

Exercise Questions

Page Number: 113-114

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

OWS	AKE	OPAQ	UEO	BJEC	TSM	SHAD
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Solution:

The given boxes can be rearranged to form 'Opaque Objects Make Shadows' as shown below

OPAQ	UEO	BJEC	TSM	AKE	SHAD	OWS
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2. Classify the objects or materials given below as opaque, transparent or translucent and luminous or non-luminous:

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

Solution:

Opaque: A piece of rock, a sheet of aluminium, a mirror, a wooden board, a CD, an umbrella, a wall, a sheet of carbon paper, a sheet of cardboard

Transparent: Air, water, and a sheet of plane glass

Translucent: A sheet of polythene, smoke, fog, a sheet of cellophane, and a wire mesh

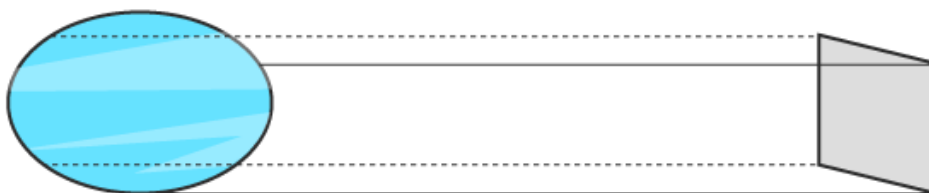
Luminous: A piece of red hot iron, a lighted fluorescent tube, the flame of a gas burner, a lighted torch, sun, firefly, kerosene stove

Non-luminous: Air, water, a piece of rock, a sheet of aluminium, a mirror, a wooden board, a sheet of polythene, a CD, smoke, a sheet of plane glass, fog, an umbrella, a wall, a sheet of carbon paper, a sheet of cardboard, a sheet of cellophane, a wire mesh, moon

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?

Solution:

Yes, as shown in the image below:



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?

Solution:

No, in a dark room, a mirror reflection of the image will not be shown as the light will not fall on the mirror to reflect the image due to darkness.

