Unit 10 Class Test Energy

NAME : _____

CLASS : _____

MULTIPLE CHOICE - Answer each of the following multiple-choice questions.

1. Energy stored in solid object when it is either stretched or compressed.

   a. Electrical energy

   b. Mechanical energy

   c. Elastic energy

2. The picture showing the energy conversion.

   Electrical → light

   is:

a. 

b. 

c. 

d. 

3. The picture showing the energy conversion

Light → electrical

is:

a. 

b. 

c. 

d. 

4. What is the energy conversion when you plug in a stereo and listen to music?

a. Chemical to heat

b. Electrical to sound

c. Potential to sound

d. Electrical to mechanical

5. What is the energy conversion when you burn wood for a fire?

a. Chemical to thermal

b. Electrical to thermal

c. Chemical to electrical

d. Light to kinetic

6. What is the energy conversion when you put batteries in a flashlight to make it turn on?

a. Chemical to light
c. Light to kinetic
b. Nuclear to light
d. Chemical to thermal

7. What is the energy conversion when you have a skateboard at the top of the hill then move down?

a. Kinetic to potential
c. Electrical to kinetic
b. Potential to thermal
d. Potential to kinetic

8. What is the energy conversion when you eat food for fuel to go for a run?

a. Chemical to nuclear
c. Kinetic to chemical
b. Chemical to kinetic
d. Potential to chemical

9. _____ energy is the energy that is stored.

a. Potential
c. Both
b. Kinetic
d. Neither

10. What is the energy conversion when photosynthesis takes place as the sun makes a plant grow?

a. Light to chemical
c. Potential to nuclear
b. Chemical to potential
d. Thermal to chemical

11.  Heat always travels from...

a. Cool to warm
c. Cool to cool
b. Warm to warm
d. Warm to cool

12. You could find a lot this type of energy at the top of a tall tree.

a. Mechanical
c. Electrical
b. Potential
d. Kinetic

13. What form of energy is defined as, "the total potential and kinetic energy of an object".

a. Potential
c. kinetic
b. Mechanical
d. Electrical

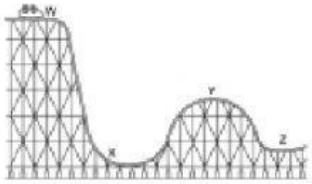
14. What type of energy is most responsible when you chew your food?

a. Potential
c. Mechanical
b. Chemical
d. Electrical

15. True or False. Energy cannot be created or destroyed, rather it is transformed from one energy type to another.

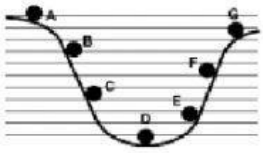
a. True
b. False

16. Which 2 letters have the most kinetic energy



a. X & Y
c. W & X
b. X & Z
d. W & Y

17. Which point has the most potential energy?



a. B
c. F
b. G
d. A

18. The faster an object moves, the _____ kinetic energy it has.

a. All of the above
c. None of the above
b. More
d. Less

19. Which is the largest amount of energy?

a. 400.000 J

b. 4 J

c. 40 kJ

d. 0.004 MJ

Fill in the blank!

20. Most important source of light energy _____

READ THESE INSTRUCTIONS FIRST

Answer all questions in the spaces provided on the question paper. The number of marks is given in the brackets [ ] at the end of each question.

kinetic energy	**heat energy**
electrical energy	**chemical energy**

21. Complete the sentences about forms of energy. Choose words from the list. [3]

a. This type of energy is released when chemical reaction occurs. It's stored in food, batteries and fossil fuels. _____

b. This energy is used to power machines._____

c. Energy of motion. All moving things have this type of energy.

_____

22. A battery supplies 100 J of energy to make a torch work. If the torch produces 20 J of light. how much heat energy will it produce?

The heat energy produced is _____ [1]

23. The table below shows the amount of energy used each minute in different activities

Activity	**Energy used per minute / kJ**
swimming at 25 m / minute	23
walking at 6 km / h	28
cycling at 16 km / h	31
running at 12 km / h	60
aerobics (vigorous)	42

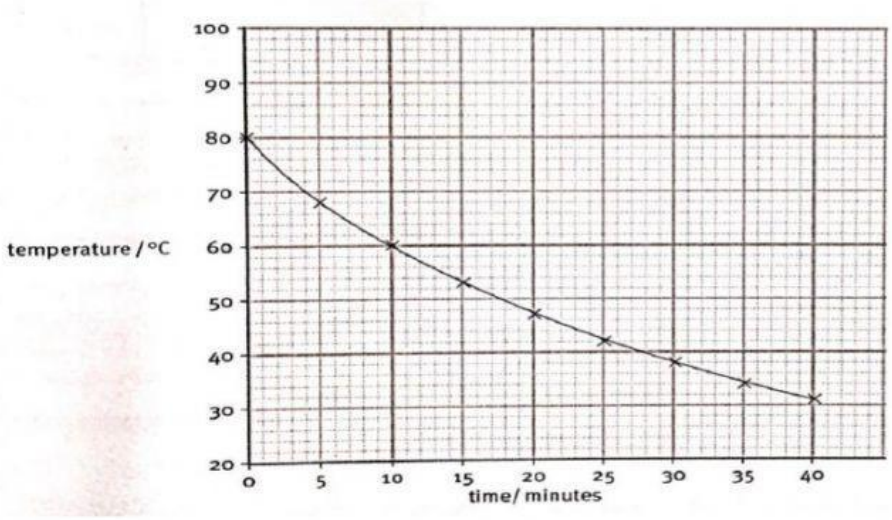
Answer the following questions

(a) Which among the activity has used up much energy?

_____ [1]

(b) How much is the total energy used up in walking and doing aerobics? _____ [1]

24. Alan and Jon investigated the cooling of a hot water poured into a metal container



(a) Study the graph. What was the temperature of the hot water at the start of the investigation?

Answer _____ [1]

(b) What is the lowest temperature in the graph?

Answer _____ [1]

(c) Look at the graph, what was the temperature of the hot water after 10 minutes?

Answer _____ [1]

(d) A lot of the energy in the hot water has disappeared, is this statement True or False

Answer _____ [1]

*** END OF THE PAPER ***