

Science 11/15/19

Essential Question: How can we revise the consensus model to include how we see color?

CW: Consensus model

HW: No HW

Agenda

1. Question of the day
2. Finish Lesson 11.2
3. Revisiting the consensus model

Open Ended Question



Please answer silently: Who would you want to be stranded with on a deserted island? Why?

Colors of Light Data Table

Colors of Light

| | Red | Orange | Yellow | Green | Blue | Violet |
|-------------|-----|--------|--------|-------|------|--------|
| Red Line | | | | | | |
| Orange Line | | | | | | |
| Yellow Line | | | | | | |
| Green Line | | | | | | |
| Blue Line | | | | | | |
| Violet Line | | | | | | |

Answer remaining questions pg. 118

5. Explain why you think the different colored lines scatter different colors of light.

6. Why do you think the colored lines were printed on black paper rather than on white paper?

Making Sense

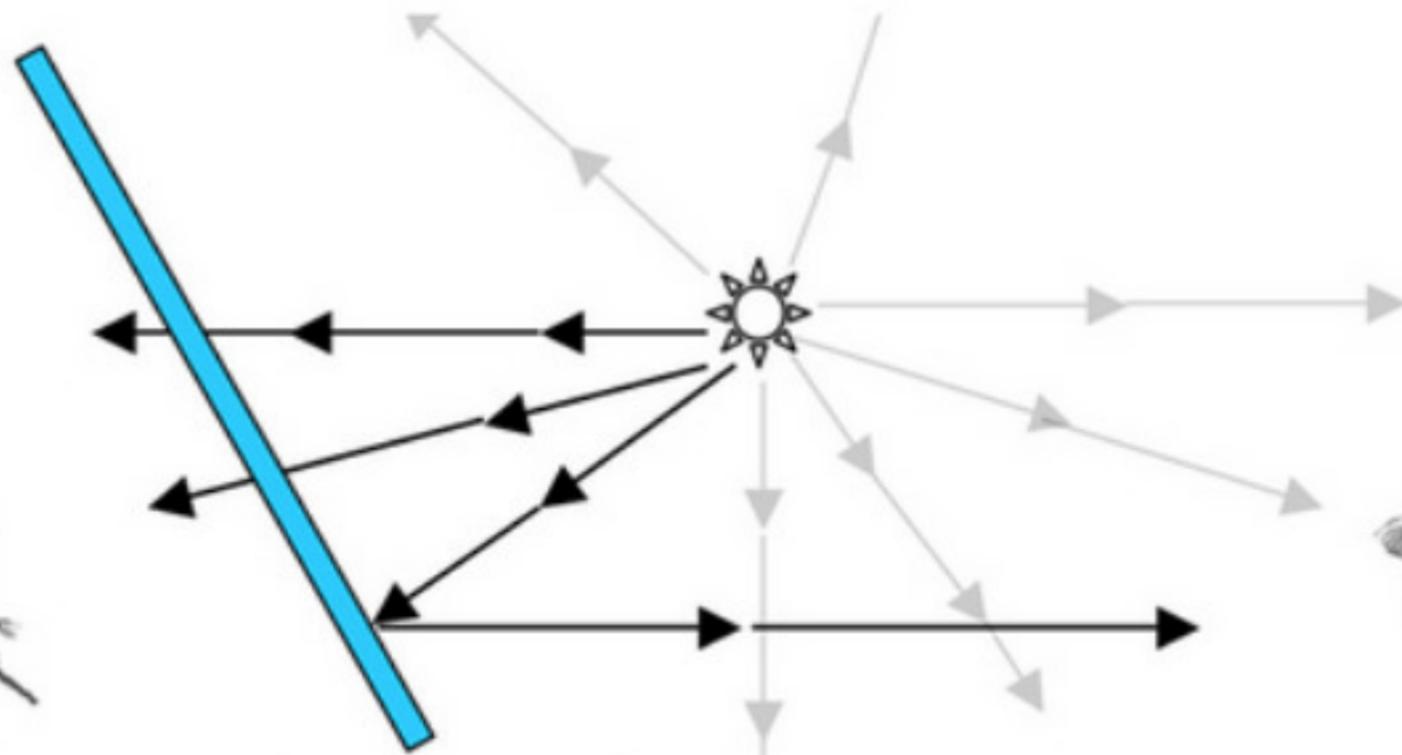
1. What color do you think you would have seen if the red stripe had been illuminated by red light?

Explain your ideas.

2. What color do you think you would have seen if the red stripe had been illuminated by green light?

Explain your ideas.

