

"INTRODUCTION TO ENERGY" WORKSHEET

Name _____

Date _____

Per: _____

Part 1. The two basic types of energy

Directions: Determine the best match between basic types of energy and the description provided. Put the correct letter in the blank.

- ____ 1. A skier at the top of the mountain (a) Kinetic Energy
- ____ 2. Gasoline in a storage tank (b) Potential Energy
- ____ 3. A race-car traveling at its maximum speed (c) Both forms of Energy
- ____ 4. Water flowing from a waterfall before it hits the pond below
- ____ 5. A spring in a pinball machine before it is released
- ____ 6. Burning a match
- ____ 7. A running refrigerator motor

Part 2. Forms of Energy.

Directions: Determine the type of energy for each form (Kinetic, Potential, or Both) and give an example. You may NOT use the examples in the next section.

Form	Definition	Type (KE, PE, or Both)	Example (for each type if both)
Mechanical (motion) energy	An object's movement creates energy		
Thermal (heat) energy	The vibration and movement of molecules		
Radiant energy	Electromagnetic waves		
Electrical energy	Movement of electrons		
Chemical energy	Stored in bonds of atoms and molecules		
Nuclear energy	Stored in the nucleus of an atom; released when nucleus splits or combines		
Sound energy	Vibration of waves through material		
Electromagnetic energy	Energy that travels through space as electrical and magnetic waves.		

Part 3. Forms of Energy Continued

Directions: Match the energy form(s) to the description provided. A few questions may have more than one answer.

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| _____ 1. Falling rocks from the top of a mountain | (a) Mechanical |
| _____ 2. Release of energy from the Sun | (b) Electrical |
| _____ 3. Energy released from food after it is eaten | (c) Thermal |
| _____ 4. Batteries | (d) Electromagnetic |
| _____ 5. The energy that runs a refrigerator | (e) Chemical |
| _____ 6. Nuclear fission reactors | (f) Nuclear |
| _____ 7. The rumble of thunder from a storm | (g) Sound |
| _____ 8. Rubbing your hands together | |
| _____ 9. Gasoline | |
| _____ 10. Food before it is eaten | |
| _____ 11. Lightning | |