

● **Light** is a **form of energy** that helps us **see things** around us. **Light travels in a straight line**. It can be **reflected, refracted, or absorbed**.

● **Reflection of Light**

- When light bounces back from a surface, it is called **reflection**.
- **Smooth surfaces** like **mirrors** reflect light very well.
- **Rough surfaces** scatter light in different directions.

● **Mirrors:** A **mirror** is a **shiny surface** that reflects most of the light that falls on it.

● **Types of Mirrors:**

1. **Plane Mirror:** Flat surface

- Forms images that are the **same size** as the object
- Image is **laterally inverted** (left appears right)

2. **Concave Mirror:** Curved inward

- Can **focus light**
- Used in **torches, shaving mirrors, dentist tools**

3. **Convex Mirror:** Curved outward

- Shows **wider area**
- Used in **vehicles' side mirrors, road safety mirrors**

● **Lenses:** A **lens** is a **transparent object** that **bends light rays**. Lenses are made of **glass or plastic**.

● **Types of Lenses:**

1. **Convex Lens** (Converging Lens)

- Thicker in the middle
- Bends light rays **inward**
- Used in **magnifying glasses, cameras, eyeglasses**

2. **Concave Lens** (Diverging Lens)

- Thinner in the middle
- Bends light rays **outward**
- Used in **glasses for short-sighted people**

● Uses of Mirrors and Lenses

Mirrors	Lenses
Used in dressing tables, telescopes, vehicles	Used in microscopes, cameras, eyeglasses
Help reflect light and form images	Help focus or spread light rays