**Somerset County Public Schools**  
**Fourth Grade Learning Activities- WEEK 4**

Name: ___________________  
Teacher’s Name: ___________________

<table>
<thead>
<tr>
<th>READING/LANG. ARTS</th>
<th>MATH</th>
<th>SCIENCE</th>
<th>SOCIAL STUDIES</th>
<th>FINE ARTS</th>
</tr>
</thead>
</table>
| **Activity #1:** April is National Poetry Month! Celebrate by writing a Haiku poem about something you have done in the past month. A haiku is a short Japanese poem with three lines. The first line has 5 syllables, the second line 7 syllables, and the third line 5 syllables. Punctuation is up to the author.  
Example: I rode on my bike  
People smiled and waved to me | **Activity #1:** Fill in the blanks of each crossword puzzle to make the multiplication equations true.  
For this week, you will complete 3 activities (from MysteryScience) on wind, sun, and water energy. For Activity 1: Complete the attached reading and questions about Wind energy. | **Activity #1:** Renewable and Nonrenewable resources.  
For this week, you will complete 3 activities (from MysteryScience) on wind, sun, and water energy. For Activity 1: Complete the attached reading and questions about Wind energy. | **Activity #1:** Need or Want Hunt: Fold a piece of paper in half and label one-half NEED and one-half WANT. Now look for items around your house to fit in each column. Try to find at least 5 needs and 5 wants. Remember - a **need** is something you have to have to live. A **want** is something you would like to have but it is not necessary. | **Activity #1:** Using a piece of paper, fold and refold in as many sections as you’d like. The more folds you make, the more squares you will end up with. Once you open your paper, you will have many different squares. In each square, color or draw a design or pattern. Make sure that you use many different colors and patterns. When you finish, your paper will |
### Activity #2:
**Read the article “Can the Amazon be Saved?”**
After reading the passage, answer the comprehension questions (#1-8) about the article. Remember to go back into the text to find your answers.

### Activity #2:
**Play a memory game to strengthen your geometry vocabulary.** Attached to your packet are premade vocabulary cards and definitions. Cut each definition and vocabulary word out and mix them up. Lay them upside down and match the correct definition to the word. Practice as many times as you would like. Remember geometry is 90% vocabulary.

### Activity #2:
**Today you will complete the reading and questions about water (hydro) energy from Mystery Science.**

### Activity #2:
**Write a scarcity story!**
Scarcity happens when something is in short supply or the demands for an item are greater than the amount of that item that is available. Write a fictional or real life scarcity story about a time when there was not enough of something for everyone. Remember to include the characters, setting, and the conflict.

### Activity #2:
**Trash ball-**
Find and empty a trash can. Ball up a piece of paper (not your schoolwork :) You can compete with a family member to see who can make the most shots or play alone with a timer and try to beat your score.

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<table>
<thead>
<tr>
<th>It made my heart smile</th>
<th>look like a patchwork quilt.</th>
<th>It made my heart smile</th>
<th>look like a patchwork quilt.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Math Problems" /></td>
<td><img src="image2.png" alt="Math Problems" /></td>
<td><img src="image3.png" alt="Math Problems" /></td>
<td><img src="image4.png" alt="Math Problems" /></td>
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2
<table>
<thead>
<tr>
<th>Activity #3:</th>
<th>Activity #3:</th>
<th>Activity #3:</th>
<th>Activity #3:</th>
</tr>
</thead>
</table>
| **Reread the article “Can the Amazon be Saved?”** Then answer the cause & effect questions (#1-5). Remember to go back into the text to find your answers. | **Write the numbers 9, 8, 6, 5 on a sheet of paper. Choose three numbers to create a 3 digit dividend and use the remaining number to create your 1 digit divisor. Solve your division problem.**<br><br>Next, rearrange the numbers to make a new divisor/dividend. Solve your division problem. Create 1 more division problem using the same directions. Please explain on your paper what patterns you notice. Write what happens when you make the dividend larger/smaller. | **Today you will complete the reading and questions about sun (solar) energy from Mystery Science.** | **Producer or Consumer? On this sheet, determine if each phrase describes a producer (creating goods or providing services) or consumer (buying goods or services).**