Person B

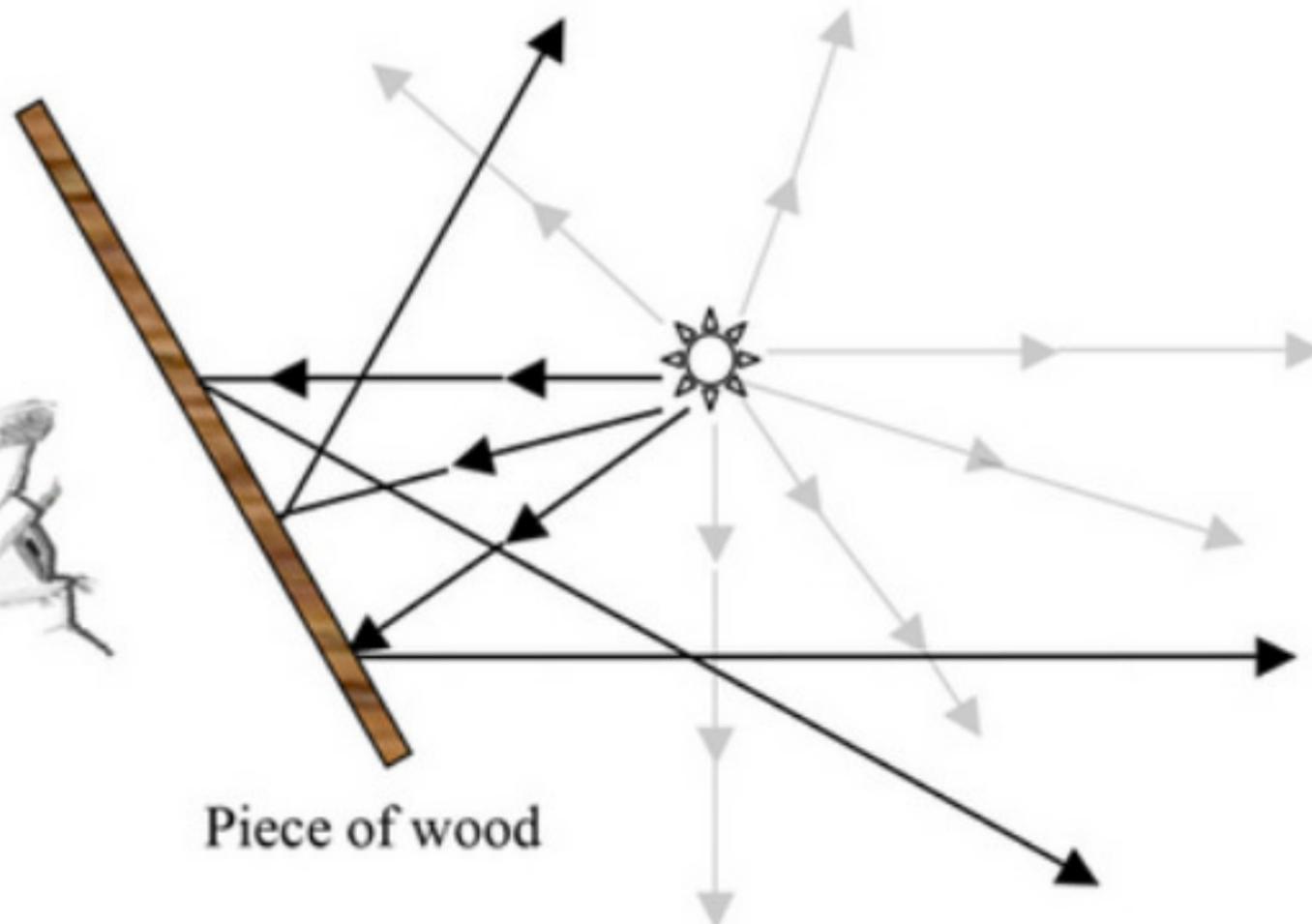


Piece of clear glass

Person A



Position B



Piece of wood

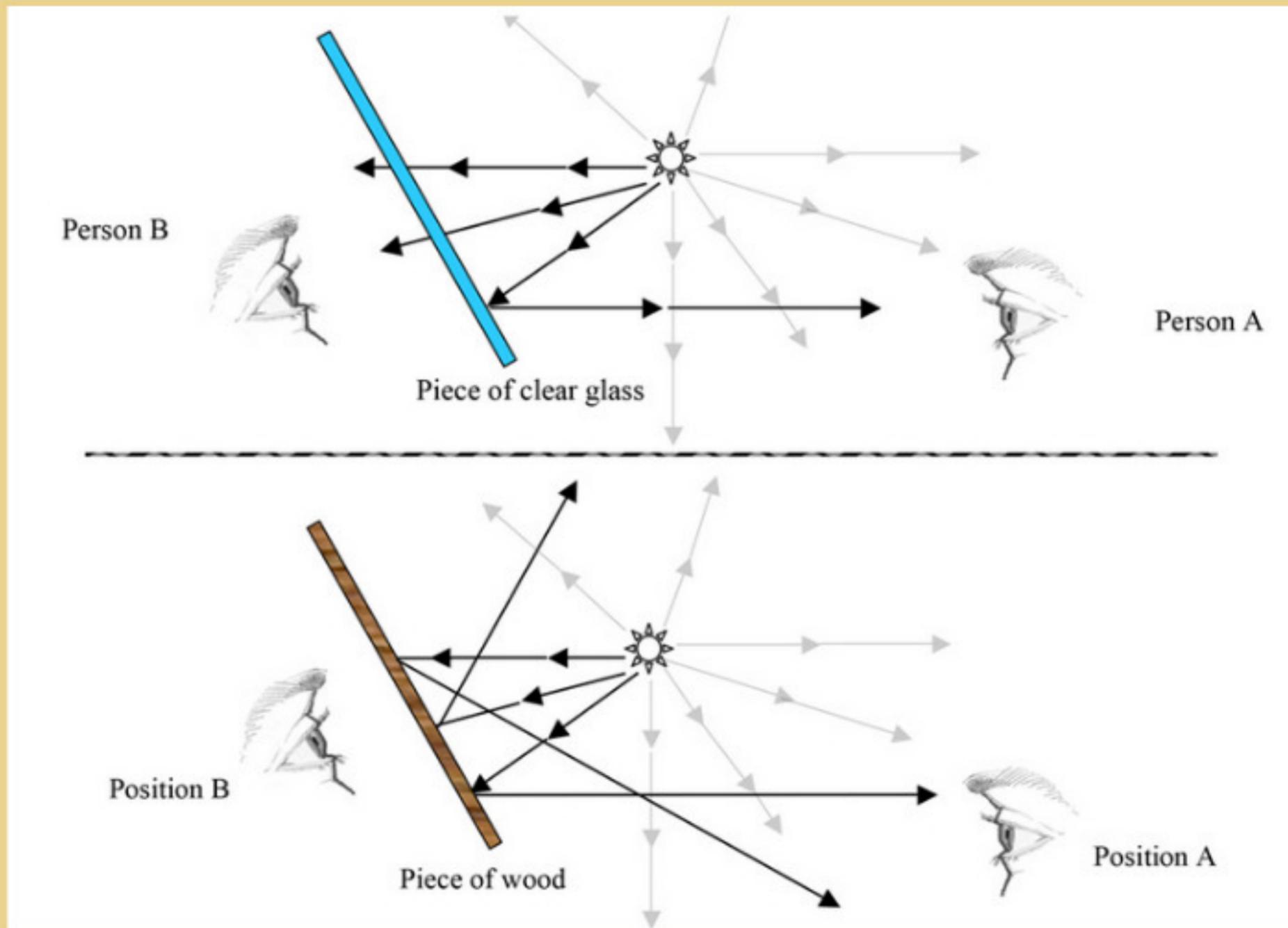
Position A



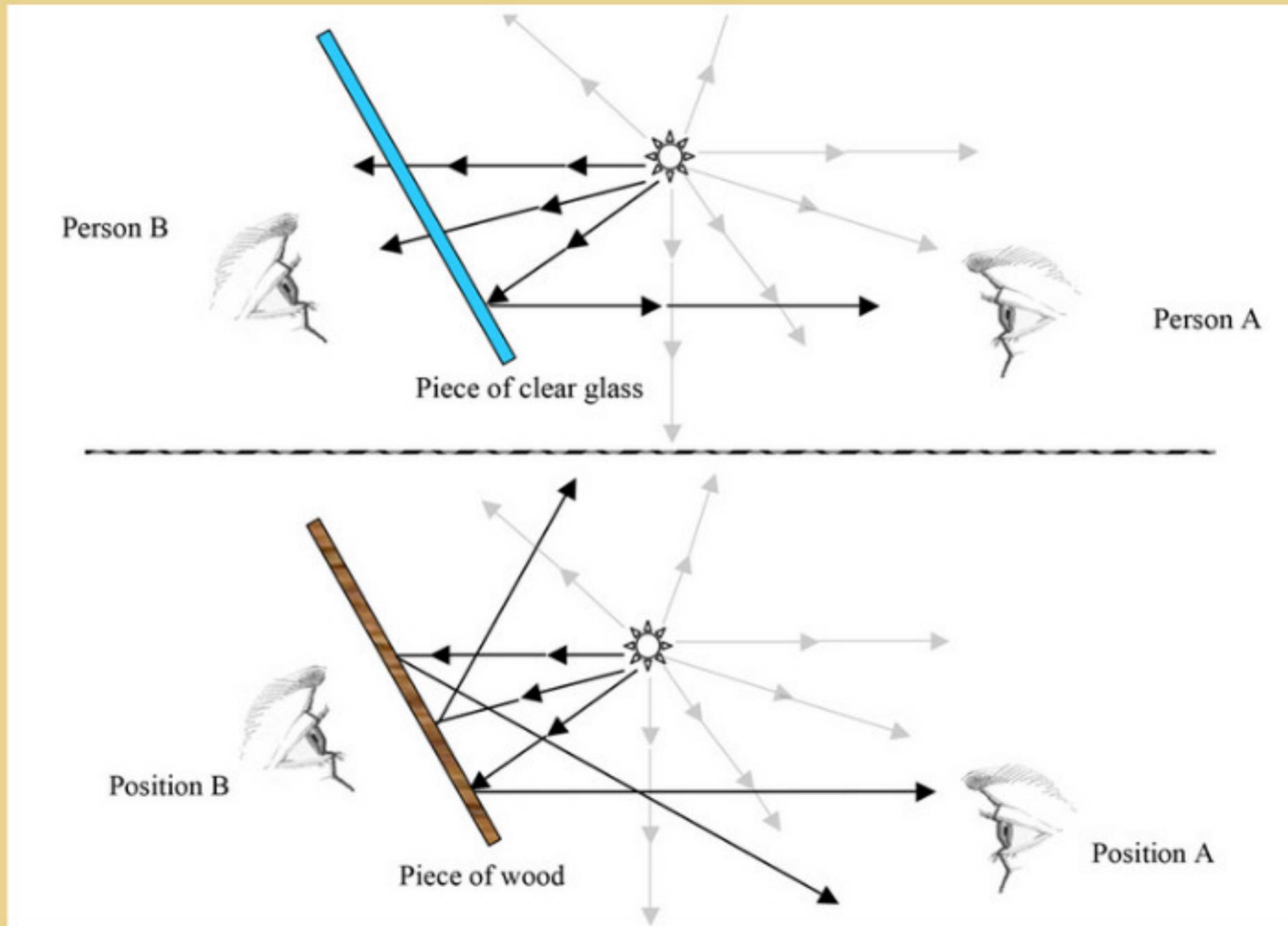
Open Ended Question

Write silently for three minutes: How useful is