Warm Up

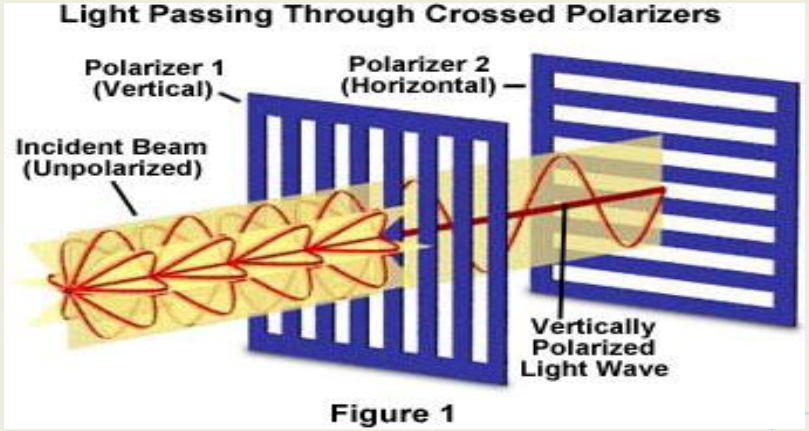
1. What is the power used to move an object 18.0 m with 16.0 N of force in 3.00 sec?
2. What is the velocity of a wave with a frequency of 720. Hz and a wavelength of 55.0 m?
3. What is the specific heat that required 73,000. joules of heat to raise the temperature of a 25.0 g sample from 35.0°C to 65.0°C?
4. How long did it take for a car to go from 25.0 m/s to 55.0 m/s if it accelerated at 5.00 m/s^2?
5. What is the energy if an object has a mass of 18.0 kg and is sitting 5.00 m up?

Targets

- I can explain the different behaviors of waves related to light.
- I can explain how we see color.

Color

- Light can also be polarized, or light with waves that vibrate in only one plane.



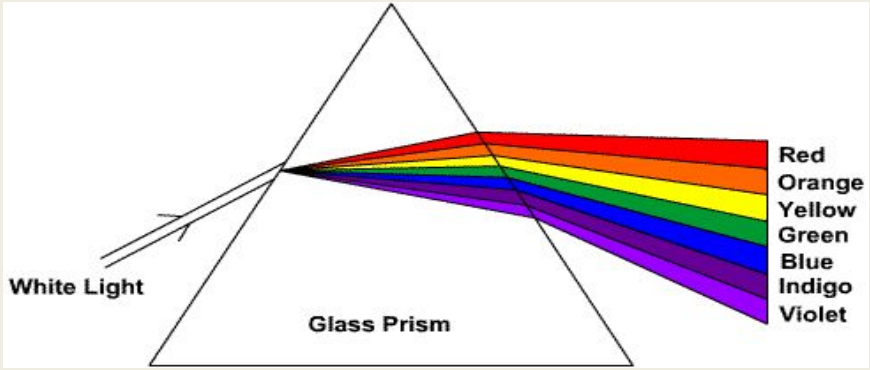
www.olympusmicro.com

- Why is the sky blue?
- Light can also be scattered or redirected as it passed through a medium.
- The different colors of the sky over the period of the day is an example.

