LIGHT

You will start writing when you see the number 1

LIGHT

- We see things every day, from the moment we get up in the morning until we go to sleep at night.
- We look at everything around us using light.
- Without light, you wouldn't see anything at all.
- There are two types of light: <u>natural light</u> or <u>artificial light</u>.

NATURAL LIGHT



- The most important source of <u>natural light</u> is the <u>sun</u>.
- The sun gives the earth light and energy.
- The **moon** and **stars** receive light from the sun and reflects it to the earth.
- A **firefly** also produces light.







ARTIFICIAL LIGHT

- Artificial light is light that is made by people, or man-made.
- This includes candles, kerosene lamps, flashlights, and light bulbs.

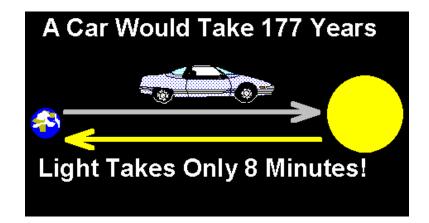






LIGHT

- Light is a kind of **energy** that travels in waves.
- Light can pass through some things, but not others.
- Light travels very fast and in <u>straight lines</u>.



1. LIGHT

• Travels in straight lines as long as the material that the light travels through does not change

2. PHOTON

A particle of light

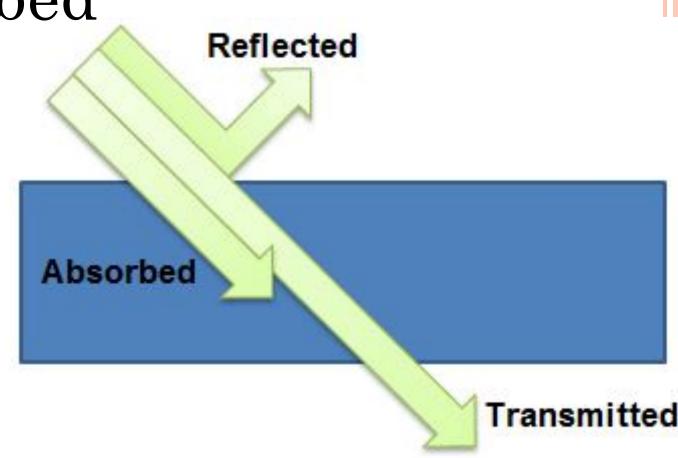
Massless "no rest" particle

 Travels 186,282 miles per second (Speed of light)

(it has no mass - that's why it travels so fast)

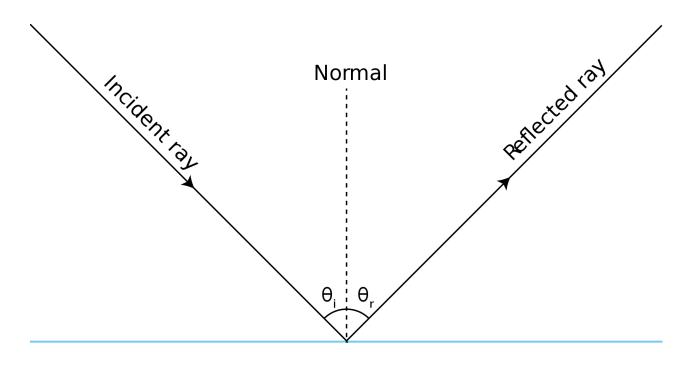
3. 3 WAYS THAT LIGHT INTERACTS

Reflected, transmitted, absorbed



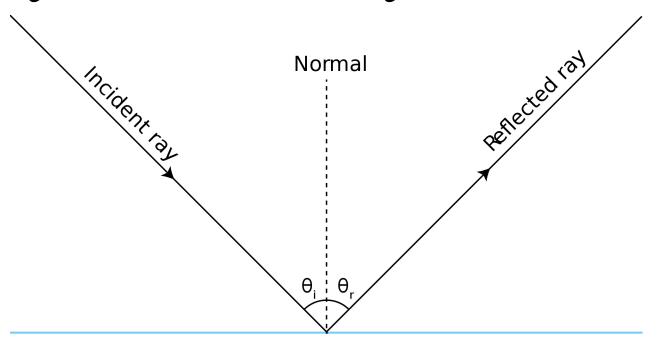
4. INCIDENT RAY

Incoming light ray



5. REFLECTION

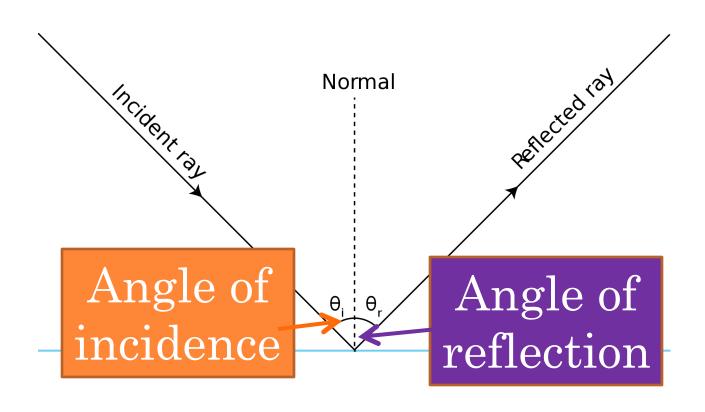
The bouncing back rays when they hit an object





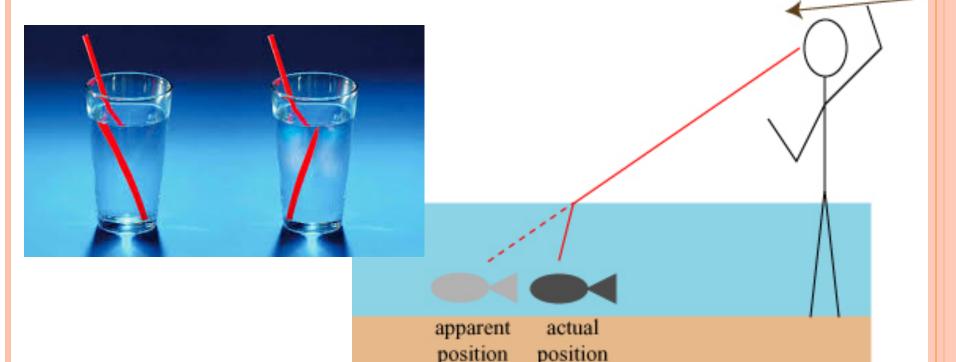
6. LAW OF REFLECTION

Angle of incidence= Angle of reflection



7. REFRACTION

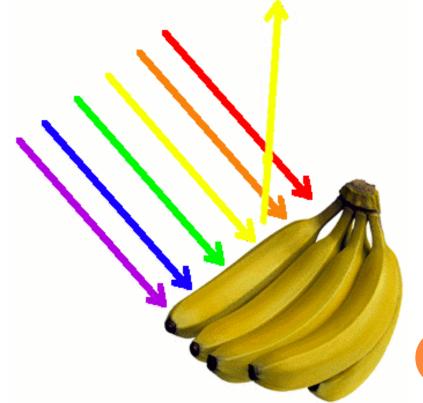
Light rays change in speed causing the rays to bend, or change direction



Apparent Fish

8. Colors of Opaque Objects

• The color of the object is the color reflected



9. WHITE LIGHT

• All the colors of light are reflected

10. The color Black

• All the colors of light are absorbed