the consensus model for explaining the color-related phenomena that we investigated using the colored stripes?

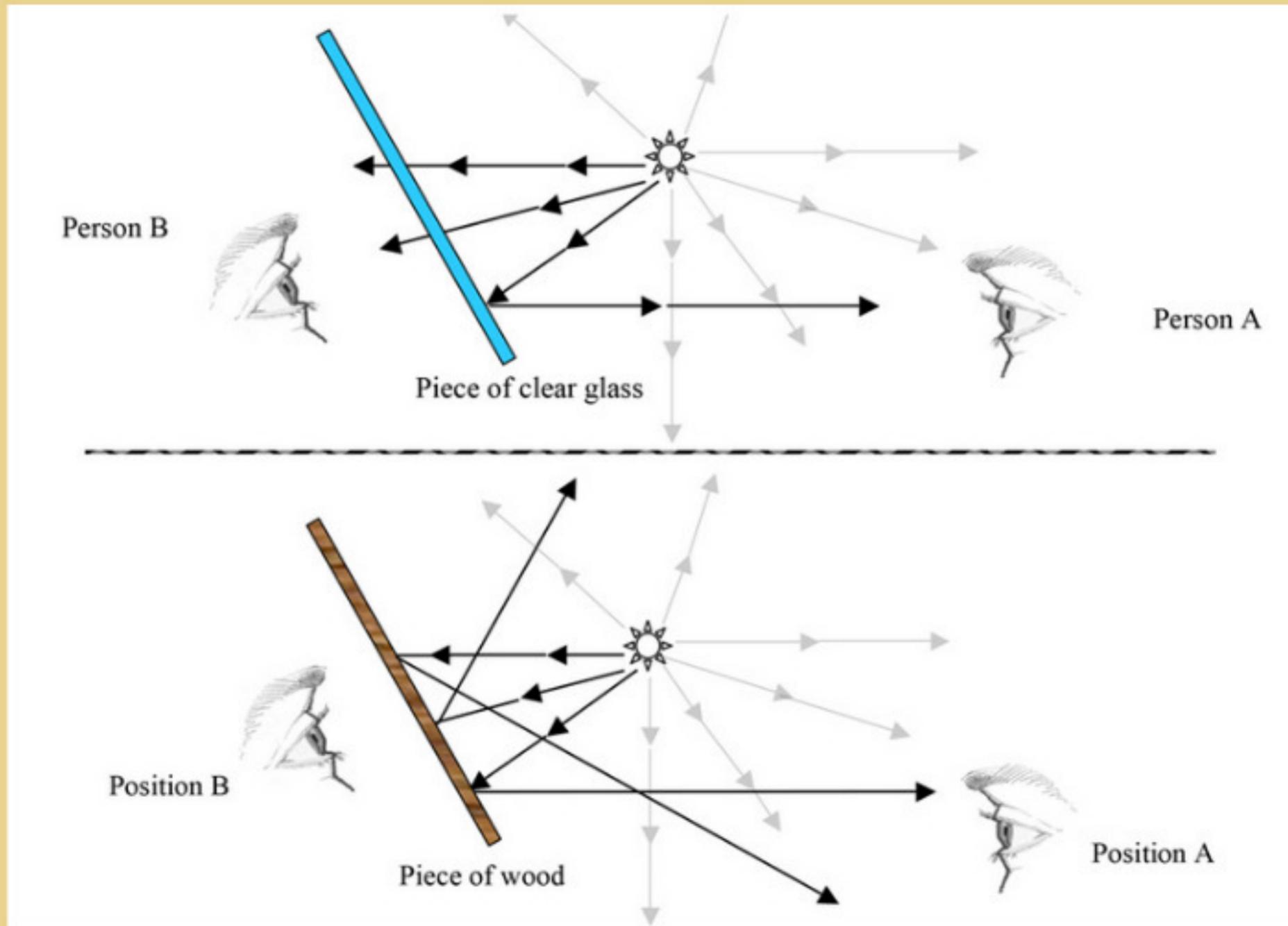
How useful is the consensus model for explaining the color-related phenomena that we investigated using the colored stripes?



