

Exercises

(A) Fill in the blanks: (Ans.)

1. straight line
2. luminous
3. non- luminous
4. visible
5. opaque
6. eclipse
7. Pinhole
8. Periscope
9. Solar
10. transparent

(B) Pick the correct options:

1. Which of the following is a luminous body?

Ans. Sun

2. Object which allow some light to pass through them are called....

Ans. translucent

3. Which of the following is a non- luminous body....

Ans. earth

4. The path along which light travels is called the....

Ans. ray of light

5. A thin layer of water is transparent but a very thick layer of water is.....

Ans. translucent

(C) Match the following: (Ans.)

1. Natural source of light
2. Opaque
3. Transparent
4. Artificial source of light
5. Translucent

(D) Answer the following questions in short: (Ans.)

(1). Objects which do not give out their own light are known as non-luminous objects. Table, chair, pen book etc. are examples of non-luminous objects.

(2) The shadow is formed when the path of light is blocked by an opaque object. Example, if you stand with your back towards the sun you will surely see your shadow.

(3) When light rays bounce off an object. If the surface is smooth and shiny like glass, water or polished metal, the light will reflect at the same angle as it hit the surface.

(4) Name the three types of beams are:

a) divergent beam

b) convergent beam

c) parallel beam

. When the light rays of a beam move out from a source in different directions, it is called as divergent beam.

. When the light rays of a beam move towards one single point it is known as a convergent beam.

(5) . Difference between a shadow and image are :

Shadow.....

1. Shadow has no colour. It can be black or grey.

2. A shadow depicts only the outline of the object.

3. A shadow is established when light is blocked.

Image.....

1. An image is the same colour as the object.

2. An image is an exact, whether enlarged of the object.

3. An image is formed by the reflection of light.

(6) Name the two natural sources of light are: Sun and Stars.

Name the two man made sources of light are: Electric bulb and Candle.

(7) The property of light of moving in a straight line is known as the rectilinear propagation of the light.

(8) This is because moon faces the sun during lunar eclipse. So, the side of the moon we see is lit up by the sun's light. So, moon will be fully visible. This is why lunar eclipse always occurs on a full moon day.

(9) characteristics of the image in pinhole camera are:

a) The image of an object formed by the pinhole camera is inverted (upside down).

b) The image in a pinhole camera is of similar colour as the object.

(10) Uses of periscope are:

a) It is used in the submarines to see what is going on the water surface.

b) It is used in some gun turrets.

(E) State whether the following statements are true or false. (Ans.)

1. True

2. False

3. False

- 4. True
- 5. True
- 6. False
- 7. True
- 8. False
- 9. False
- 10. True

