



Energy Transformations

20 Questions

NAME : _____

CLASS : _____

DATE : _____

1. Mechanical energy

- ☐ a) energy built up before being in motion
- ☐ b) energy released in a chemical reaction
- ☐ c) energy of motion
- ☐ d) sum of kinetic and potential energy

2. According to the Law of Conservation of Energy, energy cannot be _____ or _____.

- ☐ a) destroyed, destroyed
- ☐ b) created, saved
- ☐ c) created, destroyed
- ☐ d) lost, found

3. What is energy changing from one form to another?

- ☐ a) energy conservation
- ☐ b) energy transformation
- ☐ c) energy creation
- ☐ d) mechanical energy

4.



Which energy conversion is taking place when you put gasoline in a car?

- ☐ a) thermal -> electrical
- ☐ b) mechanical -> electrical
- ☐ c) chemical -> mechanical
- ☐ d) mechanical -> electromagnetic

5.



what type of energy is stored in a battery?

☐ a) electrical☐ b) chemical☐ c) thermal☐ d) mechanical

6.



When you eat pizza, Chemical Energy is transferred to ____ Energy.

☐ a) Solar☐ b) Electrical☐ c) Mechanical☐ d) Chemical

7.



Solar Energy is transferred to ____ Energy.

☐ a) Mechanical☐ b) Solar☐ c) Sound☐ d) Electrical

8.



Electrical Energy is transferred to ____ Energy.

☐ a) Thermal☐ b) Solar☐ c) Electrical☐ d) None

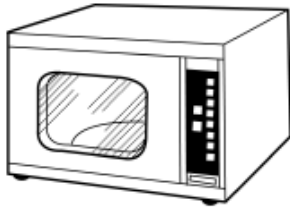
9.



Mechanical Energy is transferred to ____ Energy.

- ☐ a) Solar
- ☐ b) Mechanical
- ☐ c) Electrical
- ☐ d) Potential

10.



The picture shows a microwave oven. As a microwave oven is operated, electrical energy is transformed into all of the following types of energy EXCEPT —

- ☐ a) solar
- ☐ b) light
- ☐ c) thermal
- ☐ d) mechanical

11. Electrical -> Mechanical -> Sound

- ☐ a) A triple beam balance measuring an object's mass
- ☐ b) A pencil sharpener plugged into a wall outlet
- ☐ c) A projector displaying a diagram on the screen
- ☐ d) A working flashlight used to light up a dark corner

12. Energy you get from eating an apple

- ☐ a) nuclear energy
- ☐ b) electromagnetic energy
- ☐ c) sound energy
- ☐ d) chemical energy

13. What energy is given off when a cell phone rings?

- ☐ a) Sound Energy
- ☐ b) Gravitational Energy
- ☐ c) Thermal Energy
- ☐ d) Nuclear Energy

14. Which energy transformation occurs in a toaster?

- ☐ a) chemical to electric
- ☐ b) electric to thermal
- ☐ c) kinetic to chemical
- ☐ d) thermal to potential

15.



Can you create energy?

- ☐ a) Yes
- ☐ b) No

16.



Can you destroy energy?

- ☐ a) Yes
- ☐ b) No

17.



Making a Fruit Smoothie is YUMMY!

Plug a Blender into the wall outlet, and you're ready to go.
Which choice below BEST shows the energy transformation of making a smoothie?

- ☐ a) Electrical to Kinetic
- ☐ b) Electrical to Chemical
- ☐ c) Mechanical to Sound
- ☐ d) Kinetic to Thermal

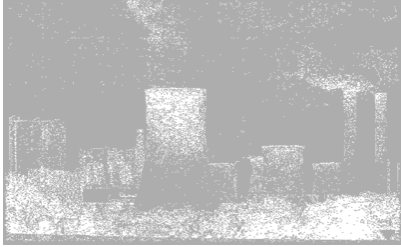
18. A hot air balloon has the following energy transformations_____.

- ☐ a) Thermal-Chemical-Electrical
- ☐ b) Chemical-thermal-mechanical
- ☐ c) Thermal-Mechanical
- ☐ d) Thermal-Chemical

19. Mr. Huff's students are complaining that it is hot in the classroom. He plugs in a fan and turns it on, what energy transformation now occurs?

☐ a) mechanical to electrical ☐ b) electrical to mechanical
☐ c) chemical to mechanical ☐ d) electromagnetic to mechanical

20.



In a nuclear power plant, uranium atoms are split in a process called "fission." This releases a tremendous amount of energy. In order to provide this energy to factories and homes, the power plant converts the energy to –

☐ a) water ☐ b) oil
☐ c) natural gas ☐ d) electricity

Answer Key

1. d
2. c
3. b
4. c
5. b

6. c
7. d
8. a
9. c
10. a

11. b
12. d
13. a
14. b
15. b

16. b
17. a
18. b
19. b
20. d