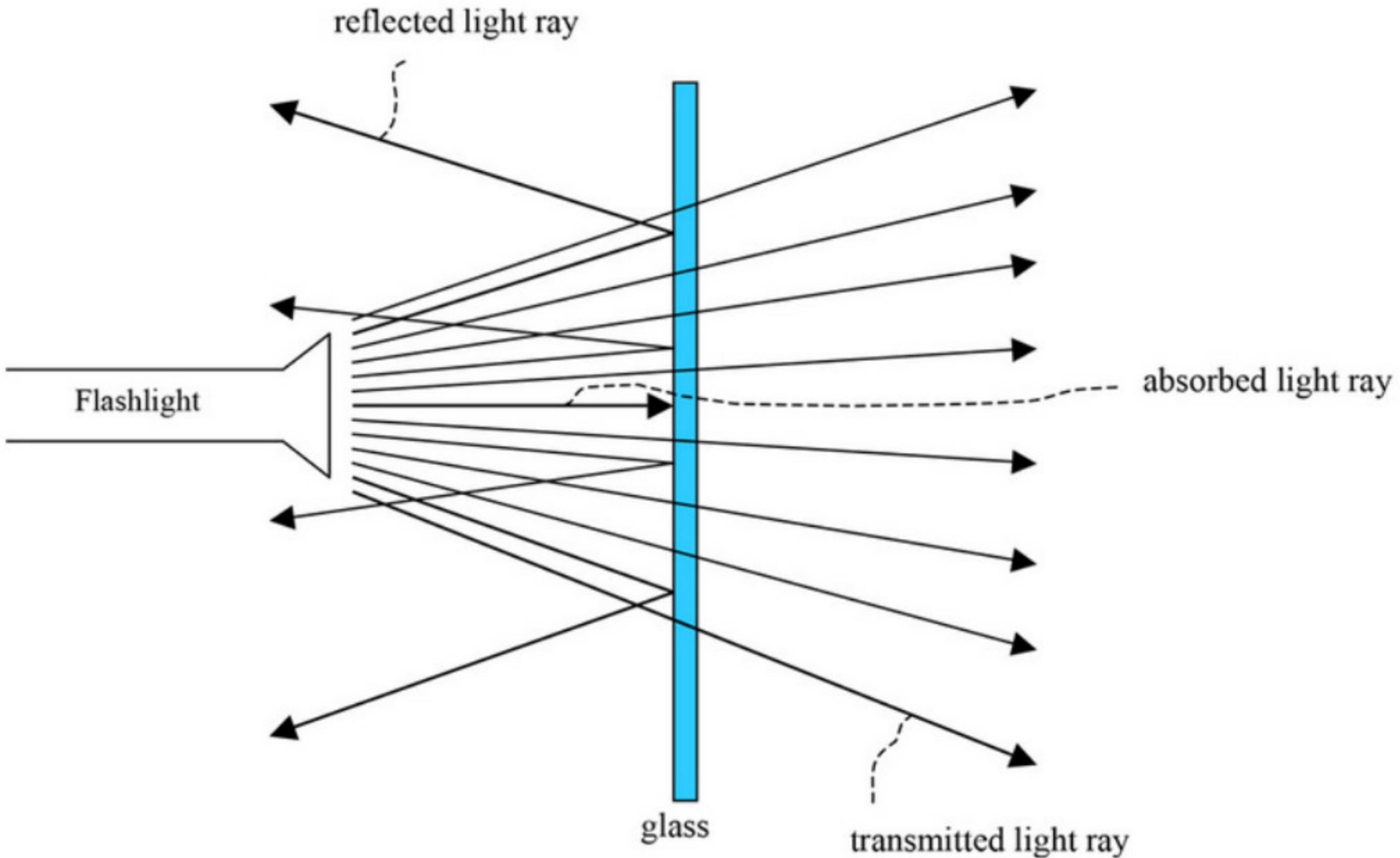
Does this model include why people see objects as different colors?

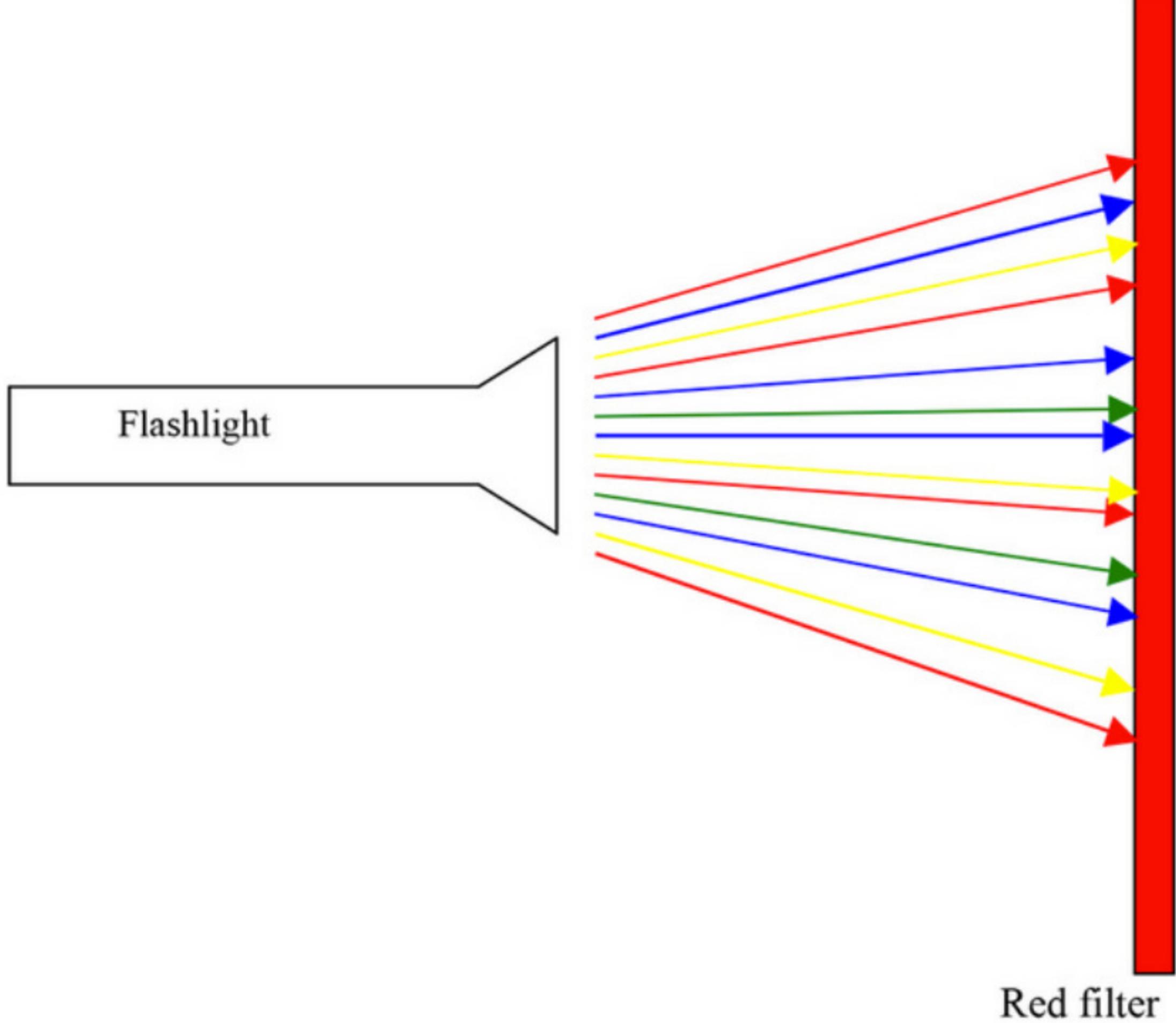


Scientists continually evaluate models to see if they account for new data and revise if needed



