

Light and its sources

What is Light?

- Light is a form of energy that enables us to see the world around us.
- When there is no light, we are unable to see objects, even if they are nearby.

Example: When you enter a dark room, you can't see anything until you switch on the light.

- The moment light is available, you can identify everything present in the room.

Why is Light Important?

- Helps us see objects around us.
- Enables photosynthesis in plants.
- Affects our sleep-wake cycle (day and night).
- Plays a major role in safety, communication, and technology.

Did You Know?

- About 200 years ago, people had no electric lights.
- They worked during the daylight hours and used candles or oil lamps at night.
- These lights were dim, and the outside world was extremely dark after sunset.
- People usually slept early and woke up with the sunrise.
- There were no streetlights, and the only natural night light came from the moon and stars.

Sources of Light

Sources of light are objects that emit (give off) light so that we can see.

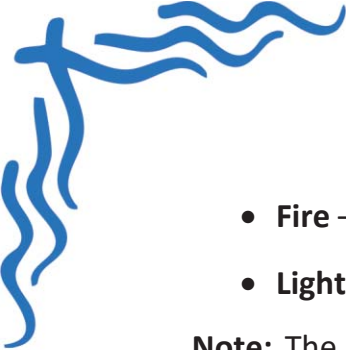
They are broadly classified into two categories:

i. Natural Sources of Light

These are naturally occurring objects that produce light on their own.

Examples:

- **Sun** – The biggest and most important source of natural light.
- **Stars** – Other suns that shine in the night sky.



- **Fire** – Flames from burning wood, candles, etc., give natural light.
- **Lightning** – Sudden flashes of light in the sky during storms.

Note: The Moon is not a natural source of light. It reflects sunlight, so it does not produce its own light.

ii. Artificial Sources of Light

These are man-made objects that produce light when switched on or lit.

Examples:

- **LED Bulbs** – Common in homes and offices.
- **Candles** – Burn to give off light.
- **Torch Lights** – Portable source of light using batteries.
- **Neon Lights** – Used in advertising signs.
- **Televisions** – Emit light to display images.
- **Table Lamps** – Used for reading or studying.

Summary Table: Sources of Light

Type	Source Examples	Nature
Natural	Sun, Stars, Fire, Lightning	Found in nature
Artificial	LED Bulbs, Candles, Torches, Neon lights, TV, Table lamps	Made by humans