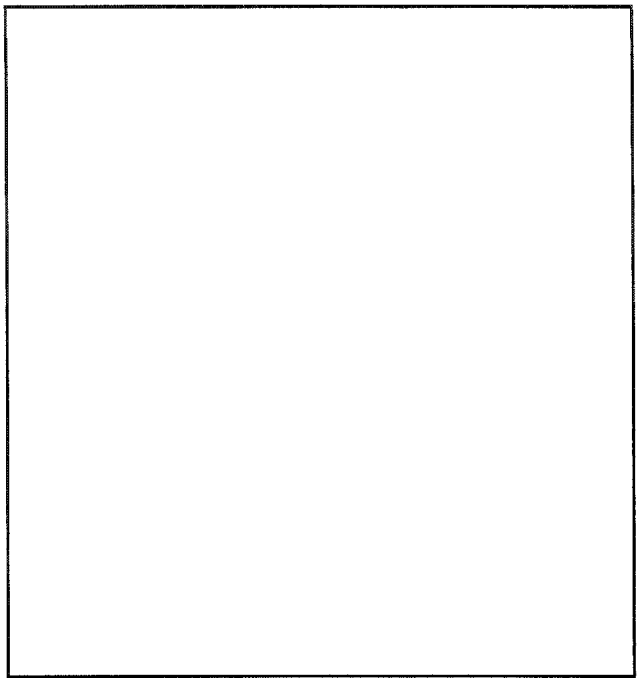
Name _____

Date _____

6



1. Draw a picture of your model of a hillside **BEFORE** water ran down it.

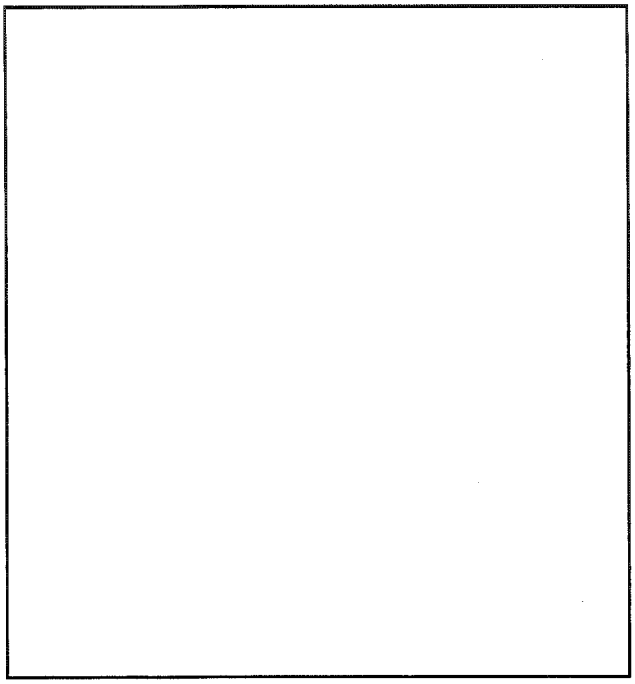


2. Draw a picture of your model of a hillside **AFTER** water ran down it.

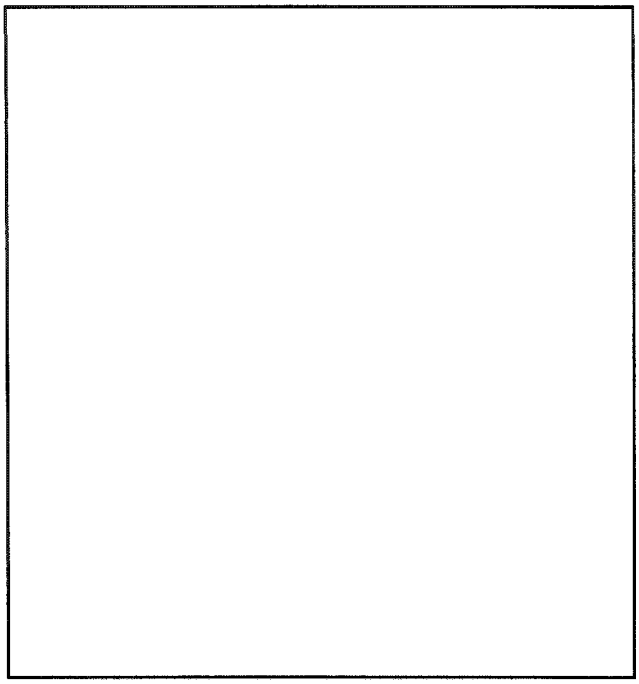
3. Write what happened to the soil on your model.

Name _____

Date _____



1. Draw a picture of your landscape model with grass growing in the soil.



2. Draw a picture of your landscape model **AFTER** the water ran down it.

3. Write what happened to the soil on your landscape model with grass. How was this different than your model without grass?