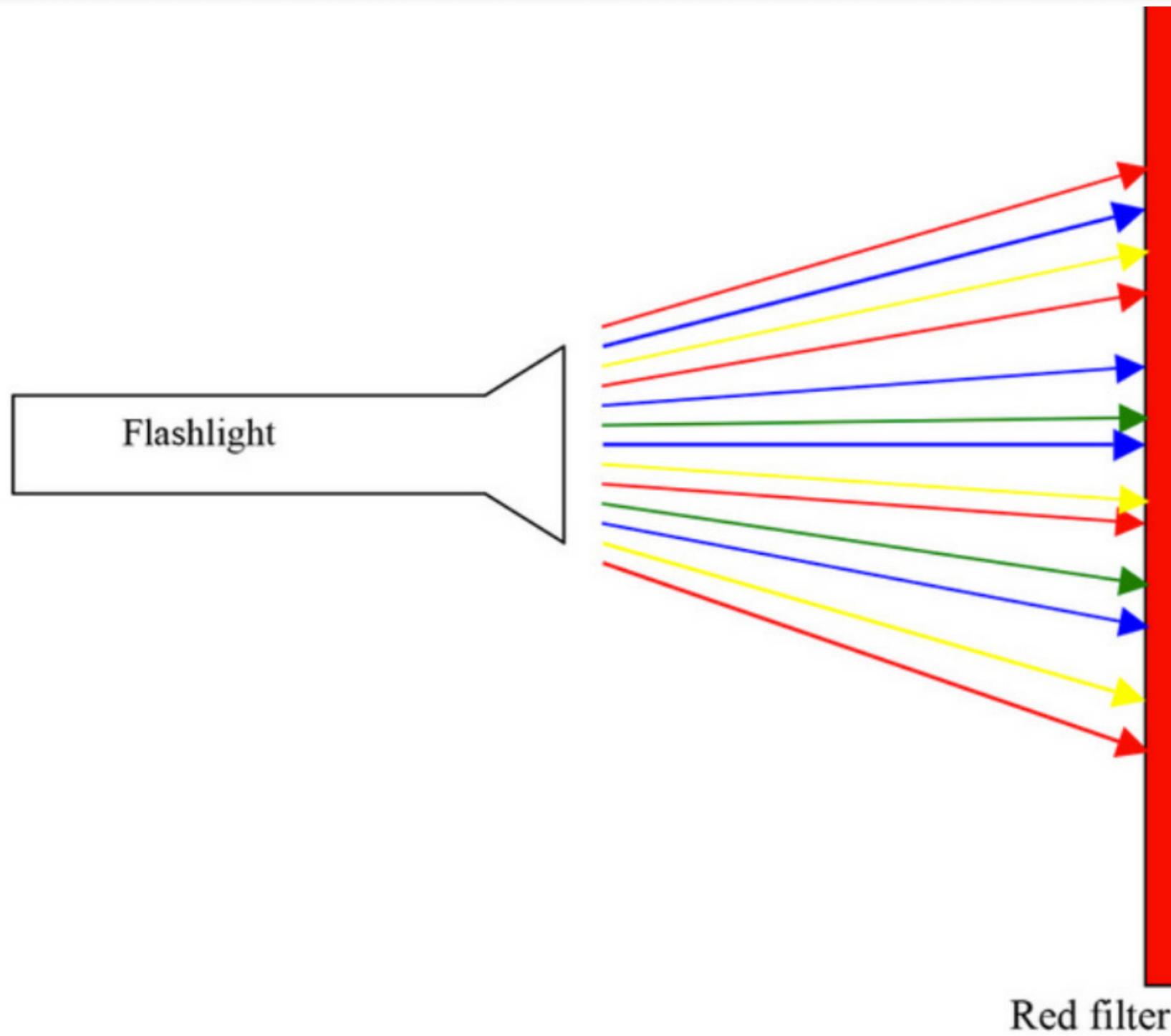
PI: Light Hitting a Transparent Object





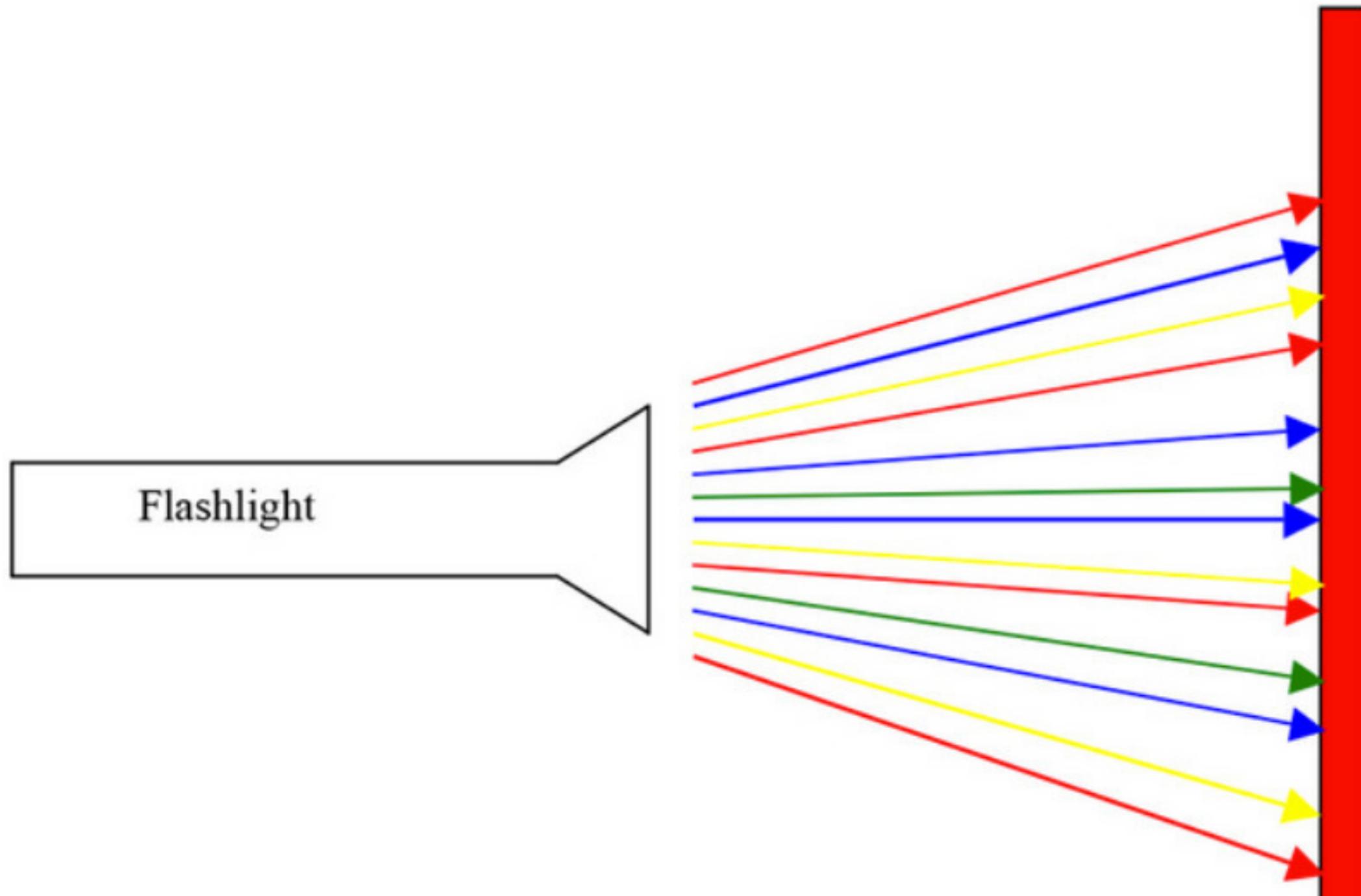
Draw It

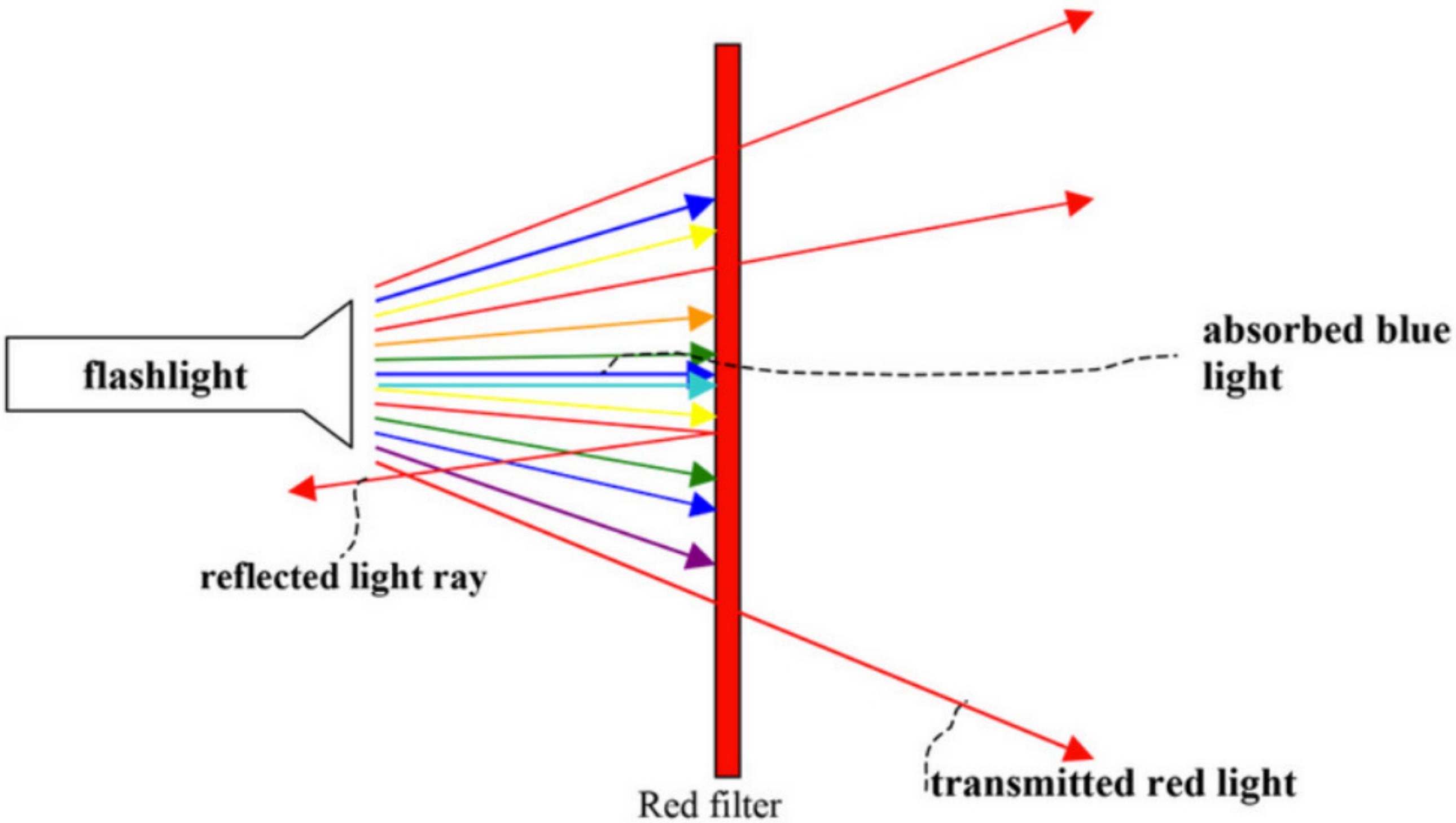
Add to this to show what happens to the white light (all colors) after it hits the red filter



Draw It

