

Color Addition and Subtraction Worksheet

Part II. Predictions

Yellow filter + cyan filter = _____

Cyan filter + magenta filter = _____

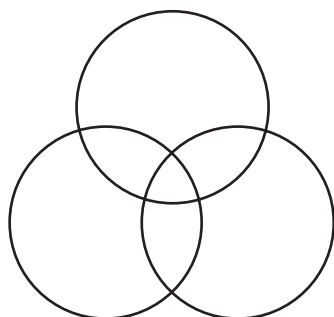
Yellow filter + magenta filter = _____

Yellow filter + magenta filter + cyan filter = _____

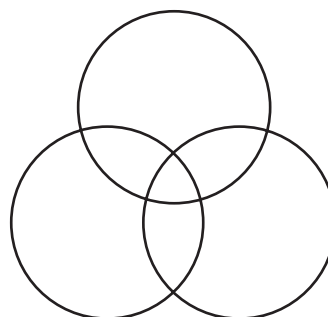
Observations

Label each section of the diagrams below with the colors observed. *Optional:* Use colored pencils to fill in the diagrams with the appropriate colors.

Part I. Color Mixing by Addition



Part II. Color Mixing by Subtraction



Discussion Questions

1. What are the primary colors of light? The primary colors of pigment? Underline the primary colors in each diagram above.
2. Define complementary colors of light. Compare and contrast the complementary colors of light and the complementary colors of pigment.
3. What color would you expect to see if white light passed through a cyan-colored filter placed on top of a red-colored filter? Explain.
4. Explain why the primary colors of pigment are also called primary subtractive colors.
5. Explain why the following statement is false. "The primary colors are red, yellow, and blue."