PHASE THREE: CONTROL
COLOR CONTROL

Mission: Can we draw lines to control how materials move?

Age: 5+
Materials: $8

Time: 30 min
(Set-up: 5 min | Activity: 20 min | Clean-up: 5 min)

NGSS Alignment of Color Control Activity

The information below may not include every area that this activity can be linked to NGSS concepts

Disciplinary Core Ideas

PS1.A Structure and Properties of Matter

- 2nd Grade
  - Different properties are suited to different purposes.
- 5th Grade
  - Measurements of a variety of properties can be used to identify materials.
- Middle School
  - Each pure substance has characteristic physical and chemical properties (for any bulk quantity under given conditions) that can be used to identify it

Performance Expectations

- 2-PS1-2: Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.
- 5-PS1-3: Make observations and measurements to identify materials based on their properties.
- MS-PS1-2: Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.

PHASE THREE: CONTROL
COLOR CONTROL

Crosscutting Concepts

Cause and Effect

- Grade 3-5
  - Simple tests can be designed to gather evidence to support or refute student ideas about causes.
- Middle School
  - Cause and effect relationships are routinely identified, tested, and used to explain change.

Engineering and Science Practices

Planning and Carrying Out Investigations

- Grade 3-5
  - Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered.
  - Make observations and/or measurements to produce data to serve as the basis for an explanation of a phenomenon or test a design solution.
- Middle School
  - Plan an investigation individually and collaboratively, and in the design: identify independent and dependent variables and controls, what tools are needed to do the gathering, how measurements will be recorded, and how much data is needed to support a claim.
  - Collect data to serve as the basis for evidence to answer scientific questions or test design solutions under a range of conditions.