



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 23.06.20

Duration: 40 min

Worksheet 45

Full Marks: 15

ENERGY & POWER

Choose the Correct options:

- The Law of Conservation of Energy states:
 - Energy can be created or destroyed but not transformed
 - Energy cannot be created or destroyed, it can only transformed
 - Energy can't be created, destroyed or transformed
- According to the Law of Conservation of energy, the amount of energy before and after a reaction must be the same. Which statement below is true?
 - The total amount of energy is conserved
 - The total amount of energy is less after a reaction
 - The total amount of energy is more after a reaction
- Which energy transformation below matches?
A book falling?
 - chemical to sound and heat
 - kinetic to sound and heat
 - electrical to sound and heat
- Which energy transformation below matches?
Water moving over a dam to move a generator?
 - kinetic to chemical
 - kinetic to electrical
 - solar to electrical
- Which energy transformation below matches?
Green plants?
 - chemical to mechanical
 - chemical to heat
 - solar to chemical
- Which energy transformation below matches?
Animals eating food?
 - electrical to potential
 - chemical to kinetic
 - potential to chemical
- Which energy transformation below matches?
Burning coal or carbon-based fuel at a power plant?
 - chemical to heat to electrical
 - mechanical to chemical to sound
 - electrical to chemical to heat
- Which energy transformation below matches?
An electrical circuit?
 - chemical to heat, sound, light, mechanical
 - solar to heat, sound, light, mechanical
 - electrical to heat, sound, light, mechanical
- Which is an example of a single energy transformation?
 - A toaster converts electrical to thermal energy

- (b) A match converts mechanical to thermal to electromagnetic
 - (c) A biker converts chemical to mechanical to thermal
10. What is an example of multiple energy transformations?
- (a) Your body transforms chemical to thermal
 - (b) Your body transforms chemical to mechanical
 - (c) a flashlight converts chemical energy in batteries to electrical to electromagnetic energy in light
11. As an object falls its _____ energy decreases and its kinetic energy increases
- (a) potential
 - (b) chemical
 - (c) thermal
12. What kind of energy in the sun transforms into electromagnetic energy?
- (a) nuclear
 - (b) thermal
 - (c) electric
13. According to the Law of Conservation of Energy, when one form of energy is transformed into another, _____ energy is lost in the process
- (a) no
 - (b) some
 - (c) all
14. _____ CANNOT be created or destroyed
- (a) energy
 - (b) transformation
 - (c) motion
15. Whenever a moving object experiences friction, some of its kinetic energy is transformed into _____ energy.
- (a) thermal
 - (b) electrical
 - (c) mechanical