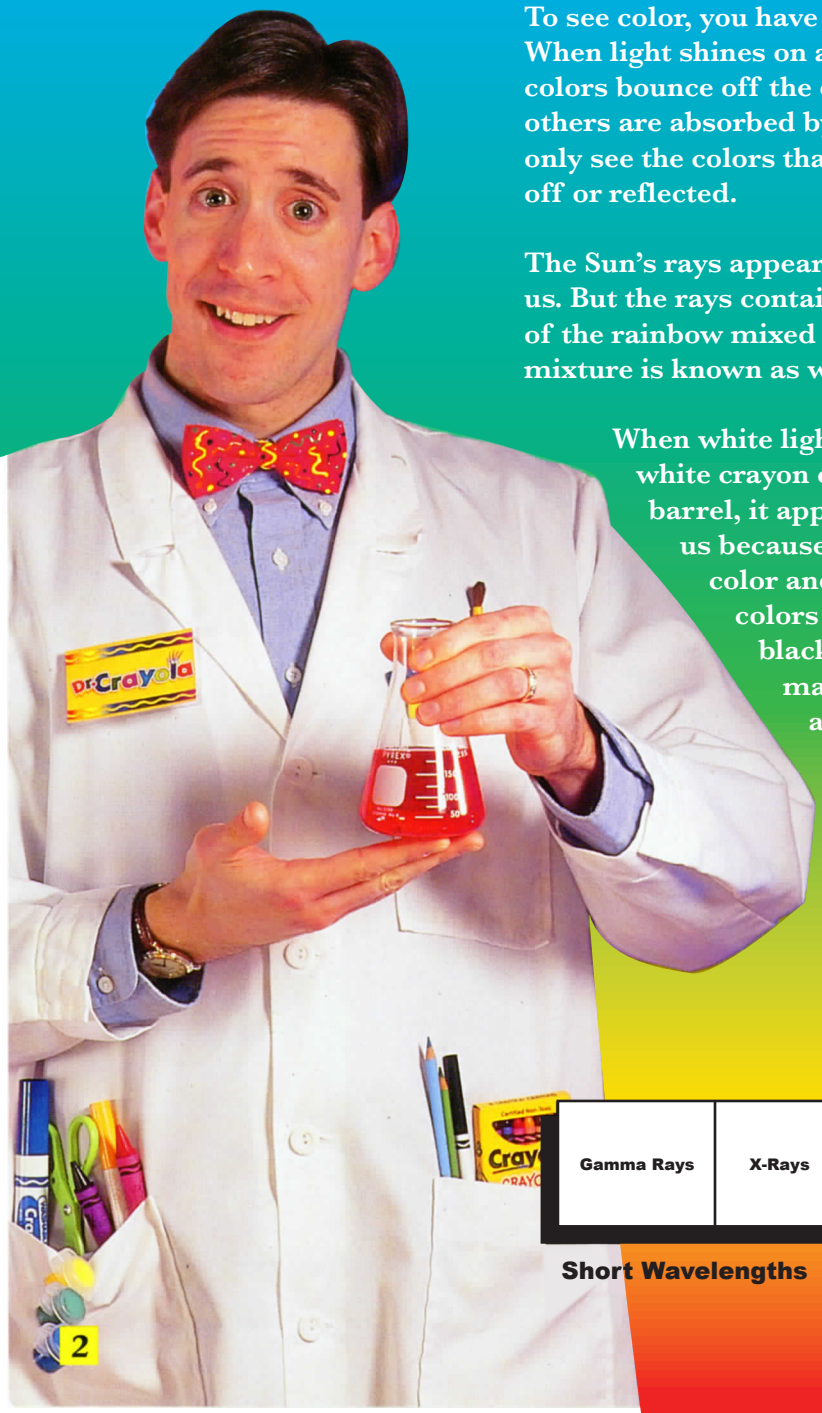
What is COLOR?

Color is the aspect of things that is caused by differing qualities of light being reflected or emitted by them.



To see color, you have to have light. When light shines on an object some colors bounce off the object and others are absorbed by it. Our eyes only see the colors that are bounced off or reflected.

The Sun's rays appear colorless to us. But the rays contain all the colors of the rainbow mixed together. This mixture is known as white light.

When white light strikes a white crayon or marker barrel, it appears white to us because it absorbs no color and reflects all colors equally. A black crayon or marker cap absorbs all colors equally and reflects none, so it looks black to us. While artists consider black a color, scientists do not because black is the absence of all color.

All light rays contain color. Light is made of electromagnetic waves. These waves spread out from any light source, such as the Sun. Light waves travel at tremendous speed (186,000 miles or 300,000 kilometers per second).

Different colors have different wavelengths, which is the distance between corresponding parts of two of the waves. The longest wavelength of light that humans can see is red. The shortest is violet. Ultraviolet has an even shorter wavelength, but humans cannot see it. Some birds and bees can see ultraviolet light. Infrared has a longer wavelength than red light, and humans cannot see this light but can feel the heat infrared generates.