



Sources of Light

Sources of Light

Light is a form of energy that enables us to see things around us. It travels in all directions from its source. There are two main types of light sources: natural light sources and artificial light sources.

Natural Light Sources

Natural sources of light are those that exist in nature and emit light on their own without human intervention.

i. The Sun

- The Sun is the primary and most important natural source of light.
- It provides energy and sustains life on Earth.
- During the daytime, the Sun illuminates the surroundings, making things visible.

ii. Stars


- Stars are natural luminous objects in the night sky.
- They emit their own light, but they appear faint because they are very far from Earth compared to the Sun.

iii. The Moon

- The Moon is a non-luminous object that does not emit its own light.
- It appears bright at night because it reflects the light of the Sun.
- A full moon provides more light as compared to other moon phases.

iv. Bioluminescent Animals

Some animals have the ability to produce light through chemical reactions in their bodies. This phenomenon is known as bioluminescence. Examples include:

- Glow-worms
 - Fireflies
- 

- 
- Certain species of deep-sea fish

Artificial Light Sources

Artificial light sources are man-made sources of light that are created using different technologies. These sources are used when natural light is unavailable or insufficient.

i. Traditional Artificial Light Sources

- Burning wood – Used in ancient times to provide light.
- Candles – Made from wax and used as a light source.
- Earthen lamps (Diyas) – Commonly used in religious ceremonies and festivals.

ii. Modern Artificial Light Sources

- Electric bulbs – Commonly used for indoor and outdoor lighting.
- Tube lights – Provide bright and efficient lighting.
- LED lamps – Energy-saving and widely used for illumination.

Luminous and Non-Luminous Objects

i. Luminous Objects

Luminous objects are those that emit light of their own. They can be either natural or artificial.

Examples:

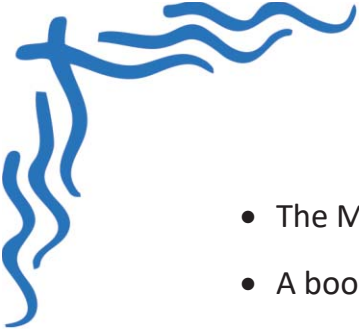
- The Sun
- Stars
- A burning candle
- An electric bulb
- A torch

ii. Non-Luminous Objects

Non-luminous objects do not emit their own light. They become visible only when light from a luminous object falls on them and gets reflected into our eyes.

Examples:





- The Moon
- A book
- A table
- A chair
- A pen

| Luminous Objects | Non-Luminous Objects |
|---|---|
| Emit their own light | Do not emit their own light |
| Examples: Sun, stars, candle, torch, electric bulb | Examples: Moon, book, table, chair, pencil |

Conclusion

- Light is essential for visibility and plays a crucial role in our daily lives.
- The Sun is the primary source of natural light, while electric lamps and bulbs are commonly used artificial light sources.
- Objects that emit their own light are called luminous objects, while those that rely on other sources for visibility are called non-luminous objects.