

Types of Energy PracticePart 1. Forms of Energy

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

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|-------------------------|--|---------------------|
| <u>A, G, & H</u> | 1. Falling rocks from the top of a mountain | (a) Mechanical |
| <u>C, F, & D</u> | 2. Release of energy from the Sun | (b) Electrical |
| <u>E, B, A, & D</u> | 3. Energy released from food after it is eaten | (c) Thermal |
| <u>E</u> | 4. Batteries | (d) Radiant |
| <u>B</u> | 5. The energy that runs a refrigerator | (e) Chemical |
| <u>F & C</u> | 6. Nuclear fission reactors | (f) Nuclear |
| <u>G</u> | 7. The rumble of thunder from a storm | (g) Sound |
| <u>C, A, & G</u> | 8. Rubbing your hands together | (h) Gravitational |
| <u>E</u> | 9. Gasoline | (i) Elastic |
| <u>E</u> | 10. Food before it is eaten | (j) Electromagnetic |
| <u>B, J, & G</u> | 11. Lightening | |
| <u>H</u> | 12. A boulder resting at the top of a hill | |
| <u>C, J, & F</u> | 13. Release of energy from the Sun | |
| <u>I</u> | 14. A coiled spring | |

Part 2. Forms of Energy.

Directions: Determine the type of energy for each form (Kinetic, Potential, or Both) and give an example.

Form	Definition	Type (KE, PE, or Both)	Example (for each type if both)
Mechanical (motion) energy	An object's movement creates energy	Both	Electric motor
Thermal (heat) energy	The vibration and movement of molecules	Both	Boiling water
Radiant energy	Electromagnetic waves	KE	Wind
Electrical energy	Movement of electrons	KE	Fan
Chemical energy	Stored in bonds of atoms and molecules	PE	Gasoline
Nuclear energy	Stored in the nucleus of an atom; released when nucleus splits or combines	PE	Nuclear fission (atomic bomb)
Sound energy	Vibration of waves through material	KE	Window vibration from rock concert
Gravitational energy	Energy of position or height	PE	Lifting a baseball up

Part 3. Transformation of Energy

Directions: Use the following forms of energy to fill in the table below: **mechanical, electrical, thermal, radiant, chemical, nuclear, and sound.**

	ORIGINAL ENERGY	FINAL ENERGY FORM
1. Electric motor	electrical	mechanical
2. A battery that runs a moving toy	chemical	mechanical
3. A solar panel on the roof of a house	radiant	electrical
4. A person lifting a chair	chemical	mechanical
5. A nuclear power plant	nuclear	electrical
6. A toaster	electrical	radiant
7. A church bell	mechanical	sound
8. Gasoline powering a car	chemical	mechanical
9. A light bulb	electrical	radiant
10. Photosynthesis	radiant	chemical