

6<sup>th</sup> Grade  
modified

# NTI DAY #10

(weather-closed school day)

# PACKET

# TEN

(Science)

## General Directions:

Due to weather, Harrison County Schools are closed. In an effort to utilize this day on the school calendar, your child is assigned and should work on this “packet” of school work today. It will count as a grade for this subject. The work attached is specific to the subject listed above. Please contact your child’s teacher of this subject at 234-7123 in the event you/your student have questions on this packet. Staff and teachers reported to HCMS today and are available should you have questions.

While this is DUE two (2) weeks after our return to school, we **strongly encourage** students to turn it in to their teacher **as soon as it’s complete** (soon after the NTI day) to avoid it being lost, eaten by the family pet, burned to keep warm, etc ☺

# What Newton Knew

Law 1: An object at rest will remain at rest and an object moving in a straight line will continue moving in a straight line unless acted upon by an outside force.

Color the box that matches each example to the law of motion it represents. If you are correct, you will find out what Sir Isaac Newton saw fall from a tree that caused him to start thinking about the force of gravity.

Law 2: The change in motion of an object depends on its mass and the force acting upon it.

Law 3: For every action, there is an equal and opposite reaction.



1. A duck flapping its wings to fly in the air.
2. Two friends on skates are facing each other. One child gives the other a gentle push, and the skaters move farther apart.
3. One box of apples is on a platform next to a stack of five boxes of apples. The stack of five boxes is harder to push than the single box.
4. A coin is on a playing card. The card is on top of a mug. The card is quickly pulled away from the mug, and the coin drops into the mug.
5. One coin is flicked toward a stack of coins on a table. It hits the coin at the bottom of the stack, causing the bottom coin to fly out from under the stack.
6. A passenger in a car is thrown forward when the car stops quickly.
7. A bulldozer pushes a wrecked car into a junkyard.
8. A child dribbles a basketball on a sidewalk.

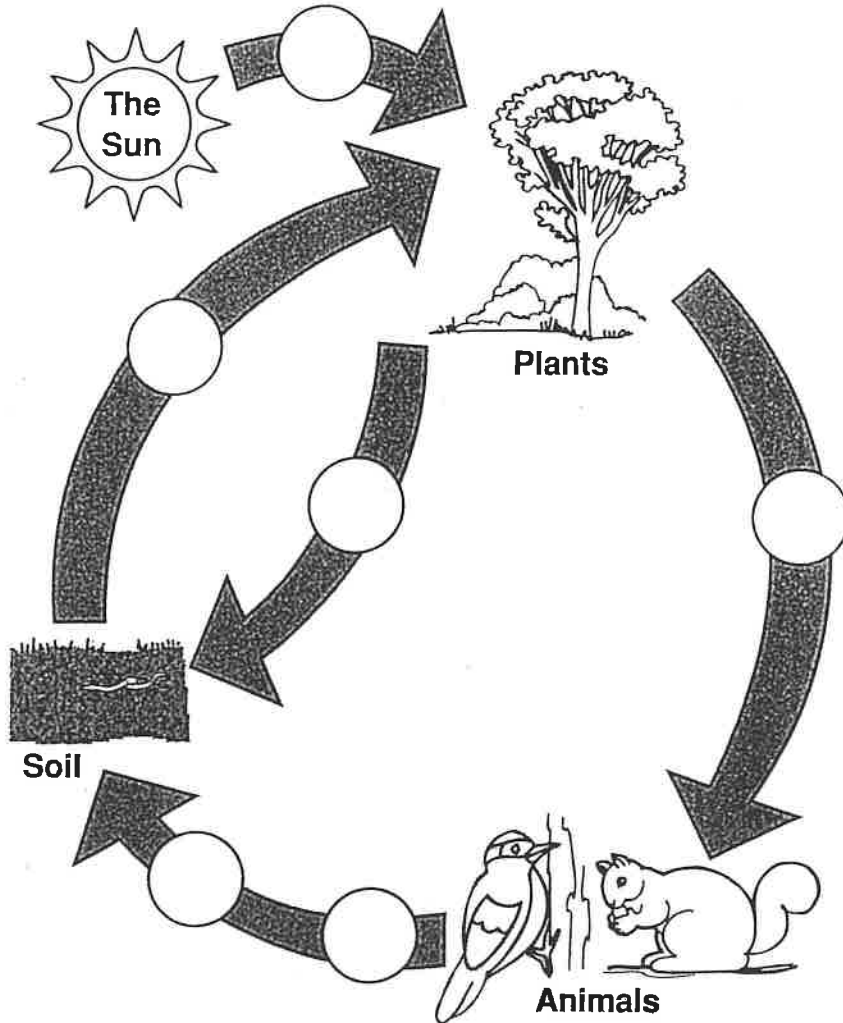
Law 1      Law 2      Law 3

Law 1	Law 2	Law 3



## A Ball of Energy

Label the diagram with the letter of each statement. Then use the completed diagram to write a paragraph explaining how energy flows through a balanced ecosystem.



