

Form 1 Chapter 6 Sources of Energy

Paper 1

Answer **all** questions. Each question is followed by four options, **A, B, C** and **D**. For each question, choose **one** answer only.

1. What form of energy possesses by a running boy?

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

2.

<i>K</i>	Electrical energy
<i>L</i>	Light energy
<i>M</i>	Heat energy
<i>N</i>	Chemical energy

Among the forms of energy above, what is involved when an electric bulb lights up?

- A *K* only
- B *K* and *L* only
- C *L* and *N* only
- D *K*, *L*, and *M*

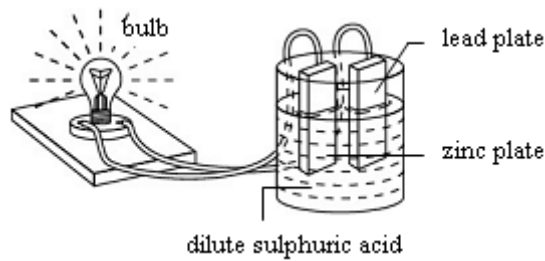
3.

Electric iron: Electrical energy $\rightarrow P$
 Electric fan: Electrical energy $\rightarrow Q$

Which of the following represents energy *P* and *Q*?

- | <i>P</i> | <i>Q</i> |
|-------------------|------------------|
| A Heat energy | Potential energy |
| B Kinetic energy | Chemical energy |
| C Chemical energy | Heat energy |
| D Heat energy | Kinetic energy |

4.



What is the energy changes taking place in the simple cell in the diagram above when the bulb lights up?

- A Light energy \rightarrow nuclear energy \rightarrow heat energy
- B Chemical energy \rightarrow electrical energy \rightarrow kinetic energy \rightarrow potential energy
- C Chemical energy \rightarrow electrical energy \rightarrow heat energy + light energy
- D Potential energy \rightarrow kinetic energy \rightarrow electrical energy \rightarrow kinetic energy

5. Among the following sources of energy, which is a renewable source of energy?

- A Petroleum
- B Natural gas
- C Coal
- D Biomass

6.

- Washing machine
- Electric fan

Which of the following appliances undergoes the same energy change as the above appliances?

- A Electric iron
- B Electric saw
- C Television
- D Battery

7.

Kinetic energy \rightarrow electrical energy

Which of the following appliances undergoes the above energy change?

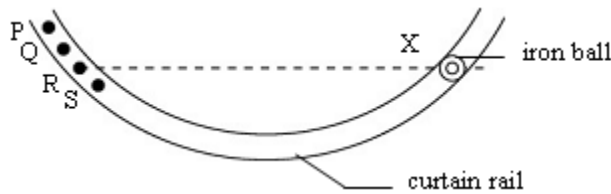
- A Hair dryer
- B Dynamo
- C Electric iron
- D Electric kettle

8. Which of the following provides you with the energy needed to carry out daily activities?

- A Chemical energy
- B Heat energy
- C Kinetic energy
- D Light energy

9. Among the following sources, which does **not** originate from the Sun?
- A Biomass energy
 - B Geothermal energy
 - C Fossil fuel
 - D Wind energy
10. An object is said to have potential energy if it
- A is placed on the floor
 - B moves with a certain speed
 - C releases a lot of heat
 - D is stretched or compressed
11. Which energy is required to evaporate the excess water from sea water in the making of salt beside the sea?
- A Potential energy
 - B Kinetic energy
 - C Heat energy
 - D Electric energy

12.



An iron ball is released from point X. If there is no friction between the iron ball and the curtain rail, the highest point the iron can reach is

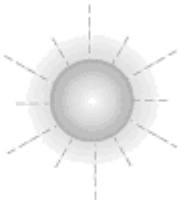
- A P
 - B Q
 - C R
 - D S
13. A clock that is wound up possesses
- A kinetic energy
 - B heat energy
 - C potential energy
 - D electric energy
14. What is the energy changes that occur when someone plays a guitar?
- A Kinetic energy → potential energy → chemical energy → sound energy
 - B Chemical energy → potential energy → kinetic energy → sound energy
 - C Chemical energy → electrical energy → sound energy → sound energy
 - D Potential energy → kinetic energy → electrical energy → kinetic energy