Landscape art is the depiction of natural scenery such as mountains, valleys, trees, rivers, and forests, especially where the main subject is a wide view. Draw a landscape. With your parent(s) permission go outside for inspiration.
<table>
<thead>
<tr>
<th><strong>Point</strong></th>
<th><strong>Line</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>point $A$</td>
<td>point $A$</td>
</tr>
<tr>
<td>An exact location in space, usually represented by a dot</td>
<td>A straight path in a plane that goes on forever in opposite directions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Line Segment</strong></th>
<th><strong>Ray</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>line segment $AB$ or line segment $BA$</td>
<td>ray $CD$</td>
</tr>
<tr>
<td>A part of a line that includes two points, called endpoints, and all of the points</td>
<td>A part of a line, with one endpoint, that continues without end in one direction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Angle</strong></th>
<th><strong>Acute Angle</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>$\angle ABC$</td>
<td>$\angle ABC$</td>
</tr>
<tr>
<td>A figure formed by two rays that have a common endpoint</td>
<td>An angle that has a measure less than a right angle (less than $90^\circ$)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Obtuse Angle</strong></th>
<th><strong>Right Angle</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>An angle whose measure is greater than $90^\circ$ and less than $180^\circ$</td>
<td>An angle formed by perpendicular lines, line segments, or rays and with a measure of $90^\circ$</td>
</tr>
<tr>
<td>Parallel Line</td>
<td>Perpendicular Lines</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Lines in a plane that never intersect</td>
<td>Two lines that intersect to form four right angles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intersecting Lines</th>
<th>Quadrilateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line $EF$ intersects line $GH$</td>
<td>A polygon with four sides</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rectangle</th>
<th>Trapezoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>A quadrilateral with 4 right angles and opposite sides equal and parallel</td>
<td>A quadrilateral with exactly one pair of parallel sides</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parallelogram</th>
<th>Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>A quadrilateral opposite sides equal and parallel</td>
<td>A quadrilateral with 4 equal sides and 4 right angles</td>
</tr>
</tbody>
</table>
Can the Amazon Be Saved?

Paradise Lost?

The Amazon rain forest is disappearing at an alarming rate.

Bright-colored toucans and other exotic birds fly among the forest. Emerald tree boas curl up on branches to stalk prey. Endangered jaguars slink through the thick brush in search of food. These are just a few of the thousands of animals that call the Amazon rain forest home.

A tropical rain forest is warm and has heavy rainfall. The Amazon, in South America, is the largest rain forest in the world.
Yet the Amazon's future is grim. Farmers are rapidly destroying this lush landscape. Deforestation has been a huge problem in the Amazon since the 1960s. Deforestation occurs when farmers and loggers cut down trees to make room for farms, homes, and roads. Until recently, scientists thought the rain forest was losing about 5,800 square miles a year. However, using the latest satellite technology, researchers have discovered that the Amazon is shrinking at about twice that rate.

Saved? **Cause for Concern**

Why should we worry about a rain forest that is thousands of miles from where we live? Deforestation reduces the rain forest's biodiversity, or the variety of plants and animals in a particular area. The Amazon is one of the richest areas of the world in animal and plant diversity. It is home to the biggest flower in the world, a bird-eating spider, and a monkey about the size of a toothbrush.

Scientists estimate that they have identified only a small number of all species that live in the rain forest. As loggers and farmers destroy the forest, animals and plants may become extinct before they are discovered.
Deforestation affects people too. Many of the foods, spices, and medicines we need come from the rain forest.

The Amazon is often called the "lungs of the world." Its trees clean the air by taking in carbon dioxide and releasing oxygen. Too much carbon dioxide in the air is harmful to humans. Carbon dioxide is a greenhouse gas. Greenhouse gases trap the sun's heat close to Earth. Without the trees in the rain forest, the Earth's climate would become much hotter.

Fixing the Problem

Stopping the destruction of the rain forest is not an easy task. Brazil's government created two national parks in the Amazon rain forest. The government's efforts placed 3.7 million acres of rain forest off-limits for development. The protected area is more than twice the size of Maryland.

Others think that this is not enough. "The single most important factor contributing to forest loss is population growth in Brazil," scientist Jim Bowyer of the University of Michigan told Weekly Reader. "People make the forest their home. All these people need land for farming and wood for heat and cooking. They are looking for a way to survive."

Scientists estimate that if deforestation continues at its current rate, the rain forest may survive only another 40 to 50 years. "We need to address the real causes of deforestation, like poverty and population growth," says Bowyer. "Solutions need to involve the very people who destroy the forest."
1. According to the passage, deforestation is being caused by
2. According to the passage, the clearing of trees is to blame for endangering the rain forest. Which of the following solutions is presented as a way to help fix the problem?

A. identifying all the species that live in the Amazon
B. planting more trees and flowers in the rain forest
C. persuading more people to move to the Amazon
D. placing part of the Amazon under government protection

3. Which of the following conclusions is supported by the passage if rain forest deforestation continues?

A. More trees will grow in the Amazon.
B. Many plants and animals will become extinct.
C. Fewer people will call the rain forest home.
D. Earth's temperature will drop.

4. Read the first sentence from the passage: "Bright-colored toucans and other exotic birds fly among the forest." In this sentence, the word exotic means

A. familiar
B. unusual
C. feathered
D. common
5. Which statement best supports the main idea of this passage?

   A. The Amazon is the largest rain forest in the world.
   B. Millions of plants and animals live in the Amazon.
   C. Deforestation is destroying the Amazon.
   D. Brazil's government created two national parks in the Amazon.

6. According to the Amazon by the Numbers box, the Amazon rain forest covers about 2 million square miles. Now look at the map. In what South American country is most of the rain forest located?

