



Recommended for Grades 2-5

Wisconsin Academic
Standards for Science:
C.4.1, C.4.2, C.4.6, D.4.4

Program length:
Approximately 40 minutes

Maximum of 30 students

Please be aware, the exhibit
gallery is dark and contains
flashing lights.

We will try to accommodate any
students who may not be able
to enter the gallery because of
sensitivity to flashing lights with
other activities.

Contact
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Mixing Light: Color Tour

Overview

The exhibit, Neon: Darkness Electrified, features about 30 vintage advertising signs from the collection of local neon artisan Jed Schleisner. These handcrafted signs present an opportunity to learn about everything from design to advertising to science. The bright colors also offer a fun way to discover color theory and the visible spectrum of light.

In this program, students will spend about 20 minutes in an activity room learning about the visible color spectrum and how colors of light can be mixed. Students will be guided through basic, fun light experiments, including using prisms and colored lights. Then in a 20 minute guided tour of the exhibit, students will observe the signs and their colors, and discuss them using what they learned in the activity room.

Student Learning Objectives

1. Students will learn the primary colors of light (as opposed to primary pigment colors) and how they can be mixed to create other light colors.
2. Students will learn how light mixing is used in everyday life (computer screens, tvs).
3. In the exhibit, students will use what they learned about mixing light colors to make predictions about how the colors in the exhibit were created.
4. Students will learn how different colors can be used, and discuss why they are important.
5. Students will gather observable data about the exhibit's signs and, with docent help, present it in a chart format.

Program Vocabulary

Visible light spectrum: The colors of light (red, orange, yellow, green, blue, indigo, violet) that make up white light. These colors can be seen in a rainbow or separated through a prism.

Prism: A clear three-dimensional shape that can refract, or separate, white light into its spectrum of colors.

Neon: A colorless and odorless gas found in nature. When electrified in a tube, it gives off a red-orange light. Neon gas is used to create the light in neon signs.

Phosphor: A metallic powder that glows when ultraviolet light is shined on it. Some glass tubes used in neon signs are coated with phosphor on the inside to give off different colors.

Ultraviolet (UV) light: UV light is an invisible part of the spectrum of light. This light is what causes sunburn, but it also makes certain substances, such as phosphor, glow.