ACTIVITY

Water In Pebbles and Sand

Name _____

Date _____

7

1. Predict how many tablespoons of water can be added to the cup of pebbles.

2. How many tablespoons of water were actually added to the cup of pebbles?

3. Draw a picture of the cup of pebbles and show where the water went.

Write where the water went.

Name _____

Date _____

ACTIVITY

Water In Pebbles and Sand (cont.)

7

1. Predict how many tablespoons of water can be added to the cup of sand.

2. How many tablespoons of water were actually added to the cup of sand?

3. Draw a picture of the cup of sand and show where the water went.

Write where the water went.

ACTIVITY

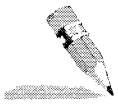
Water In Pebbles and Sand (cont.)

Name _____

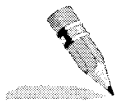
Date _____

7

4. Which cup held the most water, the cup of pebbles or the cup of sand?



Explain how you know that.



Name _____

Date _____

Think about where the water moved in the pebble and sand cups. Draw a picture to show how rainwater outside can move like the water in the pebble and sand cups.

ACTIVITY

Soak It Up!

Name _____

Date _____

8

Draw what happens when water drips on the rock, pebbles, sand, and soil.

Name _____

Date _____

ACTIVITY 8

Soak It Up! (cont.)

1. What question are you asking?

2. Write what you will do.

3. What materials will you use?

Soak It Up! (cont.)

Name _____

Date _____

4. Draw a picture of your investigation.

Write what you observed.

Name _____

Date _____

JOURNAL

Soak It Up! (cont.)

8

Explain what happens to rainwater if it does not fall into rivers, lakes, ponds, and oceans.

ACTIVITY

Comparing Bodies of Water

Name _____

Date _____

9

Complete the Bodies of Water Chart: Draw a picture of the body of water and write a description of the body of water.

Body of Water	Draw the Body of Water	Write a Description of the Body of Water
lake		
pond		
stream		

Name _____

Date _____

ACTIVITY 9

Comparing Bodies of Water (cont.)

Complete the Bodies of Water Chart: Draw a picture of the body of water and write a description of the body of water.

Body of Water	Draw the Body of Water	Write a Description of the Body of Water
river		
ocean		

JOURNAL

Comparing Bodies of Water (cont.).

Name _____

Date _____

9

1. Draw a picture of a river and a lake.

river

lake

Write how they are alike and how they are different.

Name _____

Date _____

JOURNAL

Comparing Bodies of Water (cont.)

9

2. Draw a picture of an ocean and a pond.

ocean

pond

Write how they are alike and how they are different.

ACTIVITY

Uses of Water

Name _____

Date _____

10

Daily Average Water Use

Use of Water	Average Total Amount of Water Used Daily
Washing hands	1 gallon
Washing face	2 gallons
Taking a shower	20 gallons
Taking a bath	30 gallons
Flushing toilet	20-25 gallons (3-5 gallons per flush)
Brushing teeth (without water running)	1/2 gallon
Drinking water	1/4 gallon
Washing dishes by hand	5 gallons
Washing dishes by machine	15 gallons
Washing clothes by machine	20 gallons
Cooking a meal	3 gallons
Watering the lawn	30 gallons
Washing the car	30 gallons

Name _____

Date _____

JOURNAL

Uses of Water (cont.)

10

1. Draw and label one way water is used at home.

2. Look at the *Classroom Water Use Chart.* Write what use of water happens the most in the classroom. Explain how you know that.

ACTIVITY

11 Where Do We Get Our Drinking Water?

Name _____

Date _____

1. Draw and label a picture of your well model.

2. Show how the water moved through the layers of earth material.

3. Label where the water pooled in the well model.

Name _____

Date _____

JOURNAL

Where Do We Get Our Drinking Water? (cont.)

11

1. Draw and write how groundwater can be used as a source of water for homes and schools.

Where Do We Get Our Drinking Water? (cont.)

Name _____

Date _____

2. Draw and write how lakes and rivers can be used as a source of water for homes and schools.

Name _____

Date _____

Where Do We Get Our Drinking Water? (cont.)

3. Draw and write how water in rivers, lakes, and groundwater get more water.

ACTIVITY

Plants and Animals In the Wild Need Water Too!

