

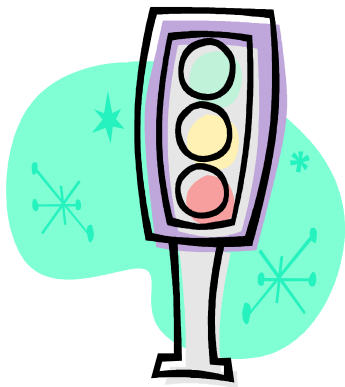
Uses of Light Energy

The uses of light energy

Lighthouses, Computers, Cameras, Televisions, Strobes, Traffic lights, Mirrors, Film, Eyeglasses, Lasers, Light bulbs, Microscopes, Telescopes, Periscopes, telescopes and Solar Heat.

Everyone uses at least one of these objects everyday.

The uses for light energy help scientists in everyday experiments. Telescopes help them see the stars and planets. Periscopes help scientists who study underwater life see if anything is coming at them from above. Microscopes help Scientists see things that the naked human eye cannot see.

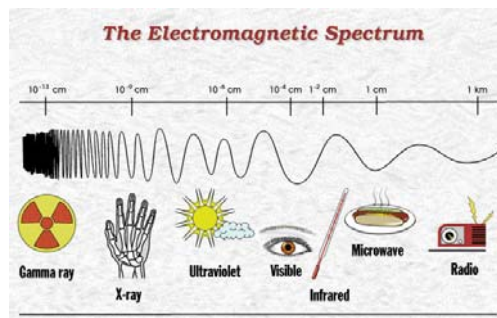


Electromagnetic Spectrum

There are many different types of electromagnetic waves , radio waves, microwaves, infrared rays, visible light(red, orange, yellow, green, blue, and violet,) ultraviolet rays, x-rays, and gamma rays.

The strongest waves gamma rays help sterilize medication, and can kill living cells. The second strongest ray, x-rays can go through the soft skin and tissue in your body but cannot go through your hard bones. Hospitals use them to take shadowed pictures of your body.

Ultraviolet or UV rays are from the sun they cause sunburn. Visible light is the light that you see, it's colors make up the rainbow. Inferred waves come from anything hot. Microwaves are produced by a tube in microwave ovens called a magnetron. Radio waves the longest and weakest waves are formed from satellites.



My Report

My Report



All About Light

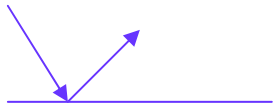
By Rachel

Colors

Behaviors of Light

There are 5 behaviors of light:

Reflect, to bounce off.



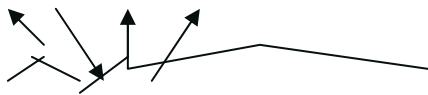
Absorb, to soak up.



Refract, to bend.



Diffuse, to bounce off in many directions.



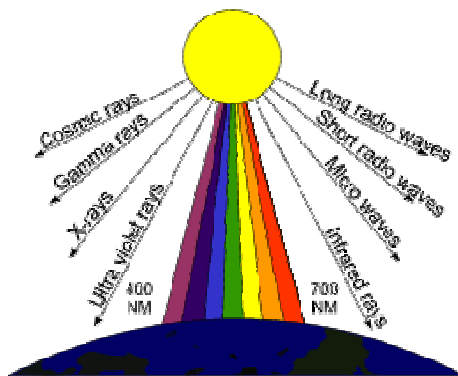
Straight Line, light traveling in a straight line.



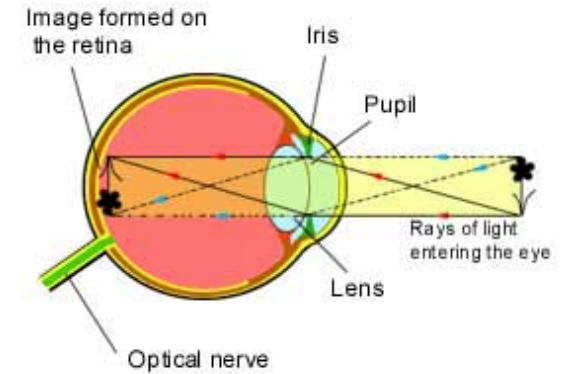
Each color of light has a different wavelength on the electromagnetic spectrum. Humans can see color because cells found in the retina called cone cells. They are made up of three types. You need cone cells to see color. Some animals like dogs and alligators do not have cone cells therefore they are colorblind.

Color on a television is made up of small light dots. Three light dots equal in proportion give off white. Three dots that lack glowing and reflecting give off black.

If the earth did not have an atmosphere the sky would not look blue. The sunlight comes through the atmosphere the blue waves scatter and are reflected in the air as it bumps into dust and water particles making the sky blue.



The Eye



How We See

We see by light images entering our eye through the pupil. It then reflects off the lens which refracts the image so the bottom of the image is on the top and the top of the image is on the bottom. The image then goes the retina and then on to the brain by way of the optic nerve. The brain flips the image back so the top is on the top, and the bottom is on the bottom.

In conclusion we cannot see upside down because the lens would flip the image right side up and the brain would correct the image.