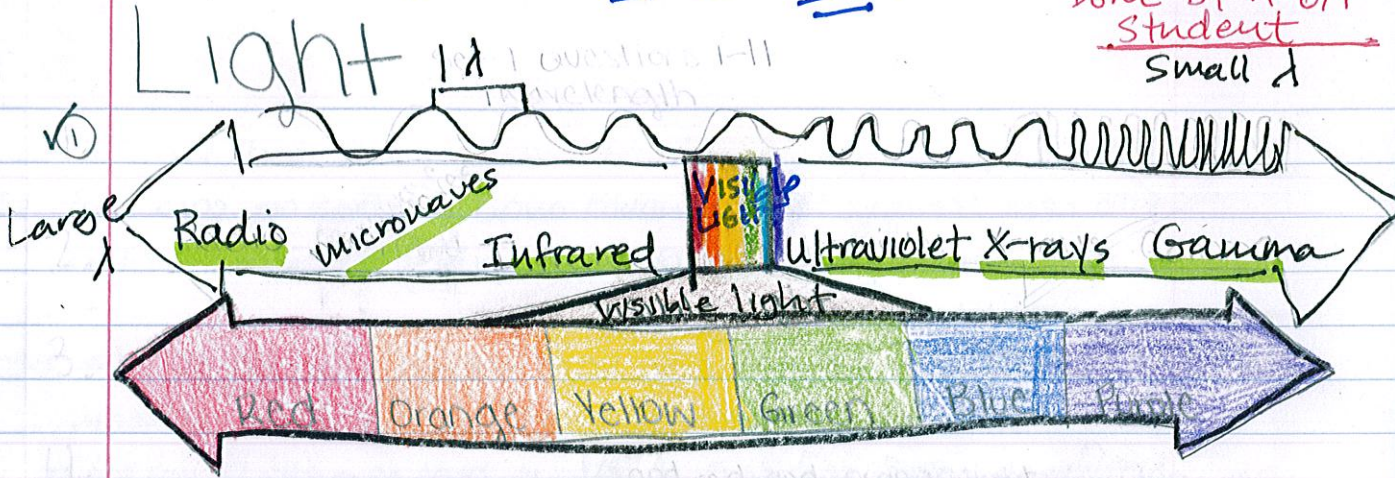


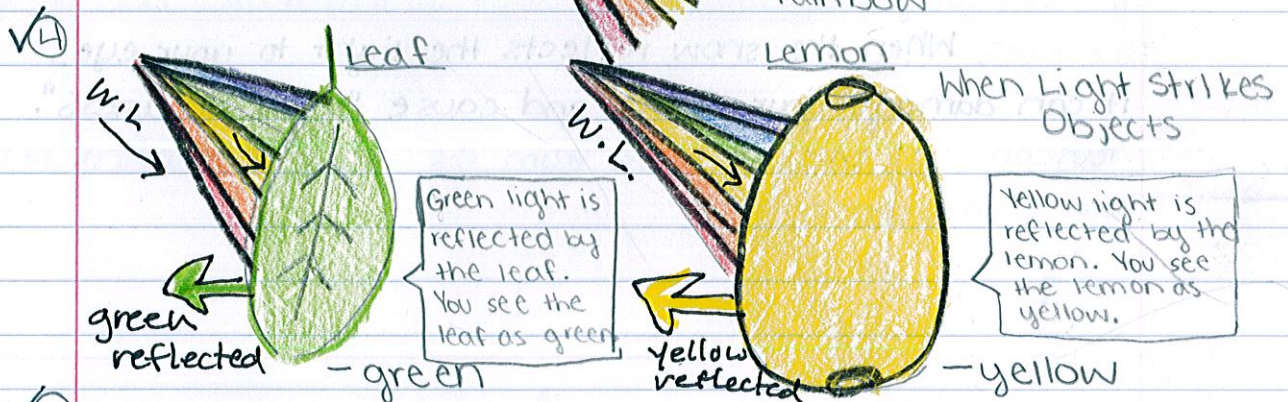
LIGHT SET 1 QSTNS

QUALITY WORK
DONE BY A 6/1
Student
Small 1



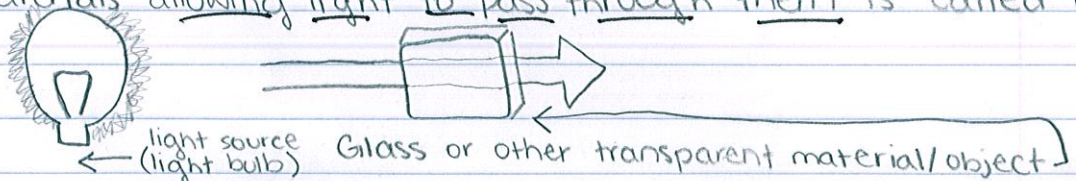
② Radio waves, microwaves, infrared waves, red light, and orange light have longer wavelengths than yellow light.

