

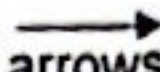


CHI ST. JOSEPH'S CONVENT

Lower Secondary Science Chapter 5 Supplementary Notes Ray Model of Light

Name: _____ () Class: _____ Date: _____

1. Light is not an arrow.

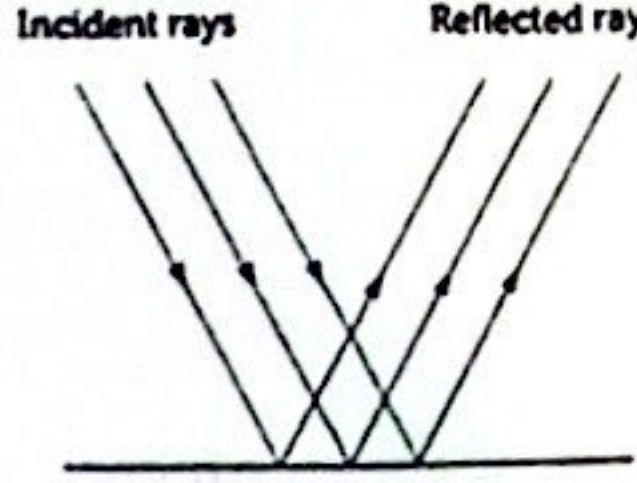
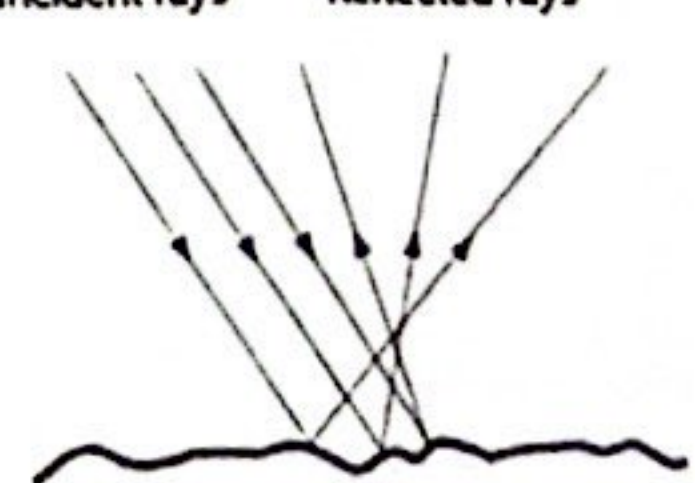
- We cannot see light itself, so we represent it as , since light travels in a straight line

