We never really perceive what color is physically."

—Josef Albers

OBSERVE, EXPERIMENT, QUESTION

What's going on here?

"White" light, such as light from the sun or an electric bulb, contains many colors. The human eye's color receptors are sensitive to red (R), green (G), and blue (B)—the "primary colors" in light waves. These primary colors can combine to produce all visible colors. Combining two of the three primary colors will produce the secondary additive colors cyan (C), yellow (Y), and magenta (M); combining all colors results in what we see as white light.

We placed red, green, and blue filters in the light fixtures above to show how these primary colors combine to create white light.

Use the items located here to experiment with color. Block some of the light to produce shadows of different colors. What happens to the white light when you use one or more of the color filters?

Sam Gilliam

Born 1933, Tupelo, Mississippi Lives and works in Washington D.C.

Deep Pool, Deep Blue Reflections, 1987

Acrylic and enamel on canvas and aluminum

Gift of Toby and Jerry Levine in honor of Bob Noyce, scientist, philanthropist, and
Silicon Valley pioneer

2009.16.01-.02

Brian Dettmer

Born 1974, Naperville, Illinois Lives and works in Atlanta, Georgia

Macmillan, 2011

Altered book Gift of Barbara and William Hyland 2012.01

INVESTIGATING PERCEPTION

Brian Dettmer—also known as the Book Surgeon—uses tweezers, knives, scalpels,

and other surgical tools to dissect and carve outdated encyclopedias, medical journals, illustration books, and dictionaries into intricate and beautiful sculptures. He begins by gluing an outdated book's edges, then excavates its pages layer by layer, exposing selected words or letters and cutting around ideas and images that he wants to retain. Nothing inside the book is added or relocated, only removed. "My work is a collaboration with the existing material and its past creators, and the completed pieces expose new relationships of the book's internal elements exactly where they have been since their original conception."

Use the magnifier to further investigate and get a closer look, while being careful to not touch the display case.

David Gilhooly

Born 1943, Auburn, California Died 2013, Newport, Oregon

Gilhooly 10 lb. Sampler, 1989

Ceramic with glazes in artist-made candy box Gift of Barry and Toby Fernald 2006.27.02

SHOW YOUR WORK: ART + MATH

While studying biology at UC Davis, in 1962 David Gilhooly enrolled in Robert Arneson's ceramics class to impress a female art student. He later switched his studies to art after attending an exhibition by painter Roy De Forest. Gilhooly produced sculptures with comical subject matter including food, animals, plants, and Frog World—the artist's alternative world of ceramic frogs that parodied ancient civilizations, religion, politics, and culture. FrogWorld successfully bridged Gilhooly's passions for the physical sciences, history, and art.

In #10 Sampler Gilhooly categorized his whimsical frog confections in a grid format as seen in the famous Whitman's Sampler boxed chocolates. In mathematics the squares in a grid are used for measurement.

Explore More in the galleries – take a sheet and complete the grid with artwork found in the Museum.

Squeak Carnwath

Born 1947, Abington, Pennsylvania Lives and works in Oakland, California

Swim Meat, 1973

Ceramic with glazes

Gift of Jerry Lutovich, M.D. 2011.13.02 a-b

WORD PLAY

Now known for her paintings, Squeak Carnwath originally trained as a ceramicist. Appearing in this early two-part work is the phrase "swim meat," which is also the work's title. The phrase refers to the event the three women depicted have gathered for—a swim meet—and also to fish meat as a form of food. It also alludes to the chauvinistic attitudes circulating around the medium of ceramics during the 1970s, "swim meat" evokes "fresh meat"—a slang term associated with newcomers or freshmen women. The hostile environment led Carnwath to turn to painting soon after graduating from the California College of Arts and Crafts (now California College of the Arts).

Swim Meat provides an early example of how words, numbers, and phrases either augment or comprise the imagery of Carnwath's paintings. The artist's playful use of the homonyms "meat" and "meet" give this work a deeper meaning.

Use the homonyms provided here to come up with the title of a new artwork, then draw it.