Name _____

Date _____

12

1. Draw the celery stalk in the colored water. Draw what you think will happen.

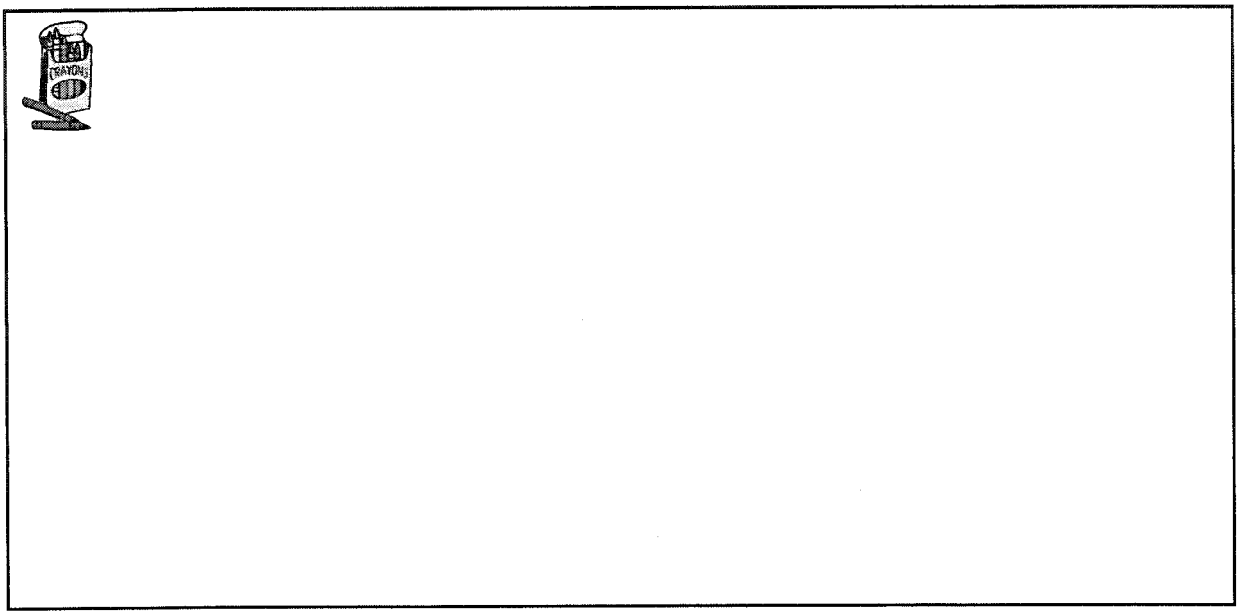
2. Draw the carrot stub in water and the carrot stub without water. Draw what you think will happen.

Name _____

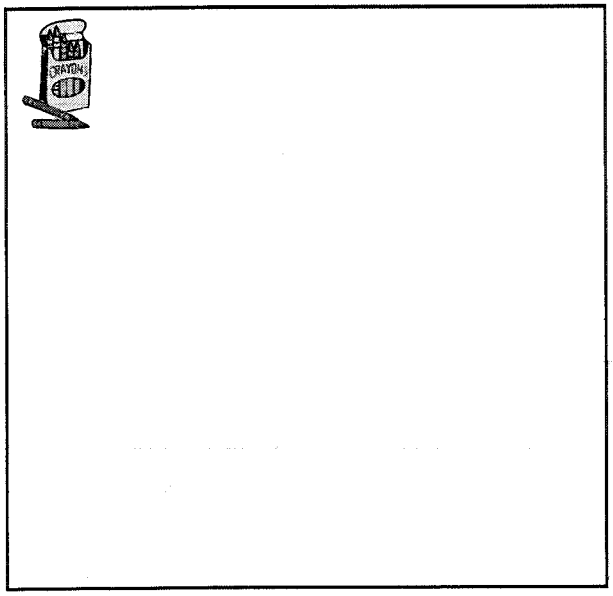
Date _____

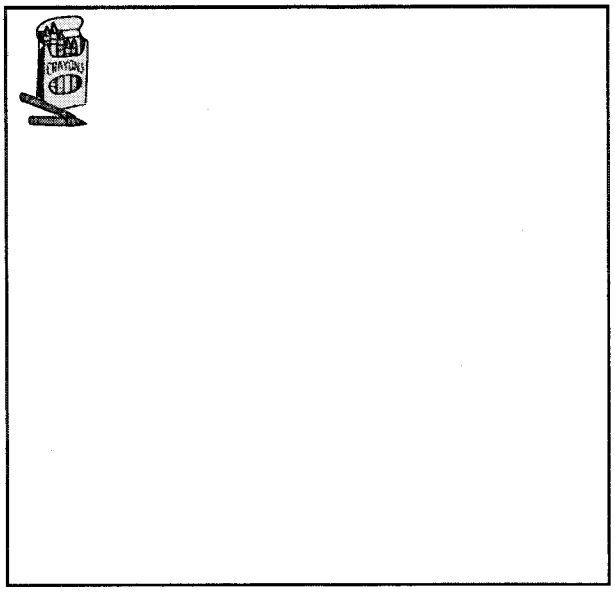
Plants and Animals In the Wild Need Water Too! (cont.)

