

Quiz 18 – Energy

Name: _____ Group: _____

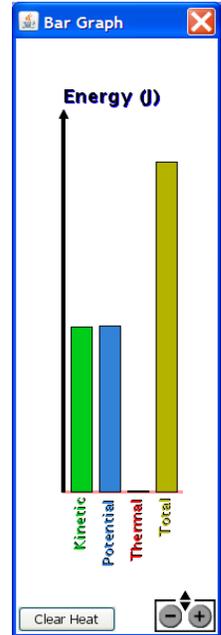
1. Circle the items below that are forms of energy and put x's through the items that are not forms of energy.

Chemical	Air	Sound	Electrical
Power	Banana	Gasoline	Nuclear
Thermal	Water	Light	Wood

2. Does energy have mass? Please provide examples.

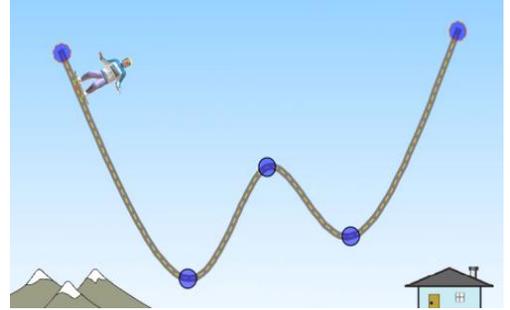
3. Draw a pie chart that matches this bar graph shown.

4. Draw the bar graph that matches the pie chart shown.



5. How does a giant windmill harvest wind energy and convert it into electrical energy?

6. If there is no friction on the track, how high does the skater get on the right side if he starts from rest at the spot shown? Mark the exact spot with an X.



Multiple Choice Section

Please put your answers for the following items on your scantron answer sheet.

1. Sally says “*kinetic energy can turn into thermal energy.*” Jean says, “*No, you are wrong. Energy cannot be created nor destroyed which must mean that you cannot create thermal from nothing and you can’t destroy the kinetic.*”

Who’s correct?

- A. Sally
- B. Jean
- C. Both Sally and Jean
- D. Both are incorrect.

2. A battery contains which type of energy?

- A. Thermal
- B. Electrical
- C. Nuclear
- D. Chemical
- E. Mechanical

3. A running buffalo contains which of the following types of energy?

- A. Thermal
- B. Mechanical
- C. Chemical
- D. All of the above
- E. None of the above

4. A car stopped at a red light on the top of a hill has which of the following types of energy?

- A. Kinetic
- B. Potential
- C. Nuclear
- D. Light

5. When a car begins from rest and speeds up to 50 mi/hr, energy begins as _____ and ends up as _____.

- A. Chemical, Thermal
- B. Chemical, Kinetic
- C. Kinetic, Thermal
- D. Kinetic to Potential
- E. Potential, Kinetic

6. When a rock drops from a tall building, energy begins as _____ and ends up as _____ before it hits the ground.

- A. Chemical, Thermal
- B. Chemical, Kinetic
- C. Kinetic, Thermal
- D. Kinetic to Potential
- E. Potential, Kinetic

7. When a car is parked on a hill and its brakes fail, it begins rolling towards the bottom picking up speed, energy begins as _____ and ends up as _____.

- A. Chemical, Thermal
- B. Chemical, Kinetic
- C. Kinetic, Thermal
- D. Kinetic, Potential
- E. Potential, Kinetic

8. When a person tosses a baseball straight up into the air, after leaving the person's hand the ball goes up and stops before falling back to the ground. Energy begins as _____ and ends up as _____ at the top of the flight.

- A. Chemical, Thermal
- B. Chemical, Kinetic
- C. Kinetic, Thermal
- D. Kinetic, Potential
- E. Potential, Kinetic

9. When Nicole runs a marathon from the start of the race to the end when she's hugging her opponent, energy begins as _____ and ends up as _____.

- A. Chemical, Thermal
- B. Chemical, Kinetic
- C. Kinetic, Thermal
- D. Kinetic to Potential
- E. Potential, Kinetic

10. When the burner on a stove top turns red hot, energy begins as _____ and ends up as _____.

- A. chemical, thermal
- B. Electrical, thermal and light
- C. Electrical, thermal only
- D. Thermal, light
- E. Kinetic, Thermal

11. Power is

- A. energy output per unit time
- B. a form of Energy
- C. a force
- D. All of the above
- E. None of the above