

➤ Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas, and big questions.

➤ Objective(s):

- *Differentiate between the different colors of visible light based on the wavelength and frequency.*
- *Understand how light addition and subtraction occurs in the creation of specific colors of light.*

➤ Notes:

During the video segment, use words, phrases, or drawings to take notes.

➤ Summary:

After watching the video segment, write at least three sentences explaining what you learned. You may ask yourself: "If I was going to explain this to someone else, what would I say?"

Answer the following.

1. What colors do you see- the ones that are absorbed by an object, or reflected by one?

2. List the colors of the visible spectrum, from longest to shortest wavelengths:

R _____

O _____

Y _____

G _____

B _____

I _____

V _____

3. Using the list above, which color light has the greatest frequency?

4. What are the three primary colors of light?

5. What color of light is formed when all three colors are combined at the same intensity?

6. Define translucent in your own words.

Answer the following.

7. What is a material called in which no light is able to pass through?

8. What does the unit lumens measure?

9. What color of light does chlorophyll absorb?

10. List the secondary colors of light from the primary colors that combine to create them:

Red + Green makes _____

Red + Blue makes _____

Blue + Green makes _____

11. When complementary colors of light are combined, _____ light is formed.

12. What process do pigments use in order for specific colors to be seen by an observer?

13. The receptors in the eye that are more sensitive to light are called _____, and the receptors that are more sensitive to color are called _____.