1. Draw a picture of the celery stalk after three to four days in the colored water.



2. Draw a picture of the carrot stub in water after three to four days and the carrot stub without water after three or four days.





Plants and Animals In the Wild Need Water Too! (cont.)

Name _____

Date _____

3. Write where plants get their water.

4. Write where animals in the wild get their water.

Name _____

Date _____

JOURNAL

Protect and Conserve Our Bodies of Water

13

List and draw ways that you can conserve and protect water.

JOURNAL

Follow That Drop!
Performance Assessment

Name _____

Date _____

14

Write a story about a drop of rain that falls on a landform on your model.

bodies of water - Bodies of water are places where water collects. Streams, rivers, lakes, and oceans are examples of bodies of water.

cleaning water - Cleaning water is water used for cleaning. It is used to remove soil or stains from objects.

dew - Dew is the moisture or water droplets that condenses on cool surfaces at night.

downhill - Downhill is the direction that water flows on the Earth.

drinking water - Drinking water is water that can be safely used for drinking.

Earth - Earth is a planet with a surface made up of land and water.

flow - To flow is to move like a liquid. Rainwater that does not soak into the ground may flow downhill to oceans by way of lakes, streams, and rivers.

fog - Fog is tiny particles of water that float in the air, usually close to the Earth.

Key Terms (cont.)

food preparation - Food preparation is making food ready for eating. Ways water is used to prepare food include adding it to make a gelatin dessert, boiling it for spaghetti, or using it to wash lettuce for a salad.

fresh water - Fresh water relates to water in the inland lakes, rivers, streams, ponds, and groundwater. Fresh water does not have a high salt content.

gas - A gas spreads out to fill any container it is in. Most gases are invisible. When water is a gas it is called water vapor and is invisible in the air we breathe.

globe - A globe is a type of map that shows that our world, planet Earth, has the shape of a sphere. A globe is a small model of the planet Earth.

groundwater - Groundwater is water that moves underground in the spaces between particles of materials, such as sand, soil, pebbles, and rocks.

hail - Hail is frozen water that is shaped in a sphere that falls from the clouds, sometimes during a thunderstorm.

hills - Hills are areas of high ground that are lower than mountains. Hills are a landform.

ice - Ice refers to frozen water.

lakes - Lakes are large bodies of water surrounded by land. Lake Michigan is a very large lake.

landforms - Landforms are different formations that make up part of the Earth's surface that is not water.

liquid - A liquid takes on the shape of its container. When water is a liquid it can be in the form of rain, dew, clouds, or steam. Liquid water is also found in bodies of water.

mountains - Mountains are high, steep surface features of the Earth that rise above the land around them. A mountain stands by itself or is a part of a group of mountains.

oceans - Oceans are large bodies of salt water that cover most of the Earth.

plains - Plains are large, mostly flat land. Many different types of grasses grow on the plains with few trees.

plateau - A plateau is a rise or hill with steep sides and a flat top.

pollutant - A pollutant is an unwanted substance that causes harm or contaminates an area, such as land, water, and air.

pollution - Pollution is the addition of any unwanted substances to land, water, and air that results in harming living things that depend on the land, water, and air.

ponds - Ponds are small, shallow bodies of water surrounded on all sides by land. Ponds are smaller and more shallow than lakes and usually have an abundance of plant growth surrounding and in the pond.

rain - Rain is liquid water droplets that fall from clouds.

rivers - Rivers are large streams of water that flow downhill. They cause slow changes in the Earth's surface by moving earth materials and forming valleys. Rivers are a surface feature.

runoff - Runoff is water that does not soak into the ground, but flows downhill. Runoff carries earth materials from one place to another.

salt water - Salt water relates to the water in the oceans and salt lakes that have a high concentration of salt.

snow - Snow is small white crystals of ice formed from the water vapor in the clouds and air.

soak - To soak into the soil means for water to move underground between the soil particles, making the soil wet or covered in water.

solid - A solid has its own shape. It does not take the shape of its container. When water is a solid, it is found in the form of ice, snow, hail, and sleet.

source - A source is the beginning of a stream of water.

Key Terms (cont.)

spring - A spring is a source of fresh water that comes up from the ground.

states of water - The states of water are the forms water takes. The three states of water are solid, liquid, and gas.

streams - Streams are small bodies of flowing water. After a rain, a stream of water may flow down a street into a drain.

surface features - Surface features are the landforms and bodies of water that are found on the surface of the Earth. Surface features include mountains, hills, valleys, plains, plateaus, rivers, lakes, and oceans.

underground - Underground means under the top of the ground. Water that moves between the soil particles usually cannot be seen.

valleys - Valleys are low landforms that are found between hills and mountains.

well - A well is a hole in the ground from which water can be drawn. Most wells are 100 to 2,000 feet deep.