

With the book, I think light was either reflected or absorbed, but for other objects I know that light can be transmitted as well as reflected or absorbed. One object that this happened with was a piece of clear glass. I found with this object that white light was reflected and it went through — was transmitted through — the object because I saw white light on the screen behind the glass. Figure 8 shows my thinking about how the colors of light interacted with this object.

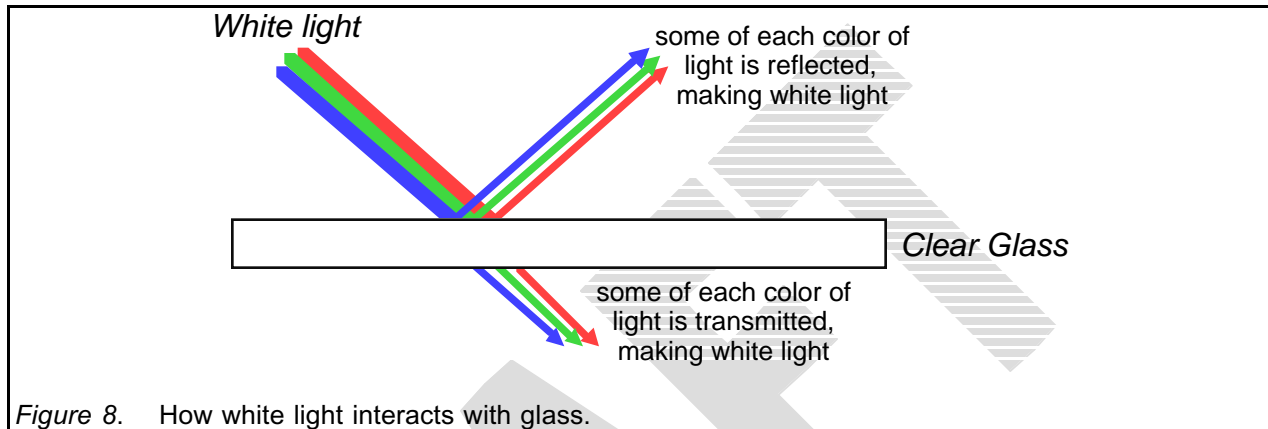


Figure 8. How white light interacts with glass.

From reading of other scientists work I learned that the colors of light combine in the following ways:

blue + green = cyan

$$\text{blue} + \text{green} = \text{cyan}$$

red + blue = magenta

$$\text{red} + \text{blue} = \text{magenta}$$

red + green = yellow

$$\text{red} + \text{green} = \text{yellow}$$

Having this information, what do I think happened when I shined light on objects that reflected specific colors of light and that had specific colors of light that were transmitted through them? The two objects that this happened with were a piece of purple glass and a piece of yellow cardboard. When I shined white light on the purple glass, I saw a faint purple light reflected off of it and on the screen behind it. When I shined white light on the yellow cardboard, I saw yellow light reflected off of it and a reddish light on the screen behind it. Tomorrow I will create drawings to show what I think was happening with the light in these cases.