

## WAYS LIGHT CAN ACT!

1.) TRANSPARENT – Objects which allow ALL light to pass through.



OTHER EXAMPLES - window glass, drinking glass

2.) TRANSLUCENT – Objects which allow SOME light to pass through.

OTHER EXAMPLES - stained glass windows, wax paper

3.) OPAQUE - Objects which allow NO light to pass through; cast shadows



OTHER EXAMPLES – PEOPLE, TREES, BUILDINGS

4.) LUMINOUS - Objects which produce their OWN source of light.



The sun



the light in the lighthouse



stars

5.) ILLUMINATED - Objects which reflect light from another source.

OTHER EXAMPLES – books, people, tables, etc.

\*\*\*LIGHT is a TRANSVERSE WAVE

\*\*\*LIGHT needs NO medium to travel on, therefore, you CAN SEE IT in outer space!

\*\*\*LIGHT travels in a straight line; it will not bend!

\*\*\*LIGHT WAVES travel FASTER than SOUND WAVES!

YOU NEED TO KNOW THE ELECTROMAGNETIC SPECTRUM!

\*\*\*Electromagnetic energy – both VISIBLE and INVISIBLE

\*\*\*Lowest frequency / longest wavelength – RADIO WAVES

\*\*\*Highest frequency / shortest wavelength – GAMMA RAYS  
(highest energy)

\*\*\*VISIBLE LIGHT – the colors of the “rainbow”

-REMEMBER – ROY G BIV

(Red, Orange, Yellow, Green, Blue, Indigo, Violet)

\*\*\* PRIMARY COLORS – Red, Green and Blue!

Longest wavelength / Lowest frequency – RED than Orange, etc.

Shortest wavelength / Highest frequency – Violet than Indigo, etc.