

## UNIT: 2 - MATTER AND MATERIALS

CLASS: IV

SUBJECT: SCIENCE

### I. Find the odd one.

- |                         |                |                    |               |
|-------------------------|----------------|--------------------|---------------|
| 1. brick,               | coir,          | <b>silk cloth,</b> | pine apple    |
| 2. <b>stone,</b>        | rubber band,   | cycle tube,        | electric wire |
| 3. sun,                 | candle,        | torch,             | <b>pen</b>    |
| 4. umbrella,            | <b>sponge,</b> | rain coat,         | jerkin        |
| 5. <b>glass bottle,</b> | exam pad,      | paper plate,       | wooden board  |

### II. Fill in the blanks.

1. Materials which can be compressed or cut easily are called Soft materials.
2. Gold and diamond are the examples of Shiny materials.
3. Materials which can be bent or stretched easily are called Flexible materials.
4. Transparent objects allow all the light to pass through them.
5. Light is the natural source that stimulates sight and makes things visible.

### III. Match the following.

- |                 |   |               |
|-----------------|---|---------------|
| 1. Light source | - | Sun           |
| 2. Waterproof   | - | Rain Coat     |
| 3. Transparent  | - | Glass         |
| 4. Translucent  | - | Vegetable oil |
| 5. Opaque       | - | Metal         |

### IV. Say True or False.

- |  |       |
|--|-------|
| 1. We cannot compress, cut or bend the rough materials easily. | True  |
| 2. Dull materials reflect light.                               | False |
| 3. Sand paper is a good example for smooth materials.          | False |
| 4. Opaque objects do not allow light to pass through them.     | True  |
| 5. Mirrors change the direction of light that fall on them.    | True  |

## V. Answer the following.

### 1. When can you say a material is waterproof material?

Materials that do not allow water to pass through them are called waterproof material.

**Example: Raincoat.**

### 2. What is a light source?

- ❖ Light may come either from the sun (or) from other sources like an electric lamp ( or ) a bulb.
- ❖ The objects that give off light are called light sources.

### 3. What is the difference between transparent and opaque materials?

Transparent	Opaque
Transparent objects allow the light to pass through them.	Opaque objects do not allow light to pass through them.
We can see the objects clearly	We cannot see the objects clearly.
<b>Eg: Air, glass and pure water.</b>	<b>Eg: Wood, stone and metals.</b>

### 4. Define reflection.

When light falls on a transparent material it passes through it. However when light falls on a polished surface of an opaque material, it does not pass through it. It bounces back. The bouncing of light by any smooth or polished surface is called **reflection**.

### 5. Classify the objects given below as transparent, translucent or opaque materials.

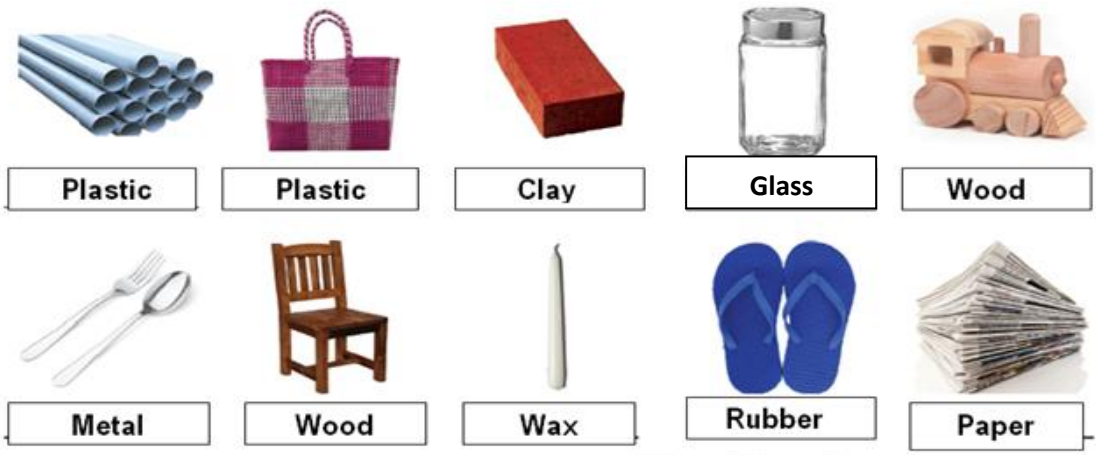
(Air, Rock, Water, Aluminium foil, Mirror, Snow, Wooden board, Polythene bag, CD, Oil soaked paper, Glass tumbler and Coloured glass)

Transparent Materials	Translucent Materials	Opaque Materials
Air	Polethene bag	Rock
Mirror	Coloured glass	Wooden box
Glass tumbler	Oil soaked paper	C.D
water	Snow	Aluminum foil

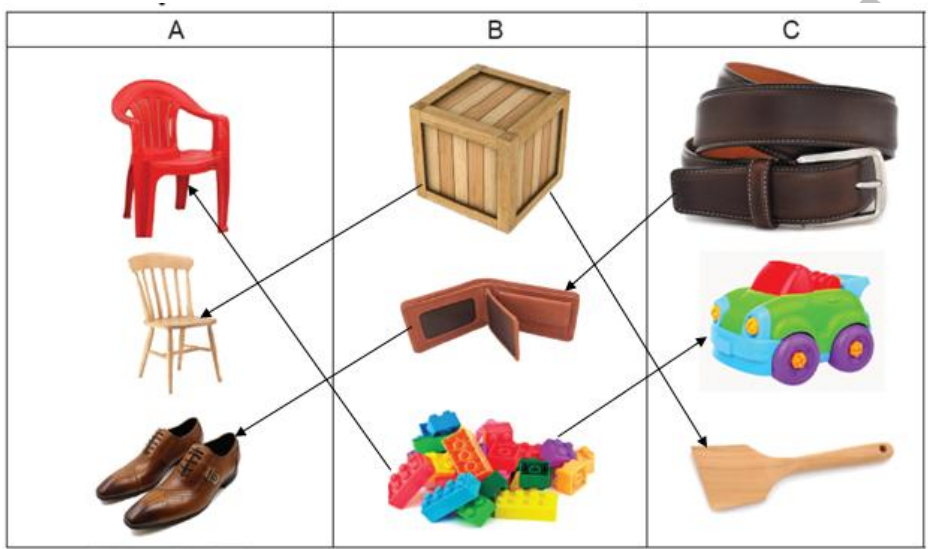
## BOOK INSIDE

### I. Look at the pictures and identify the materials by which they are made of:

(Paper, clay, Glass, Wood, Plastic, Metal, Rubber, Wox)



**II. Match the objects that are made of some materials.**



**III. Write whether the given materials are hard or soft.**

Wood	Eraser	Cotton
Hard	Hard	Soft

**IV. Sort the given objects as rough or smooth.**

1. Wet soap – Smooth
2. Glass ball – Hard
3. Coir – Rought
4. Paper board – Hard
5. Feather – Smooth
6. Sand paper – Hard
7. Stone – Hard
8. Plastic spoon – Hard

V. Give one plastic scale and wooden scale to the students. Ask them to bend. Tabulate their observation ( Bends, does not bend)

Plastic scale	Wooden scale
Bends	Does not bend

VI. Complete the sentence in you own words.

1. Transparent objects allow ( Light to pass through them )
2. Translucent objects allow ( Some light to pass through them )
3. Opaque objects allow ( Do no allow night to Light through them )

VII. Write whether the objects are Transparent, translucent or opaque.



Opaque



Translucent



Transparent



Transparent



Opaque



Translucent