2. How do we see?

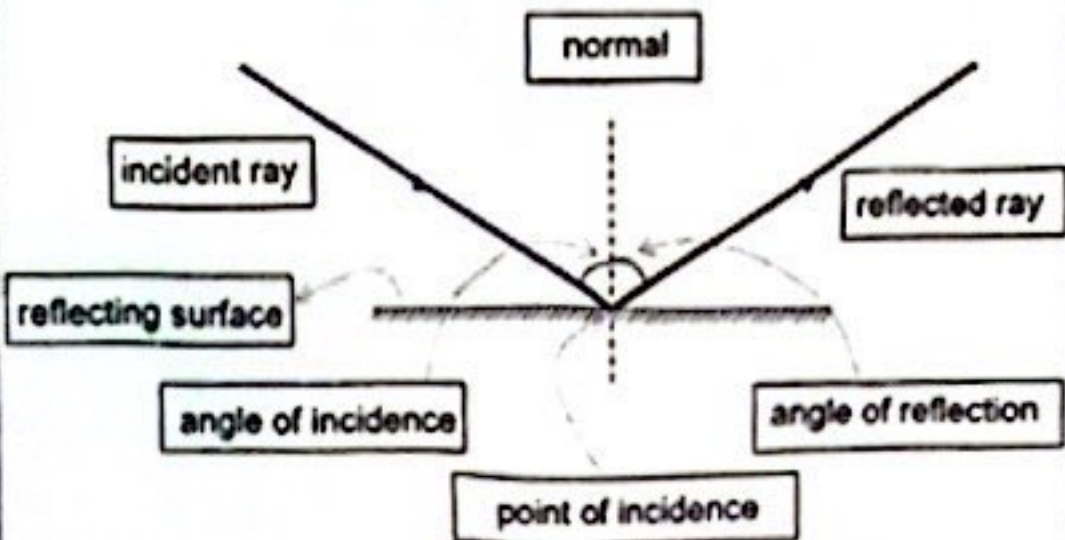
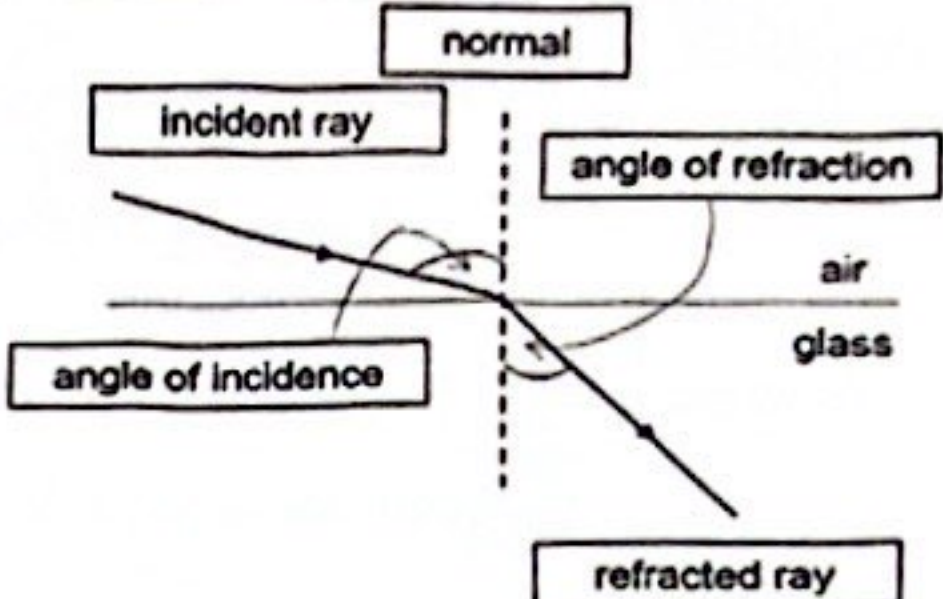
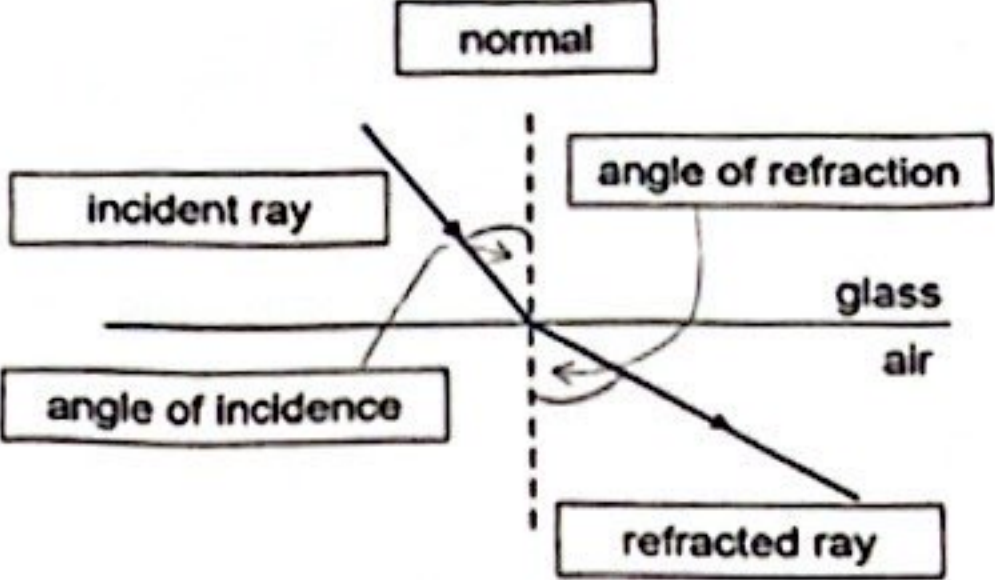
- Light from objects enters our eyes, allowing us to see these objects
- Two types of objects:

	Luminous Objects	Non-Luminous Objects
Definition	Objects that give off light	Objects that do not give off light
Examples	Fire, Sun, working light bulb	Almost every other object e.g. water bottle, pens, wallet etc
How do we see them?	Light from the luminous objects enters eyes	Light from luminous objects reflects off non-luminous objects and enters eyes
		

3. 2 Types of Reflection

Reflection off smooth surfaces	Reflection off rough surfaces
	
Laws of Reflection apply for both:	
1. The incident ray, refracted ray and normal all lie on the same plane (flat surface)	
2. angle of incidence = angle of reflection	

4. Reflection vs Refraction

Reflection	Refraction
- Light <u>bouncing off</u> when incident on a reflecting surface - Light <u>does not pass through</u> reflecting surface	- Light <u>bending</u> when incident on another (transparent/ translucent) medium - Light <u>passes through</u> boundary
	From: optically less dense medium (e.g. air) To: optically denser medium (e.g. glass) <i>light bends towards normal</i> 
	From: optically denser medium (e.g. glass) To: optically less dense medium (e.g. air) <i>light bends away from normal</i> 

5. Drawing of image and reflected rays:

