



How Do We See Things?

How Do We See?

- We can see objects around us because of light.
- Light travels in a straight line (rectilinear propagation).
- When light hits an object, it gets reflected (bounced back).
- This reflected light enters our eyes, and this is how we see the object.

In simple terms:

Light → Object → Reflected to Eyes → Vision

Reflection of Light

- Light rays that hit an object bounce off in different directions.
- If this reflected light reaches our eyes, we are able to see the object.
- No light = No vision. That's why we cannot see in complete darkness.

Visibility Through Different Materials

Different materials interact with light in different ways. Based on how much light they allow to pass through them, materials are classified into three types:

i. Transparent Materials

Materials that allow light to pass completely through them.

- You can clearly see through them.
- Light is not blocked or scattered.

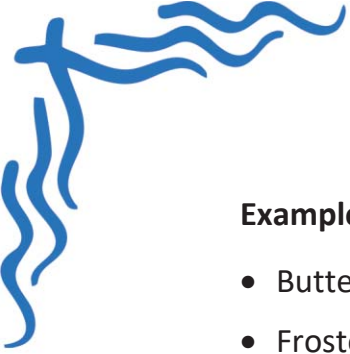
Examples:

- Clear glass
- Water
- Cellophane paper
- Clean plastic sheet

ii. Translucent Materials

Materials that allow light to pass through them, but only partially.

- You can see blurred or unclear shapes through them.
- They scatter light in different directions.



Examples:

- Butter paper
- Frosted glass
- Oily paper
- Thin fabrics

iii. Opaque Materials

Materials that do not allow light to pass through them at all.

- You cannot see anything through them.
- They completely block the light.

Examples:

- Wooden block
- Book
- Brick wall
- Metal sheet

Quick Summary

Type of Material	Allows Light?	Can You See Through It?	Examples
Transparent	Yes, completely	Yes, clearly	Glass, water, cellophane paper
Translucent	Yes, partially	Yes, but blurry	Butter paper, frosted glass
Opaque	No	No	Wood, book, brick wall