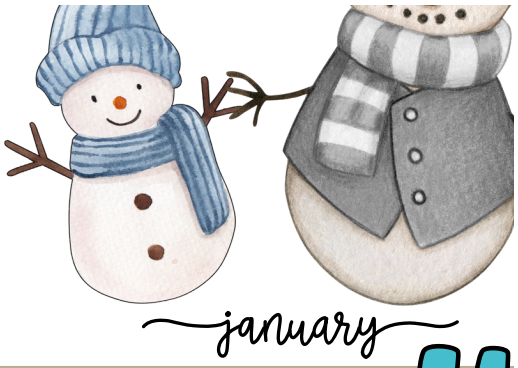
52 Te Tellurium | 89 Ac Actinium | 1 H Hydrogen | 68 Er Erbium

ewsletter

Week of January 22th - January 26th



WHAT ARE WE LEARNING?

Forms of Energy

eflection, Refraction and Absorption of light

IN CLASS PROJECTS/LABS

FORMS OF ENERGY LAB STATIONS

- Students will rotate around the classroom exploring different forms of energy.

CONTACT ME

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3A,B,C,D,E HOME LEARNING

- Review Vocabulary
- Forms of Energy Questions

VOCABULARY - QUIZLET

"Education is one thing no one can ta away from you."

Name: _____ Date: _____

● Forms of Energy Reading Passage (Version 1) https://bit.ly/3BCGvoR

FORMS OF ENERGY

Energy is the ability to do work. In other words, an object that has energy can apply a force to move or change something. Energy can interact with objects and cause them to move or change. Energy can also be stored, used to maintain a process or carry out an action. We often classify energy, which distinguishes several forms of energy.

Mechanical energy has to do with motion or position. It is used to move, lift and hold objects. For example, a bike has mechanical energy because it is moving and wind has mechanical energy because it is moving air.

Light energy is carried by light waves. Light usually refers to visible light. Visible light is electromagnetic radiation that is visible to the human eye. All types of electromagnetic radiation have energy. For this reason, light energy is more accurately called **radiant energy**. Electromagnetic radiation such as infrared, radio waves, UV light, and x-rays have radiant energy. Other kinds of waves carry energy as well. **Sound energy** is carried by sound waves. Sound waves are longitudinal waves produced by a vibrating object. A vibrating object produces sound, and thus, sound energy.

Electrical energy is carried by charged particles. It is also called electricity. Charged particles can accumulate on an object, which creates stored electrical energy called **static electricity**. Charged particles can move from one place to another, which creates moving electrical energy called **current electricity**. Current electricity moves along a path called a circuit. Electrical devices can harness this energy by hooking up to the circuit.

Thermal energy is associated with the temperature of an object. Matter is made of tiny particles called atoms. Atoms are always moving or vibrating. The faster the atoms move, the hotter the temperature of the matter and the more thermal energy the matter has. The amount of thermal energy in a substance has to do with the substance's temperature as well as the amount of matter in that substance.

Chemical energy is stored within the bonds between atoms of matter. It is used to keep atoms bonded together. The bonds between atoms in food and fuel store a lot of chemical energy. When a person digests food, the bonds break and chemical energy is released. When fuel is burned, the bonds break and chemical energy is released.

Name: _____ Date: _____

● Forms of Energy Answer Sheet (Version 1)

Questions

1. What is energy? What can an object with energy do?

2. Briefly describe the different forms of energy in the table below.

Energy Form	Definition
Mechanical	
Radiant	
Electrical	
Sound	
Thermal	
Chemical	

3. How does the amount of thermal energy change with temperature?

4. What is the difference between static and current electricity?

5. Which forms of energy are vital to the survival of living things? Justify your answer.