ENERGY FORMS & TRANSFER

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

_____	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) Radiant
_____	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	(h) Gravitational
_____	9. Gasoline	(i) Elastic
_____	10. Food before it is eaten	(j) Electromagnetic
_____	11. Lightening	
_____	12. A boulder resting at the top of a hill	
_____	13. Release of energy from the Sun	
_____	14. A coiled spring	

2. 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		
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		
Gravitational energy	Energy of position or height		

3. Determine the energy transfers that take place in the following situations.

	ORIGINAL ENERGY	ENERGY TRANSFERS
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 person lifting a chair		
5. A nuclear power plant		
6. A toaster		
7. A church bell		
8. Gasoline powering a car		
9. A light bulb		
10. Photosynthesis		