7. Why is the Amazon rain forest important to us even though it is so far away?
8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Scientists thought that the rain forest was losing about 5,800 square miles a day; _____, they later learned that it is disappearing about twice as fast.

A. first
B. such as
C. however
D. like

Name: _______________________________ Date: _____________ 1.

Deforestation refers to

A. cutting down trees.
B. moving a forest from one continent to another.
C. removing flowers from trees.
D. planting trees in the forest.
2. Plants and animals in the rain forest are becoming extinct because

A. tourists are vacationing in the rain forest.
B. loggers and farmers are destroying the rain forest.
C. the weather in the rain forest keeps changing.
D. they are being killed by hunters.

3. Scientist Jim Bowyer says the real cause of deforestation is

A. plants and animals.
B. factories and mills.
C. malls and gas stations.
D. population growth and poverty.

4. Destroying trees in the rain forest will cause

A. cleaner air.
B. animals to have more homes.
C. Earth's climate to get hotter.
D. larger rivers.

5. Why did the author write this passage?
WIND ENERGY
in Greensburg, Kansas

Report from Greensburg, Kansas
From the Mayor

On May 4th, 2007, a tornado knocked down all the buildings in our town. We needed to rebuild the town. We wanted our new town to get its electricity from the wind. Then we would have less air pollution.

There was plenty of room for windmills around the town. So we built ten big windmills. When the wind blows, the windmills turn. The turning windmills change wind energy into electrical energy.

The wind blows almost every day in our town. It blows hard and fast. That's a good thing. The wind has to blow at least 15 miles per hour to make the windmills turn. (That's at least 6 meters per second.) When the wind doesn't blow fast enough, the windmills don't turn. Our ten windmills make enough electricity for four towns the size of Greensburg. We sell our extra electricity to other towns.

1. What are the benefits or advantages of using energy from wind?

2. What are possible problems or disadvantages of using energy from wind?
3. What does Greensburg have that makes energy from wind a good choice for this town?

4. Does Boulderville have what it needs to use energy from wind? Explain.

Name:

SUN ENERGY in Ranchtown, Florida

Report on Ranchtown, Florida from the town engineer

We wanted our town to run on electricity made from sunlight. To do that, we use solar panels. These panels take energy from sunlight and change it into electricity. They don't make any smoke or air pollution!

Our town's solar panels take up a lot of space-about 440 acres, the size of 333 football fields. But those panels make enough energy for more than 10,000 homes! During the day, we make more electricity than our town needs.

But there's a problem. Solar panels only make electricity when the sun is shining. They don't make electricity at night.
Right now, we have no way to store the extra energy. At night and on cloudy days, we have to get our electricity from other towns, which make it by burning coal and other fuels.

1. What are the benefits or advantages of using energy from sunlight?

2. What are possible problems or disadvantages of using energy from sunlight?

3. What does Ranchtown have that makes energy from sunlight a good choice for this town?

4. Does Boulderville have what it needs to use energy from sunshine? Explain.

WATER ENERGY

in Aspen, Colorado

MYSTERY science Energizing Everything | Mystery 8
Report on Aspen, Colorado

From the town historian

Our town is high in the Rocky Mountains. Every spring, snow from the mountains melts. Water flows downhill into streams and rivers.

Over 100 years ago, an engineer figured out how to make electricity using energy from the flowing water. People built a dam, a thick wall to control the flow of the river. Then they built giant wheels called turbines. The dam releases water to turn the turbines. The turbines spin and make electricity.

It takes a lot of flowing water to make enough electricity for our town. Making enough electricity for our town takes a flow of about one million gallons a minute!

Today, our town needs more energy than the dam and turbines can supply. People don’t want to build another dam. They want to be sure the rivers have enough water for fish and other wild animals. So our town buys some electricity arby towns that have energy to spare from windmills powered by the wind.

1. What are the benefits or advantages of using energy from flowing water?

2. What are possible problems or disadvantages of using energy from flowing water?
3. What does Aspen have that makes energy from flowing water a good choice for this town?

4. Does Boulderville have what it needs to get its energy from flowing water? Explain.
### Producer or Consumer?

**Directions:** Looking at the list below, determine if the phrase is an example of a producer or a consumer. Make two columns, label one Producers and the other column Consumers. Then, place each phrase in its correct location.

<table>
<thead>
<tr>
<th>Making a purse</th>
<th>Attending a play</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painting nails</td>
<td>Checking out a book</td>
</tr>
<tr>
<td>Driving a charter bus</td>
<td>Fixing a car</td>
</tr>
<tr>
<td>Painting a sculpture</td>
<td>Ordering a new outfit online</td>
</tr>
<tr>
<td>Teaching a student</td>
<td>Protecting the community</td>
</tr>
<tr>
<td>Making a cake</td>
<td>Buying a new purse</td>
</tr>
</tbody>
</table>