### Flow of Energy in a Balanced Ecosystem

- A. Animals die.
- B. Plants are food for animals.
- C. Dead plants break down and enter soil as nutrients.
- D. Nutrients in the soil help plants grow.
- E. Dead animals break down and enter soil as nutrients.
- F. The sun provides energy for plants.

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NAME \_\_\_\_\_  
 DATE \_\_\_\_\_

# The Rock Files

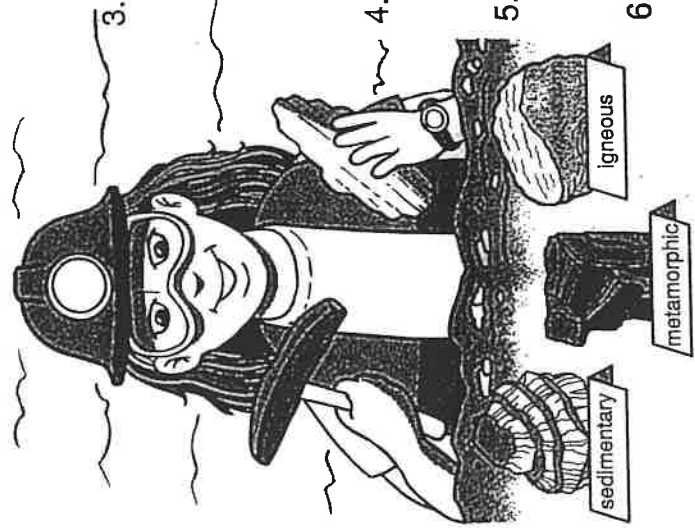


Read the passage. Then answer the questions that follow.

Igneous rocks are formed when either lava or magma cools. Many types of igneous rocks can form. It all depends on how and where the melted rock cools. Granite is strong and durable. It forms beneath Earth's surface when magma cools slowly. Obsidian is smooth and brittle. It forms above ground when lava cools quickly.

Sometimes rocks on Earth's surface break down into smaller pieces. This is called weathering. The small pieces are carried away by wind or water. Then they settle at the bottom of rivers, lakes, and streams. The small rocks that settle are called sediment. Over time, the sediment builds up. Then it squeezes together to form sedimentary rocks.

Some rocks can change using heat or pressure. They then look and feel different. They also change the form of their minerals. These rocks are called metamorphic rocks. Metamorphic rocks can form from igneous, sedimentary, or even other metamorphic rocks. When the sedimentary rock limestone is heated and placed under pressure, it turns into the metamorphic rock marble.



1. How do igneous rocks form? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
2. What can make one igneous rock different from another? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
3. What is sediment? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
4. What type of rock is created from layers of sediment? \_\_\_\_\_  
 \_\_\_\_\_
5. What is the name for a rock that changes form? \_\_\_\_\_  
 \_\_\_\_\_
6. What different types of rock can change form? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# The Heat under Your Feet

**The upper ten feet of most of the earth's crust ranges between 50 and 60 degrees Fahrenheit. Temperatures in the earth's core are hotter than the sun's surface.**

Have you ever been to Yellowstone National Park and watched Old Faithful erupt? Old Faithful is a *geyser*. Geysers are similar to volcanoes, but they spew out hot water and steam instead of melted rock. Geysers form deep below the earth's surface where water seeps into channels through cracks in the earth's crust. The deeper the water goes, the more it is heated.

Geysers are a form of geothermal energy. Scientists are learning how to use steam and hot water from deep within the earth to heat buildings and make electricity. People who heat their homes with this form of energy help our environment stay clean.

Geothermal energy is renewable. That means we will not run out of it. Heat within the earth is produced constantly, and water that erupts from geysers is gained back when it rains. Geothermal energy can be used by people around the world.



Write a word from the word bank to complete each sentence. Some words will not be used.

1. Geothermal energy is \_\_\_\_\_.
2. Old Faithful is a \_\_\_\_\_.
3. Temperatures closer to the earth's \_\_\_\_\_ are \_\_\_\_\_ than they are at the surface.
4. Hot water \_\_\_\_\_ from geysers.
5. Renewable energy is energy that \_\_\_\_\_ be replaced.
6. People around the \_\_\_\_\_ can use geothermal energy.
7. Scientists can use \_\_\_\_\_ and hot water to make \_\_\_\_\_ and to heat \_\_\_\_\_.

## Word Bank

steam  
can  
buildings  
hotter  
electricity  
core  
cannot  
nonrenewable  
United States  
erupts  
geyser  
atmosphere  
world  
colder  
volcano  
renewable

**Bonus Box:** Geothermal energy is a clean, underused form of power. How can people around the world use it more? Write your answer on the back of this page.

