## **Science 8- Energy Types and Transformations Quiz**

Match the example with the correct type of energy.

B. Velocity

101. 102. 103. 104. 105.	Driving a car to the store Eating a banana Using light from the sun to read a book Boiling water on the stove to cook soup Plugging in your phone charger		Chemical Energy Thermal(Heat) Energy Electrical Energy Mechanical Energy Electromagnetic Energy
For numbers 6-13, use the word bank and choose the correct form of energy and its transformation.  A. Mechanical B. Chemical C. Electrical D. Electromagnetic E. Thermal AB. Nuclear			
106.	107.	108.	109.
	$\rightarrow$	THE WAY	
110.	111.	112.	113.
114. /	An object that can store energy as a result o A. Potential Energy	of its <b>position</b> is call B. Kinetic Ene	
115.	15. The energy an object possesses due to its <b>motion</b> is called:		
	A. Potential Energy	B. Kinetic Ene	rgy
116.	The <b>splitting</b> of an atom is called:  A. Nuclear Fission	B. Nuclear Fu	sion
117. \	Which of the following is <b>NOT</b> known has a A. Evaporation B. Melting	phase transition? C. Liquid D. Condensat	ion
	118. The <b>measurement</b> of the total amount of kinetic energy that the particles of a substance called		
(	A. Temperature	C. Electrical E	nergy

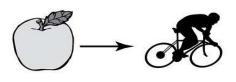
D. Thermal Energy

## Write the correct type of energy next to the example provided.

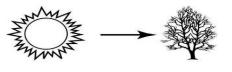
- 1. Driving a car to the store
- 2. \_\_\_\_\_ Eating a banana
- 3. Using light from the sun to read a book
- 4. Boiling water on the stove to cook soup
- 5. Plugging in your phone charger

## For numbers 6-9, choose the correct form of energy and its transformation.

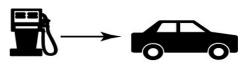
6.



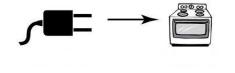
7.



8.



9.



- 10. An object that can store energy as a result of its position is called:
  - A. Potential Energy

- B. Kinetic Energy
- 11. The total amount of energy that the particles of a substance have is called
  - A. Temperature

C. Electrical Energy

B. Velocity

- D. Thermal Energy
- 12. What is the main difference between a renewable resource and a non-renewable resource?

## Solve the following word problems using the kinetic and potential energy formulas (Be sure to show your work!)

- 13. Determine the kinetic energy of a 1000-kg roller coaster car that is moving with a speed of 20.0 m/s.
- 14. Find the potential energy of a 75-kg refrigerator that is located on the 70<sup>th</sup> floor of a skyscraper (300m)?

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