The person holding this flashlight would also see the red filter. What is the light doing to help the person see the filter as red?

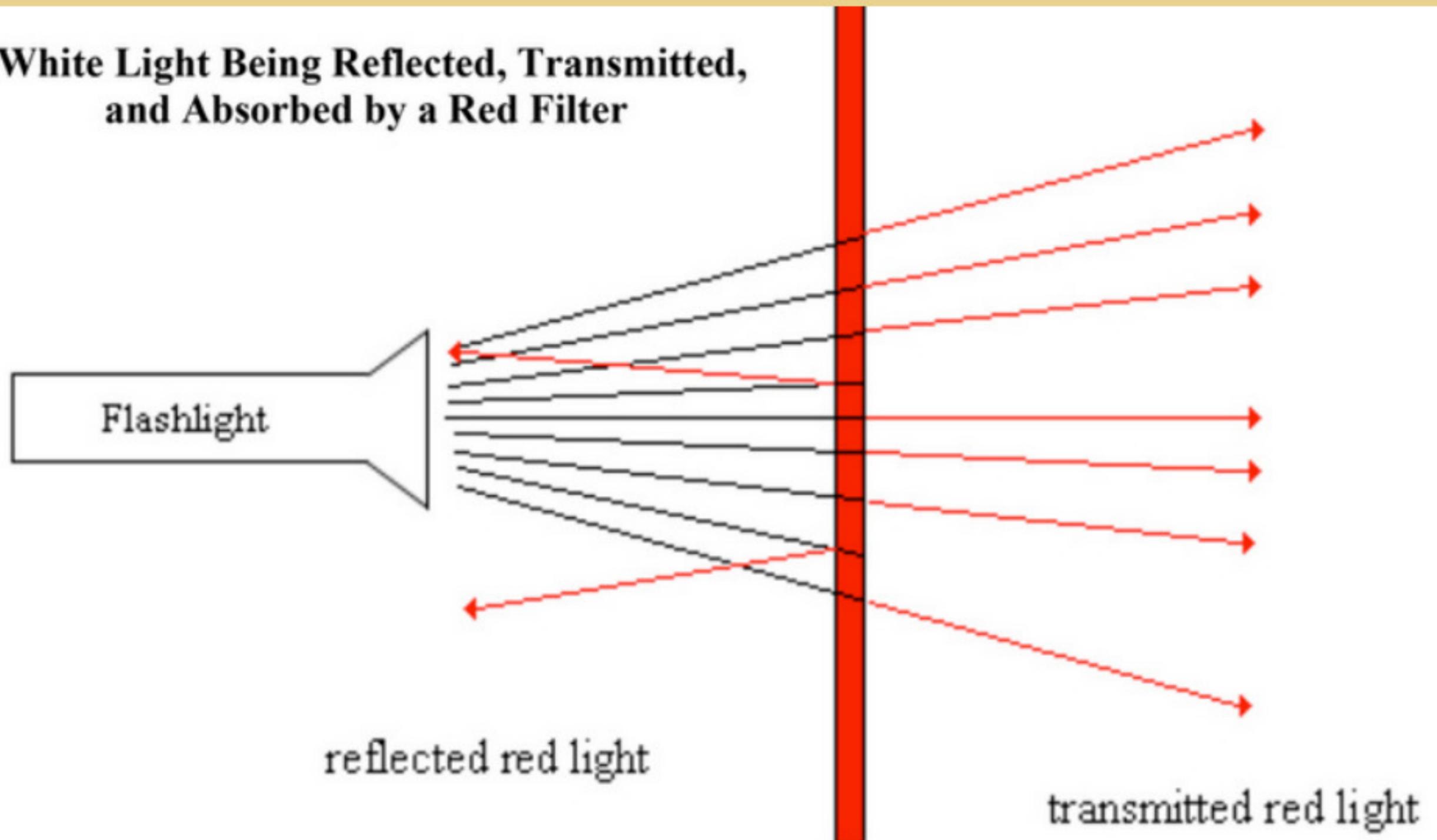




White Light being Reflected, Transmitted, and Scattered by a Red Filter

This represents the same situation as the last slide, but uses black lines to represent white light.