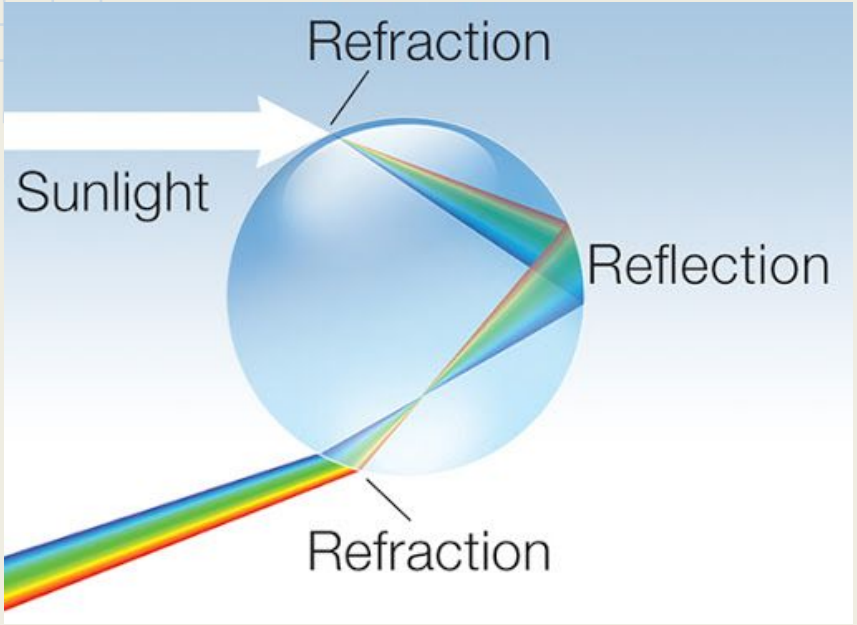
APOD

Color

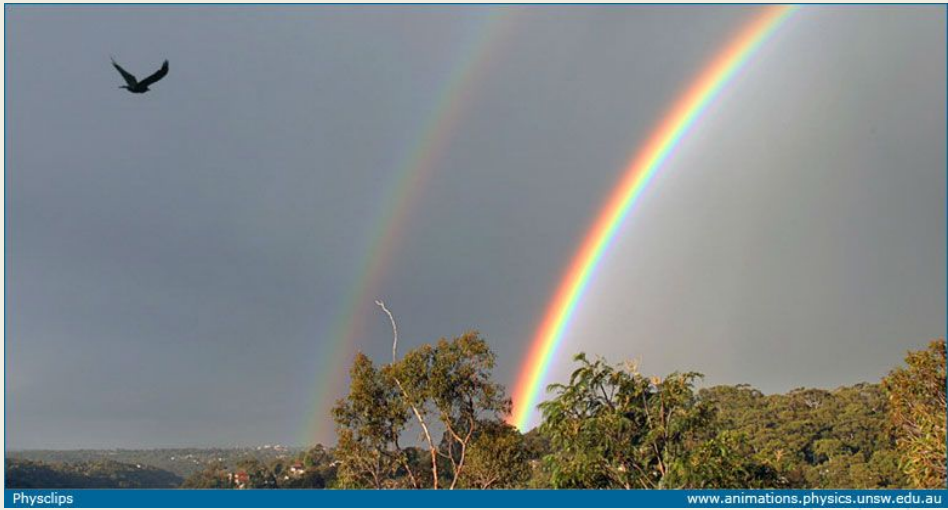
- Newton investigated light and determined that white light is made up of all the colors of light.
- When white light separates into colors is called dispersion.



www.school-for-champions.com

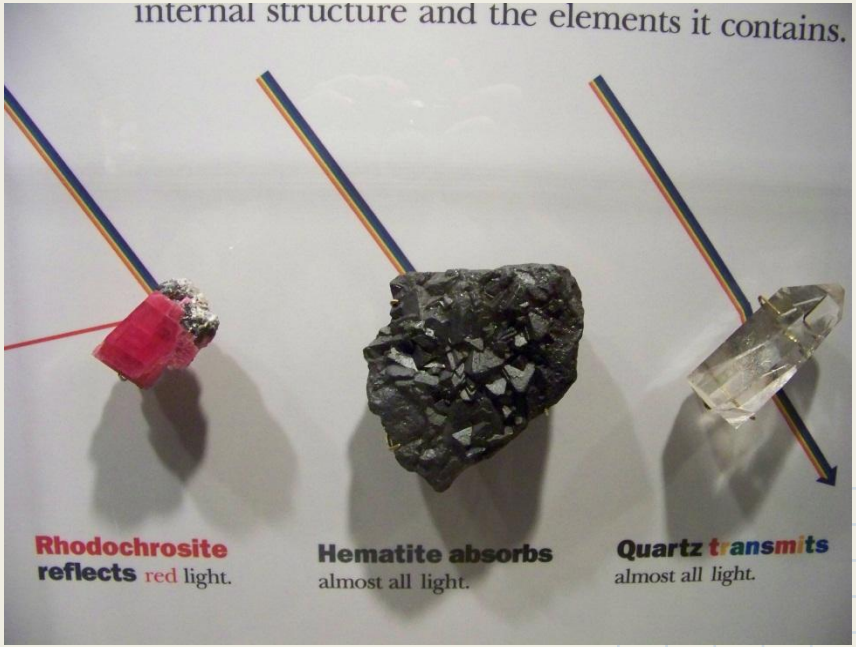


http://earthsci.org/processes/weather/rainbow/rainbow.html

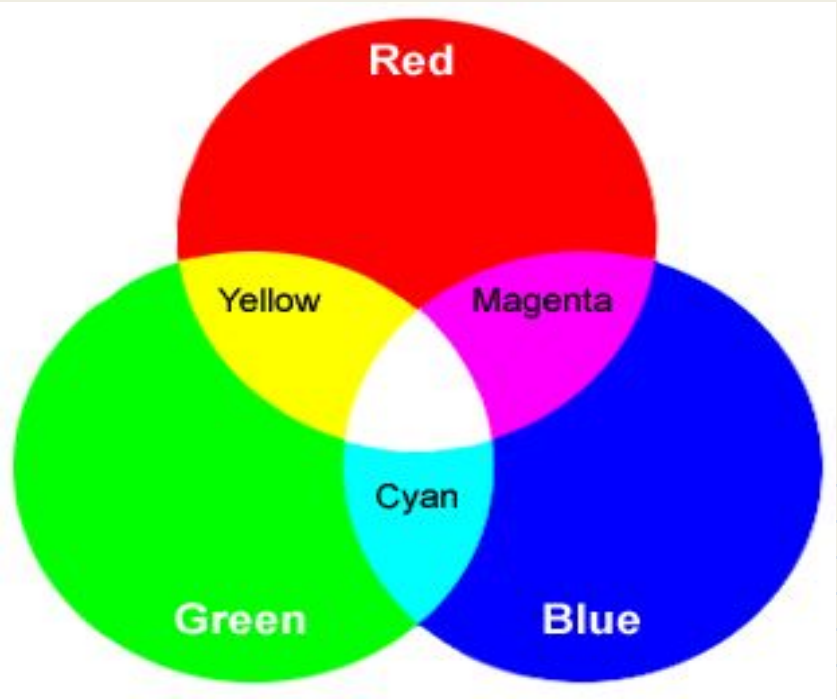


https://www.animations.physics.unsw.edu.au/jw/light/chromatic_dispersion_rainbows_Alexanders_dark_band.htm

- The color of an object depends on what it is made of and what color of light strikes it.



- The primary colors of light are red, blue, and green.
- The secondary colors of light are cyan, yellow, and magenta.
- A primary color and its complementary color together produce white light.



http://www.wiu.edu/art/courses/design/color.htm