

TOPIC: MATTER AND ENERGY

TOPIC: LIGHT ENERGY

LIGHT

What is light?

- Light is the form of energy that enables us to see.
- Light is the form of energy that stimulates the sense of sight.

Why is light regarded as the form of energy?

- It helps in doing work/ it enables one to do work

Name the instrument used to measure light

- Light meter/ Photometer

State the units in which light energy is measured.

- Lux

SOURCES OF LIGHT

What is a source of light?

- A **source of light** is anything that gives out light.
- This is a body or an object that emits light.

Sources of light are grouped into

- Natural sources of light
- Artificial sources of light

NATURAL SOURCES OF LIGHT

What are natural sources of light?

- These are sources of light which exist by nature.

Name four examples of natural sources of light

- Sun
- Glowworms
- Fireflies
- Stars
- Lightning
- Erupting volcanoes

ARTIFICIAL SOURCES OF LIGHT

What are artificial sources of light?

- These are sources of light which are made by people.

Name four examples of artificial sources of light

- Electric bulb
- Torch
- Candle
- Fire
- Lamps

LUMINOUS OBJECTS

What are luminous objects?

- These are objects that produce/emit their own light.

Mention examples of luminous objects.

- Sun
- Glowworms
- Stars
- Fireflies
- Torches
- Electric bulbs

GROUPS OF LUMINOUS OBJECTS

- Incandescent objects
- Non incandescent objects

What are incandescent objects?

- These are objects that produce light when heated.
- These are objects that emit light when hot.

Give examples of incandescent objects

- ❖ Sun
- ❖ Burning candles
- ❖ Erupting volcanoes
- ❖ Burning charcoal

- ❖ Electric bulbs
- ❖ Kerosene lamp
- ❖ Lanterns

What are non incandescent objects?

- These are objects that produce light when not hot.
- These are objects that emit light without heat.

Name examples of non incandescent objects

- Fireflies
- Glowworms
- Fluorescent lamps
- Neon lamps

NONLUMINOUS OBJECTS

What are nonluminous objects?

- These are objects that do not produce/emit their own light.
- These are objects that reflect light from other sources of light.

Give examples of nonluminous objects

- Moon
- Mirrors
- Planets

Why is the moon not regarded as a source of light?

- It just reflects light from the sun.
- It doesn't produce light of its own

Why is the moon considered a nonluminous object?

- It reflects light from the sun

How light travels

- Light travels in straight lines from the source.
- Light travels in all directions from the source.

What is a ray?

- **A ray** is a path/pathway of light.
- **A ray** is a narrow line of light.

What is a beam?

- A beam is group of light rays.
- A beam is a collection of light rays.

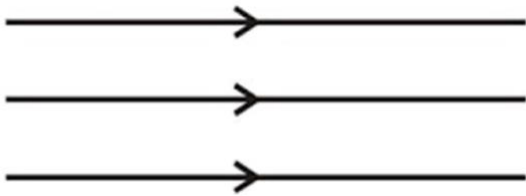
TYPES OF BEAMS

Name three types of beams

- Parallel beam
- Converging beam/ Convergent beam
- Diverging beam/ Divergent beam

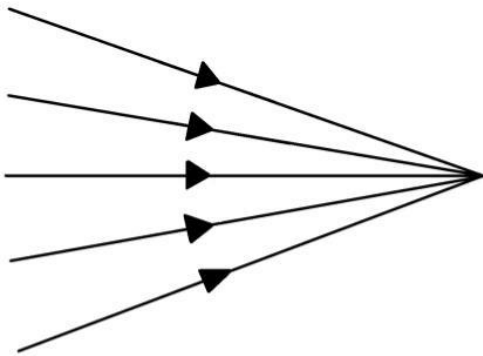
Parallel beam

- This is a group of light rays which move parallel to each other.
- This is a beam in which light rays don't meet at any point.



Converging beam/Convergent beam

- This is a group of light rays which come from different directions and meet at the same point.



Diverging beam/divergent beam

- This is a group of light rays which come from the same point and scatter/spread out.
- This is a type of beam in which light rays originate from one point and move in different directions.

