



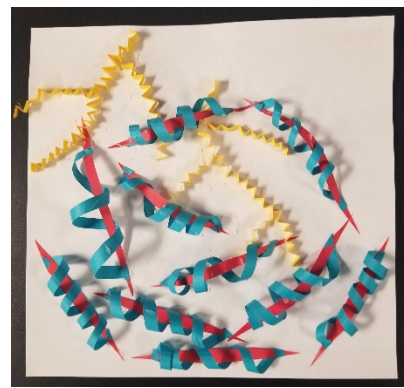
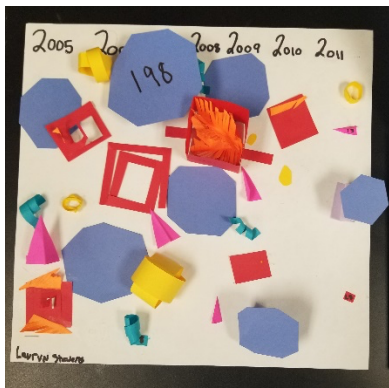
# Sun Valley Museum of Art

## Data Sculptures: Visually Representing Data

**SUBJECT:** Science

**GRADE LEVEL:** 7

**LESSON PLAN:** Six 50-minute classes



Students will explore 7<sup>th</sup> grade science concepts by studying weather data and learning how to translate that data into a three-dimensional sculpture. Different data sets include snow fall, river levels, fire data, etc. Students will assign a color and a shape or form to each different piece of data. They will then sculpt each type of data using paper sculpture techniques. When finished, students will have a sculpture that communicates their chosen weather data visually.

### OBJECTIVES:

- Students will explore a variety of weather-related data sets.
- Students will identify color, shape and form as elements of art.
- Students will translate their chosen weather data into visual representations of color, shape and form.
- Students will demonstrate a variety of paper sculpting techniques.
- Students will write a three-to-four sentence statement about their artwork

### BASIC OUTLINE OF THE LESSON:

- Introduce the Project and share slideshow.
- Students will review and select their data set.
- Students finalize their data translation plan on brainstorming worksheet.

- Students are introduced to a variety of paper sculpting techniques and begin sculpting.
- Students will be introduced to a variety of attachment techniques and continue sculpting.
- Students display their work and artist statement, give feedback and discuss.

#### **ART SUPPLIES:**

- Pencils and erasers
- colored pencils
- paper in various colors
- grocery bags to hold sculpted pieces in between days
- scissors
- glue sticks
- heavy paper to mount sculpture (cardstock)

#### **OTHER RESOURCES:**

- PowerPoint slideshow
- Brainstorming worksheet

#### **IDAHO STATE LEARNING STANDARDS:**

- **Arts and Humanities: Anchor Standard 2:** Organize and develop artistic ideas and work.
  - VA:Cr2.1.7a: Demonstrate persistence in developing skills with various materials, methods, and approaches in creating works of art or design.
  - VA:Cr2.3.7a: Apply visual organizational strategies to design and produce a work of art, design, or media that clearly communicates information or ideas.
- **Arts and Humanities: Anchor Standard 3:** Refine and complete artistic work.
  - VA:Cr3.1.7a: Reflect on and explain important information about personal artwork in an artist statement or another format.

**Science Objective:** Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.

#### **ACADEMIC LANGUAGE:**

- Subject area language: data, data set, weather, observation, translation, variables
- Art Language: Sculpture, form, shape, color, 2D, 3D

#### **STUDENT USE OF VOCABULARY:**

Students will use the words when creating their sculptures, when writing about their work, and when discussing their projects.

#### **STUDENT GROUPING:**

Students could work in pairs or independently.

## **INSTRUCTION:**

### **DAY 1 — INTRODUCTION**

Introduce the project through the slide show.

- Show students the work of artists who use data as the inspiration for their artwork
- Engage students by encouraging them to critically think and ask:
  - How could you translate numbers into art?
  - What might that look like?
- Introduce the project goal of creating a sculpture that visually communicates their weather data. Finally, begin brainstorming and go over expectations.

### **DAY 2 — ARTMAKING**

- Students will finalize their data translation plan.
- They will be introduced to various paper sculpting techniques and begin to sculpt pieces of data.

### **DAY 3 — ARTMAKING**

- Students given tips for attaching sculpted papers to paper base.
- Students continue sculpting.

### **DAY 4 — ARTMAKING**

- Students continue working on their sculptures.

### **DAY 5 — ARTMAKING**

- Students continue working on and finish their sculptures.

### **DAY 6 — PRESENTATIONS**

- Students will title their work and write artist statement paragraph.
- Students will display their artwork and artist statement and participate in a gallery walk where they will observe each other's works and give feedback to at least two of their peer's work. Class discusses what they observed in their peer's work.

## **SLIDE SHOW OUTLINE:**

- Share the work of data artists
- Show a brief history of paper art around the world & other paper artists
- Introduce planning/sorting data
- Share data sets
- Brainstorming
- Composition tips
- Paper sculpture techniques

- Composition review
- Attachment techniques
- Project check-In
- Artist statement question prompts to help students write their own artist statement
- Resources

**END OF PROJECT ARTIST REFLECTION AND PRESENTATION:**

- What is your sculpture called?
- What colors did you use in your sculpture? Why, what do they represent?
- What do the different shapes and forms represent in your sculpture?
- How does the arrangement of your sculpture (the composition) help to communicate your data?