15. Plants carry out photosynthesis to make food. What is the energy change that occurs?
- A Light energy → chemical energy
 - B Potential energy → kinetic energy
 - C Light energy → heat energy
 - D Chemical energy → light energy
16. Which of the following energy changes occurs in a hydroelectric station?
- A Potential energy → chemical energy → electrical energy
 - B Chemical energy → heat energy → electric energy
 - C Potential energy → kinetic energy → electrical energy
 - D Heat energy → kinetic energy → potential energy
17. Of the following energy sources, which are renewable?
- I Biomass
 - II Solar energy
 - III Geothermal energy
- A I only
 - B I and II only
 - C II and III only
 - D I, II, and III
18. Of the following forms of energy, which is/are possessed by a piece of burning charcoal?
- I Heat energy
 - II Chemical energy
 - III Light energy
- A I only
 - B I and II only
 - C II and III only
 - D I, II, and III
19. Which of the following is the use of heat energy?
- I Grinding wheat
 - II Lighting up a dark room
 - III Drying hair with a hair dryer
- A III only
 - B I and II only
 - C II and III only
 - D I, II, and III
20. We must use and manage our energy resources properly because
- I fossil fuel is non-renewable
 - II the rate of energy usage is increasing rapidly
 - III non-renewable energy sources are decreasing rapidly
- A I only
 - B I and II only
 - C II and III only
 - D I, II, and III

Paper 2

Answer the question.

The figure below shows diagrams of sources of energy *P*, *Q*, *R* and *S*.



P



Q



R



S

Observe the sources of energy in the figure above.

Based on your observations,

(a) state **one** characteristic of sources of energy *P*, *Q*, *R* and *S*.

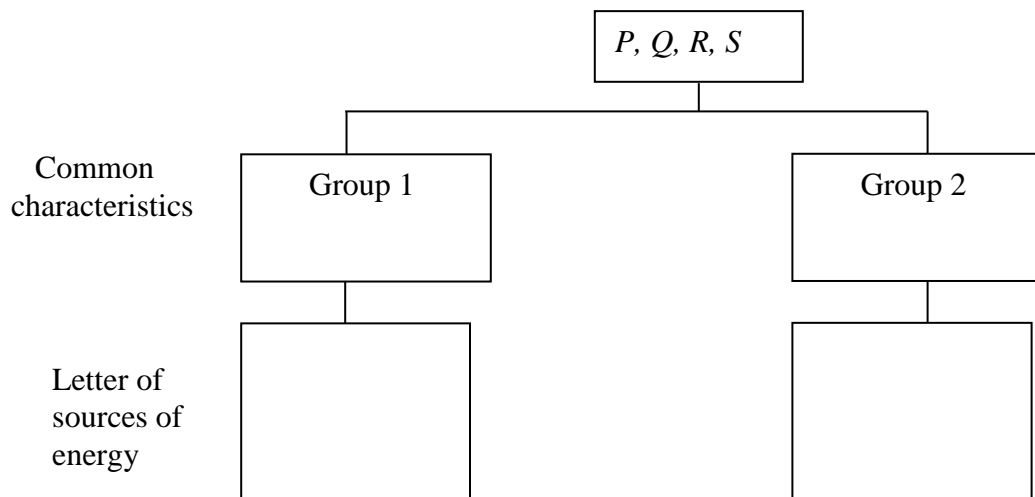
P: _____

Q: _____

R: _____

S: _____

(b) Classify sources of energy *P*, *Q*, *R* and *S* in the figure above into two groups based on **common characteristics**. Write the letter of sources of energy belonging to each group.



Answers:

Paper 1

1	A	11	C
2	D	12	D
3	D	13	C
4	C	14	B
5	D	15	A
6	B	16	C
7	B	17	D
8	A	18	D
9	B	19	A
10	D	20	D

Paper 2

- (a) *P*: Renewable source of energy
Q: Non- renewable source of energy
R: Renewable source of energy
S: Renewable source of energy
- (b) Group 1: Renewable source of energy; *P, R, S*
Group 2: Non- renewable source of energy; *Q*