

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK, POWER & ENERGY

### Energy Basics

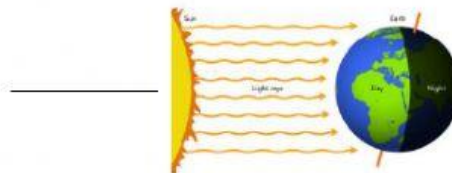
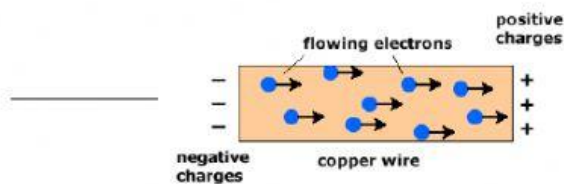
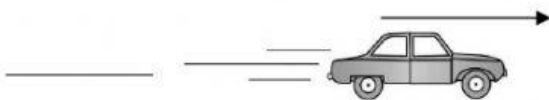
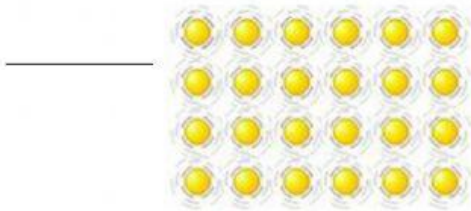
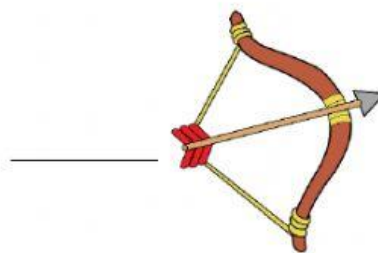
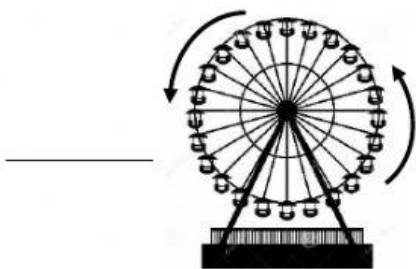
**Part 1: Forms of Energy.** Drag and drop the energy form on the line next to its definition or description.

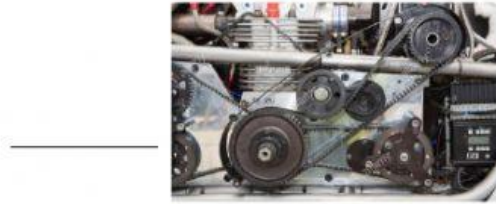
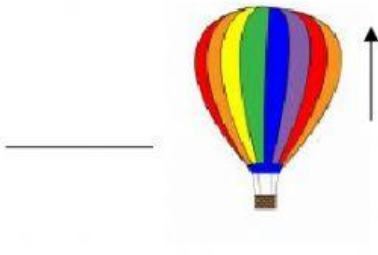
Chemical potential energy	Gravitational potential energy	Rotational kinetic energy
Elastic potential energy	Mechanical kinetic energy	Thermal energy
Electricity	Nuclear energy	Translational kinetic energy
Friction	Radiant energy	Vibrational kinetic Energy

1. \_\_\_\_\_ Photons move through space and carry the energy. Light energy.
2. \_\_\_\_\_ Objects moving with a velocity from one place to another.
3. \_\_\_\_\_ Energy that is stored in foods, fuels, and plant materials.
4. \_\_\_\_\_ Objects are spinning or moving in a circle.
5. \_\_\_\_\_ The sprocket, gears, chains, and pedals of a bicycle all move together.
6. \_\_\_\_\_ Movement of energy from hotter matter to colder matter
7. \_\_\_\_\_ Stretch a spring, the spring will restore itself if you let go.
8. \_\_\_\_\_ The energy that holds protons and neutrons together in the nuclei of atoms. This energy is released as heat and light when the atom breaks.

9. \_\_\_\_\_ The string on a piano moves back-and-forth very fast and produces sound.
10. \_\_\_\_\_ Electrons moving through a metal wire.
11. \_\_\_\_\_ A person lifts a book and puts it on a shelf 2 meters above the floor. The energy in the book.
12. \_\_\_\_\_ This force reduces kinetic energy and increases heat.

**Part 2: Match the forms of energy to the pictures.** Write the letter of the form of energy on the line next to the correct picture.





- A. Translational KE
- B. Rotational KE
- C. Vibrational KE
- D. Mechanical KE
- E. Elastic PE
- F. Gravitational PE

- G. Chemical PE
- H. Thermal energy
- I. Electricity
- J. Radiant energy
- K. Nuclear energy

(PE = potential energy; KE = Kinetic energy)