

The Arts in STEM: Advancing Meaningful Integration

## **SCAVENGER HUNT**

An Integrated Math and & Arts Lesson

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## The Arts in STEM: Advancing Meaningful Integration

Which Art standards could relate to a current lesson you teach?

### *National Core Arts Standards: Visual Arts*

**VA:Cr1.2.1a** Use observation and investigation in preparation for making a work of art

**VA:Cr2.1.1a** Explore uses of materials and tools to create works of art or design.

**VA:Cr2.3.1a** Identify and classify uses of everyday objects through drawings, diagrams, sculptures, or other visual means.

### *National Core Arts Standards: Media Arts*

**MA:Cr2.1.1** With guidance, use identified ideas to form plans and models for media arts productions.

**MA:Cn110.1.1a** Discuss and describe media artworks in everyday life, such as popular media, and connections with family and friends.

**MA:Cn110.1.1b** Interact appropriately with media arts tools and environments, considering safety, rules, and fairness.

### *Georgia Standards of Excellence: Visual Arts*

**VA1.CR.1** Engage in the creative process to generate and visualize ideas by using subject matter and symbols to communicate meaning.

**VA1.CR.2** Create works of art based on selected themes.

**VA1.CR.3** Understand and apply media, techniques, and processes of two-dimensional art.

**VA1.CR.4** Understand and apply media, techniques, and processes of three-dimensional art.

**VA1.PR.1** Participate in appropriate exhibition(s) of works of art to develop identity of self as artist.

**VA1.CN.2** Integrate information from other disciplines to enhance the understanding and production of works of art.

**VA1.CN.3** Develop life skills through the study and production of art (e.g. collaboration, creativity, critical thinking, communication).

Submit a lesson plan you would like to modify to include an arts element and discuss in 1 paragraph how you think the arts standards could enhance your lesson.

GEORGIA STANDARDS OF EXCELLENCE FOR MATHEMATICAL CONTENT

**Reason with shapes and their attributes.**

**MGSE1.G.1** Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

**MGSE1.G.2** Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. This is important for the future development of spatial relations which later connects to developing understanding of area, volume, and fractions.

I am planning an integrated Arts and Math lesson that will cover the standards for teaching all about shapes. Students will master attributes of shapes through visual and graphic arts activities. They will first create the shapes using materials such as straw and pipe cleaners. They will compare different shapes through their attributes such as number of sides and corners. Students will get a chance to create shapes on our promethean board so they can see how they can introduced to graphic designing and this will further help them master shapes. We will do activities such going around their classroom, around the school and in the school yard looking for shapes that make-up stuff. This activity will help build connection with what they are learning in the classroom with the world around them and teach them that everything around them has a shape with certain attributes. After mastering individual shapes, students will learn about composing new shapes out of the ones that they learned about. We will further our study of shapes by introducing 2-D and 3-D shapes and they will be given an opportunity to create their own unique shape which they will get to name as well which will enhance their learning and build mastery. Students will present their final shapes project through a video presentation and through an art exhibit.