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|  | **Science 9**  **Intro to Energy Worksheet** |  | **Name:**  **Date: Block:** |

**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. A match burning

\_\_\_\_\_\_7. A running refrigerator motor

**Part 2. Definitions of Energy**

Directions: Write down the definition for each of the following terms.

ENERGY:

KINETIC ENERGY:

POTENTIAL ENERGY:

**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. You may use these options more than once.

\_\_\_\_\_\_\_\_\_\_\_\_\_1. Falling rocks from the top of a mountain (a) Mechanical

\_\_\_\_\_\_\_\_\_\_\_\_\_2. Release of energy from the Sun (b) Electrical

\_\_\_\_\_\_\_\_\_\_\_\_\_3. Energy used to throw a baseball (c) Heat

\_\_\_\_\_\_\_\_\_\_\_\_\_4. Batteries (d) Solar

\_\_\_\_\_\_\_\_\_\_\_\_\_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. Food before it is eaten

**Part 4. Transformation of Energy**

Directions: Use the following forms of energy to fill in the table below: **mechanical, electrical, heat, solar, chemical, nuclear, and sound**. The first one has been done for you.

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|  | **ORIGINAL ENERGY FORM** | **FINAL ENERGY FORM** |
| 1. Electric motor | electrical | mechanical |
| 2. A battery that runs a moving toy |  |  |
| 3. A solar panel on the roof of a house |  |  |
| 4. A nuclear power plant |  |  |
| 5. Gasoline powering a car |  |  |
| 6. A light bulb |  |  |
| 7. Photosynthesis |  |  |