Disappearing Colors

Crayola Supplies
- Construction Paper™ Crayons
- Scissors
- Washable Markers

Other Supplies
- clear adhesive tape
- construction paper
- oak tag or poster board
- plastic wrap (colors)

Suggested Curriculum

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Why

Experiment with color perception by making your own color filter glasses that seem to make colors magically disappear.

Benefits

- Students observe the effect of looking through various colorful lenses and record their results.
- Students engage in scientific inquiry about color filters, identify a simple current problem, and implement a solution by constructing color-filtering devices.

Close adult supervision is required to ensure children's safety.

Directions

1. Try on sunglasses with different colored lenses. Share observations with other students about how the view changes depending on the lens color.

2. Design your own experiment. Draw patterns of lines and shapes using Crayola® Construction Paper™ Crayons on both light and dark construction paper.

3. Construct color filter glasses to see how looking through different colored plastic wrap affects your perception of colorful patterns. On oak tag, draw at least three pairs of color filter glasses frames with crayon. Cut out frames and
the lens area using Crayola® Scissors. Decorate the frames with Crayola® Washable Markers.

4. Cut and tape one or more layers of colored plastic wrap onto the lens area of each pair of glasses. Construct some with red, green, blue, or other color lenses.

5. Observe how your perception of the patterns you drew seem to change depending on which glasses are worn. Record your observations in an organized manner on an information sheet. Why do certain colors seem to disappear depending on the color of the lens you look through?

Adaptations

- Write simple lab reports for this scientific inquiry. Design a format to present the design and results of the investigation. Add graphics to show how to construct color filter glasses, and a visual demonstrating how perceptions of patterns changed.
- Older students investigate why the disappearing color phenomenon occurs.
- Pair older students with younger children to conduct the experiment and explain how it worked in simple language when the investigation is complete.

Safety Guidelines

ATTENTION: The cutting edges of scissors are sharp and care should be taken whenever cutting or handling. Adult supervision is recommended with all children.

Safety guidelines recommend this art project is suitable for children age 4 years and older. Close adult supervision is required to ensure children’s safety.

Related Resources

Books:

How Do Our Eyes See? by Carol Ballard


Sight (Explore Your Senses) by Laurence P. Pringle

Simple Optical Illusion Experiments With Everyday Materials by Michael Anthony DiSpezio

The Cheshire Cat and Other Eye-Popping Experiments on How We See the World by Paul Doherty

Visual Intelligence: How We Create What We See by Donald D. Hoffman

Videos:

My First Science Video.

Software:

I Love Science