

NCERT SOLUTIONS FOR CLASS 6 SCIENCE

Chapter-11 Light, Shadows and Reflections

1. Rearrange the boxes given below to make a sentence that helps us understand opaque objects.

OWS AKE OPAQ UE O
BJEC TSM SHAD

Answer: OPAQ UE O BJEC TS M AKE SHAD OWS

Opaque objects make shadows.

2. Classify the objects or materials given below as opaque, transparent or translucent, luminous or non-luminous:

Air, water, piece of rock, sheet of aluminium, mirror, wooden board, sheet of polythene, CD, smoke, sheet of plane glass, fog, piece of red hot iron, umbrella, lighted florescent tube, wall, sheet of carbon paper, flame of a gas burner, sheet of cardboard, lighted torch, sheet of cellophane, wire mesh, kerosene stove, sun, firefly, moon.

Answer:

Object	Object is Transparent/Translucent/Opa- que	Object is Luminous/Non- luminous
Air	Transparent	Non-luminous
Water	Transparent	Non-luminous
Piece of rock	Opaque	Non-luminous
Sheet of aluminium	Opaque	Non-luminous
Mirror	Opaque	Non-luminous
Wooden board	Opaque	Non-luminous
Sheet of polythene	Translucent	Non-luminous
CD	Translucent	Non-luminous

Smoke	Translucent	Non-luminous
Sheet of plane glass	Transparent	Non-luminous
Fog	Translucent	Non-luminous
Piece of red hot iron	Opaque	Luminous
Umbrella	Opaque	Non-luminous
Lighted fluorescent tube	Opaque	Luminous
Wall	Opaque	Non-luminous
Sheet of carbon paper	Opaque	Non-luminous
Flame of a gas burner	Translucent	Luminous
Sheet of cardboard	Opaque	Non-luminous
Lighted torch	Opaque	Luminous
Sheet of cellophane	Translucent	Non-luminous
Wire mesh	Translucent	Non-luminous
Kerosene stove	Opaque	Luminous
Sun	Opaque	Luminous
Firefly	Opaque	Luminous
Moon	Opaque	Non-luminous

3. Can you think of creating a shape that would give a circular shadow if held in one way and a rectangular shadow if held in another way?

Answer: A cylinder object can cast shadows in two ways. When the top circular view faces the sun, a circular shape shadow is formed. When its horizontal side faces the sun, it casts a rectangular shadow.

4. In a completely dark room, if you hold up a mirror in front of you, will you see a reflection of yourself in the mirror?

Answer: No, in a completely dark room, there won't be any light in the room, so there won't be any reflection of light and no image will be formed on the mirror.

