Revision Notes

Class 7 Science

Chapter 15 - Light

- **Light** is a naturally occurring substance that enhances vision and makes objects visible. Light follows a straight path.
- A **mirror** can be made out of any polished or gleaming surface.
- A **true image** is one that can be obtained on a computer screen. It's made up of light rays that pass through the screen.
- A **virtual image** is an image that cannot be obtained on a screen. It's made up of light rays that appear to travel right through the screen.
- A **planar mirror** produces an erect picture. It's a virtual object that's the same size as the real thing. The picture behind the mirror is the same size as the object in front of it.
  The left side of an object appears on the right side of an image generated by a mirror, and the right side of the object appears on the left side of the picture.
- A true and inverted image can be created via a **concave mirror**. The picture generated when the object is put very close to the mirror is virtual, erect, and enlarged.
- A **convex mirror** is one that curves outwards and has a convex reflecting surface. The image that is created is virtual, upright, and shrunk. A convex mirror creates an image that is upright, virtual, and smaller in size than the object.

(a) Concave mirror (b) Convex mirror

- A **concave lens** is one that has a thinner centre than it has at the edges. It's a convergent lens. The resulting image is imaginary, erect, and shrunken.

- A **convex lens** can create both a true and a distorted image. The image generated when the object is put very close to the lens is virtual, erect, and enlarged. The convex lens is known as a magnifying glass when it is used to magnify objects.

Convex Lens

Concave Lens

- **White light** is made up of seven different colours.
- **Properties of Light**:
    A. **Rectilinear Propagation of Light:** The quality of light that allows it to move in a straight line in any direction. The direction in which light travels to form a ray.
    B. **Light Reflection:** This is the phenomenon of light rebounding back after striking an object's surface. Smooth, gleaming surfaces reflect nearly all of the light.
    C. **Dispersion:** The breaking of white light into its seven colours is referred to as dispersion. Violet, Indigo, Blue, Green, Yellow, Orange, and Red (VIBGYOR) hues make up white light.