③ The Visible Spectrum
When white light passes through a prism, you can see that it is made up of the colors of the rainbow.



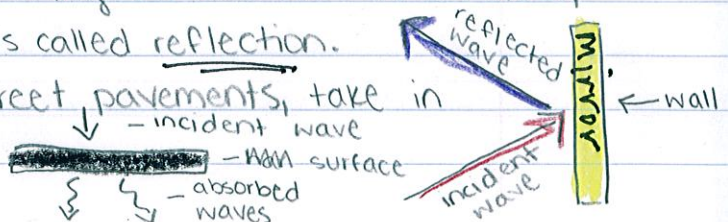
⑤ The colors that are not reflected off of the green leaf and the yellow lemon get absorbed.

⑥ The process of some objects such as glass and other transparent materials allowing light to pass through them is called transmission.



⑦ The process of light hitting a shiny surface such as a mirror, and the light bouncing back is called reflection.

⑧ When dark objects, such as street pavements, take in light, it is called absorption.

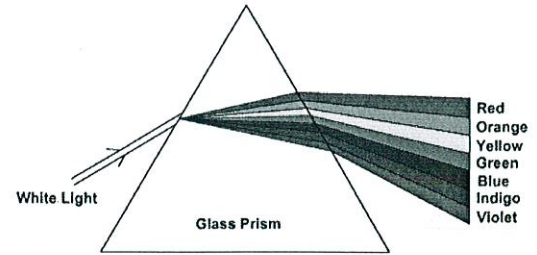


Light & Heat

- ✓⑨ Black objects absorb almost every color and turn them into heat energy. People would avoid purchasing cars with black or dark interior, because black absorbs the most colors, meaning it absorbs the most heat.
- ✓⑩ It would be wise to wear light colored clothing to the beach in the summer (when it is hot) because white reflects almost all colors, meaning it reflects heat as well. It would be wise to wear dark clothing to go skiing in the winter (when it is cold) because black absorbs almost all colors, meaning it absorbs heat as well.
- ✓⑪ People wear sunglasses when they snow ski because white snow reflects light meaning skiers have 2 light sources shining in their eyes - reflected light from the snow and direct rays from the sun. Sunglasses absorb the light so that it does not hit you in the eyes. When the snow reflects the light to your eyes it can damage your retina and cause "snow blindness". You can get bad sunburns from the light reflecting off of the white snow

SET 1 QUESTIONS

LIGHT



Resources: Use the *red textbook* to answer the following questions! Answer in complete sentences. Place answers on white paper since this homework requires you to draw and color several diagrams.

1. Read page 337 in the red book on Electromagnetic radiation. Draw Figure 1. **Color** and **label** your diagram.
2. Which forms of electromagnetic radiation have a longer wavelength than yellow light?
3. Red Book – Read Pages 426-427 → **Draw** and **color** figure 5-The Visible Spectrum on page 426. Provide a caption under your drawing explaining your drawing.
4. Red Book – Read Page 427 → **Draw** and **color** figure 6-When Light Strikes Objects. Provide a caption under your drawing which explains your drawing.
5. What happens to the colors that are **not reflected** off of the green leaf or the colors that are **not reflected** off of the yellow lemon?
6. Explain what **Transmission** of light is in words, and **draw** a picture to illustrate transmission of light.
7. Explain what **Reflection** of light is in words and **draw** a picture which illustrates Reflection.
8. Explain what **Absorption** of light is in words and **draw** a picture which illustrates the absorption of light.
9. Explain why some people avoid purchasing cars with a black or dark interior.
10. Why would it be wise to wear light colored clothing to the beach in the summer but dark clothing to go downhill skiing in the winter?
11. Why do people wear sunglasses when they snow ski?