UNITED ARAB EMIRATES
MINISTRY OF EDUCATION

الإمارات العربية المتحدة
وزارة التربية والتعليم

Khalifa City A School - Cycle 1

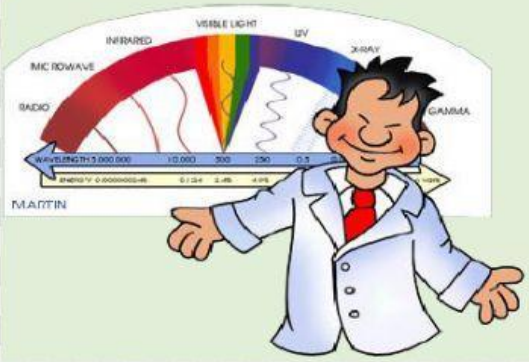
مدرسة مدينة خليفة أ / حلقة أولى

SCIENCE

CHAPTER 7- ENERGY

LESSON 3- LIGHT

PART 2



Created by- Nisha Tanwar

HOW DOES LIGHT TRAVEL

REFRACTION

Bending of light when it passes from one medium to another.

- Light travels at different materials in different medium.
- When light travel from lighter medium to denser medium, it slows down.

REFLECTION

Bouncing back of light after hitting any hard surface.

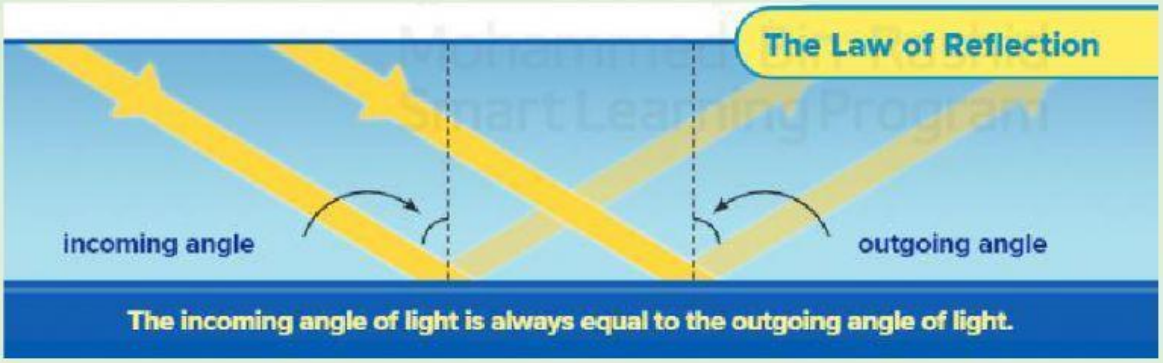
- Shiny surface reflects almost all the light.
- Dull and rough surface reflect the least amount of light.
- If the desk doesn't reflect light, you cannot see it.

REFLECTION

Bouncing back of light is called reflection

LAWS OF REFLECTION

The incoming angle of light is always equal to the outgoing angle of light.



TYPES OF MIRROR

CONVEX MIRROR **CONCAVE MIRROR**

REFRACTION

The bending of light as it moves from one type of matter to another

PLEASE READ THIS

A *lens* is a tool that refracts light. A *concave* lens curves inward. Light bends outward from the center of the lens. The rays spread apart. Glasses that help you see faraway objects are made with concave lenses.

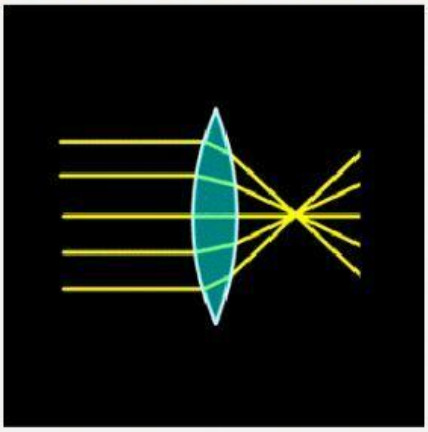
A *convex* lens bulges outward. Light rays bend inward toward its center. This makes objects near the lens seem bigger. Reading glasses have convex lenses.

LENSES

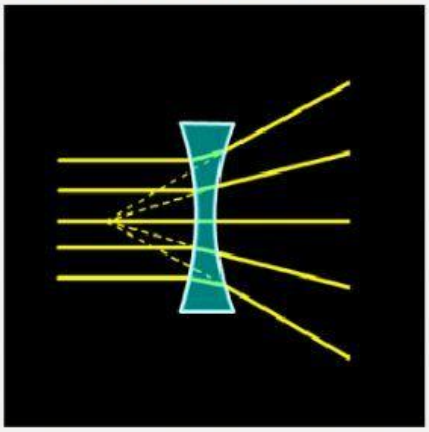
A lens is a tool that can bend light

- Concave lens- spread light out
- Convex lenses- brings light together

CONVEX LENS



CONCAVE LENS



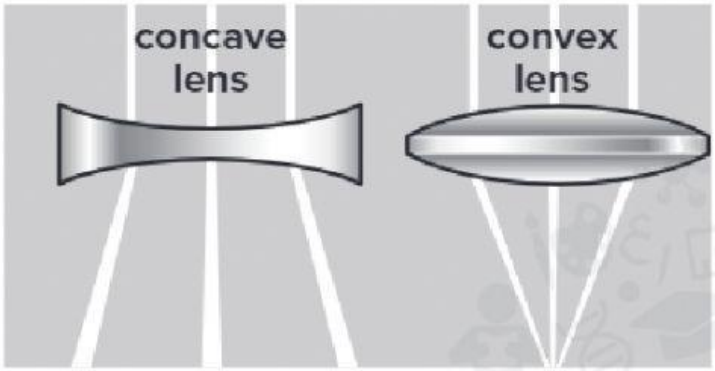
IMPORTANT LINKS FOR PRACTICE

- **Click** here to practice more abou COLOR
- **Click** here to practice more about REFLECTION

QUESTIONS FROM BOOK

1.

Circle the best answer for each question.



1. Which property of light does this diagram show?

   A refraction
   B absorption
   C reflection
   D translucence

2. **Vocabulary.** When light rays bounce off a surface, it is called _____.

3. **Test Prep.** Light cannot pass through a(n) _____ object.

A transparent
B opaque
C translucent
D convex

4. **Test Prep.** Which light has the most energy?

A radio waves
B x-rays
C gamma waves
D microwaves

5. White light can be separated into different colors by a(n) _____.

6. What happens to the beam of a flashlight when it hits a mirror?

A It disappears.
B It becomes a new form of energy.
C It is reflected off the mirror.
D It goes into the mirror.

7. A window curtain blocks light. The curtain is

A translucent.
B transparent.
C opaque.
D convex.