

Exercises

A. Tick (✓) the correct option:

1. Sun is a _____ source of light.

Ans.1 (b) natural

2. Colour of the shadow is _____.

Ans.2 (c) black

3. If force is applied to your study table kept in your room, it will _____.

Ans.3 (a) move

4. Shadow is formed on the _____ side of source of light.

Ans.4 (b) opposite

B. Short Answer Type Questions:

1. Why do we need light?

Ans. We need light to see things around us.

2. How does light travel?

Ans. Light travels in a straight line.

3. At what time of the day is our shadow the shortest?

Ans. The shadow is shortest at noon.

4. What is force?

Ans. A push or pull that causes an object to move is called force.

C. Long Answer Type Questions:

1. How is a shadow formed?

Ans. A shadow is formed when the path of light is blocked by an opaque object.

2. What kind of a shadow is formed at noon? Why?

Ans. At noon, the shadow of an object is very short because the sun is high in the sky and its rays fall straight on the earth.

3. Why are shadows long in the morning?

Ans. In the morning, the sun rays fall slanting because the sun is very low in the sky.

Therefore, a shadow is longer in morning.

4. Write the effects of force on an object.

Ans. The effects of force on an object are:

- i) Move an object.
- ii) Stop an object
- iii) Change the direction of motion.
- iv) Change the shape of an object.
- v) Change the speed of an object in motion.

5. What do you mean by luminous and non - luminous objects? Give two examples of each.

Ans. The objects that give us light are called luminous objects. Example: Sun, Candle

The objects that do not have light of their own are called non - luminous objects.

Example: Table, Chair

D. Fill in the blanks:

- 1. We need light to see objects.
- 2. Sun is a natural source of light.
- 3. A shadow is always black in colour.
- 4. Force is a push or pull.
- 5. A shadow is always formed on the opposite side of source of light.

E. State True or False:

- 1. A book is a luminous object. (False)
- 2. When you kick a football, force is applied on it. (True)
- 3. Opaque objects make shadows. (True)
- 4. Shadow is shortest in the evening. (False)
- 5. Force can change the direction of an object. (True)

F. Match the Columns:

Column A

Column B

- | | | |
|-----------------|---|--------------|
| 1. Luminous | - | glowing lamp |
| 2. Non-luminous | - | bed |

- 3. Shadow - black
- 4. Force - push or pull

G. Give two examples each of:

- 1. Artificial source of light Torch Bulb
- 2. Luminous objects Lamp Candle
- 3. Non – luminous Objects Pen Paper
- 4. Force applied to move an object Push Pull

H. Puzzle and Quiz:

1. Find 9 terms relating to the lesson in the maze below.

Answers. 1. Direction ; 2. Opaque ; 3. Pull ; 4. Force ; 5. Motion ; 6. Shadow ;
7. Artificial ; 8. Sun ; 9. Luminous

2. What am I?

- a) I am the natural source of light on earth Sun
- b) I am the dark shape of an object made on a surface Shadow
- c) I am the push or pull bringing a change in an object Force

