Energy Intro Notes

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Energy is the ability to cause change...
Change position
Change shape
Change state

Examples: Wind, electricity, heat

Forms of Energy

1.Mechanical 2.Sound 3.Chemical 4.Thermal (HEAT) 5. Electromagnetic (EM) 6. Nuclear

Forms of Energy

1- Mechanical...MOVE **OBJECTS Example: turning a car** key 2- Sound- VIBRATION, VIBRATING MOLECULES **Example: any musical** instrument 3- Chemical- stored energy in molecules **Example- gasoline**

Forms of Energy

4- Thermal- MOVEMENT OF PARTICLES (MOLECULES)

5- Electromagnetic (EM)-move through space...

X-rays, UV RAYS

6- Nuclear- energy of the atom (nucleus)

Energy: Kinetic and Potential

Kinetic energy IS the energy of motion Examples:

- A rock falling
- A paper plane flying
- A bowling ball rolling towards the pins

Energy: Kinetic and Potential

Potential energy is STORED energy Examples:

- A rock on the top of the mountain
- Food
- Battery

7th grade Anchor Questions Week 14 (Dec. 1-5)

- What is energy? List the six forms of energy
- 2. Compare sound and electromagnetic energy
- 3. Give an example of each of the six forms of energy
- 4. What are the two basic types of energy?
- 5. How are kinetic and potential energy different?
- 6. Explain with an example kinetic energy
- 7. Explain with an example potential energy

Vocabulary:

Energy
Chemical energy
Nuclear energy
Kinetic energy
Mechanical energy
Potential energy
Thermal energy
Sound energy
Energy efficiency
Electromagnetic energy