

LESSON – 10

Light And Shadow

1. Tick (✓) the correct answer:-

a. The rotation of the earth takes

Ans. i. 1 day

b. For a shadow to be formed we need.

Ans.iv. all of them

c. The colour of a shadow is

Ans. i. black

d. Objects that form the darkest shadows are

Ans. i. opaque objects

e. Shadow is shortest in the

Ans.iii. Noon

2. Fill in the blanks:-

a. Light can pass partially through **translucent** objects.

b. A shadow is formed on the side **opposite** to the source of light.

c. An **eclipse** is formed in space when the sun, moon and the earth are in a straight line.

d. Clear water and air are examples of **transparent** objects.

e. When a **solar** eclipse occurs, the moon casts its shadow on the earth.

3. Write True or False:-

- a. Transparent objects form shadows. **False**
- b. Rotation of the earth causes seasons. **False**
- c. The shadow shows only the outline of an object. **True**
- d. Light cannot pass through translucent objects. **False**
- e. If an object is near the source of light, the shadow of the object formed is smaller. **True**
- f. A solar eclipse occurs when the earth comes between the sun and the moon. **False**

4. Answer the following questions briefly:-

- a. Distinguish between rotation and revolution.

Ans. Rotation is the movement of earth on its own axis.

Revolution is the movement of earth around the sun.

- b. How is a solar eclipse different from a lunar eclipse?

Ans. In a solar eclipse the moon casts its shadow on the earth while in a lunar eclipse earth casts its shadow on the moon.

- c. Distinguish between transparent and opaque objects.

Ans. Objects through which light can pass totally are called transparent objects.

Objects through which light cannot pass at all are called opaque objects.

d. How are shadows formed?

Ans. A shadow is formed when light falls on an opaque object and cannot pass through it.

e. Define.

i. Eclipses:- A shadow formed in space that makes the sun or moon invisible for some time.

ii. Shadow:- A dark image of an object that is formed when light cannot pass through it.

iii. Translucent objects:- Objects through which light can pass partially.