White Light Being Reflected, Transmitted, and Absorbed by a Red Filter



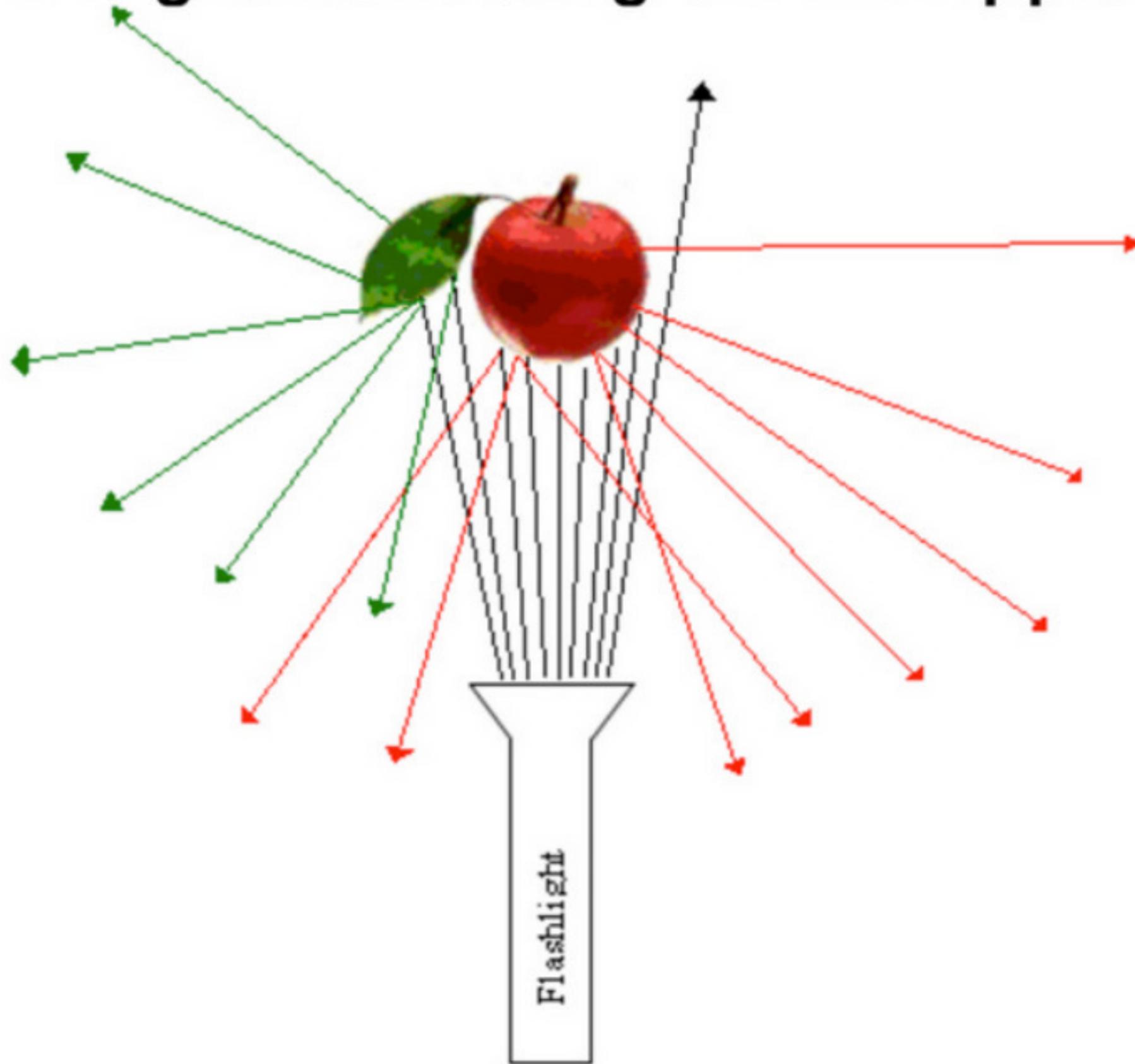


What ideas would you need to represent in a model?

Collaborate!

What ideas would you need to represent in a model showing

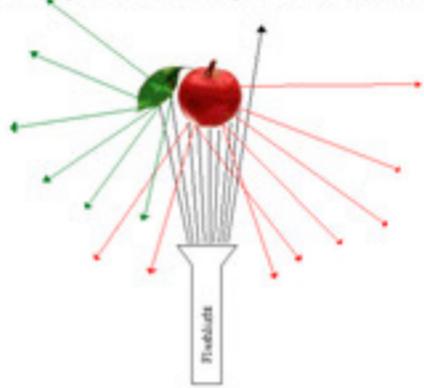
PI: Light Reflecting Off An Apple



White Light Being Scattered by a Red Filter

Open Ended Question

PI: Light Reflecting Off An Apple



White Light Being Scattered by a Red Filter

How does this drawing show the ideas we just talked about?

Draw It

Draw a consensus model showing white light hitting an apple. Be sure to include arrows, label your drawing and write a one sentence explanation.

Draw it!

Draw a consensus model showing white light hitting an apple. Be sure to include arrows, label your drawing and write a one sentence explanation.

You may use colored pencils to add color to your models

Share it!

Use your iPads to take a picture of your consensus model



Upload your pictures here

Collaborate!

Upload your pictures here