ARTS + ACADEMIC EXTENSIONS

GRADES 1-2: MATH/VISUAL ART

Going to Great Lengths

Students will use their measuring skills to compare length and width while discovering all the ways that visual artists use math to make and display their work.

CONNECTED OBJECTIVE: Students learn how to use their measuring skills to frame and display artwork, and consider how measuring a line is similar to the concept of line in visual art.

MATERIALS NEEDED DURING EPISODE: none

ARTS + ACADEMIC EXTENSIONS

Standards:

CCSS.MATH.CONTENT.2.MD.B.5
Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

VA:Pr5.1.2
Distinguish between different materials or artistic techniques for preparing artwork for presentation.

ARTS EXTENSIONS:

Create a drawing or painting of a landscape (tutorials linked below). Use a larger piece of paper to create a frame. You can measure the width and length of both pieces of paper to determine how much longer the frame is in both directions. Use a subtraction equation to find the answer.

Add all 4 measurements together to find the perimeter.

Students will be able to create a landscape painting by using simple lines and following a tutorial.
https://artprojectsforkids.org/draw-a-landscape/

Students will be able to create a cityscape painting by using simple lines and following a tutorial.
https://artprojectsforkids.org/how-to-draw-a-city/

Students will be able to create a summer beach scene by using simple lines and following a tutorial.
https://artprojectsforkids.org/beach-drawing/

ACADEMIC EXTENSIONS:

Perimeter: Use the example of a painting or frame to introduce the concept of perimeter.

- Model measuring the perimeter of two rectangles. Discuss how different looking shapes can have the same perimeter.
- Send students to measure the length and width of something in their house (a book, a table, the tv, or computer) and show the math they used to find the perimeter.

Helpful Visuals: (see below)

ARTS + ACADEMIC EXTENSIONS

Perimeter of an Object

Perimeter - the distance all the way around an object.

5in. 5in.
4in.

Add up all the sides to find the perimeter.

?
? 5in.
7in.

You can find the length of the missing side by looking at parallel sides.

15in.
15in.
? 25in.
25in.

Total perimeter = 90 in.

Add the given lengths, then subtract from the total perimeter to find a missing side.

Measurement Length

vocabulary

length
compare
long, longer
short, shorter
same (equal)

longer taller   shorter

strategy: How do I measure accurately?

* I use tools
* I line them up
* I do not leave spaces   NO   YES
* I compare
* I count carefully   1,2,3,4,5,6,7,8,9,10