

KEY STANDARDS

CONTENT	ARTS
CCSS.MATH. C.K.OA.A.1	Art: VA:Cr2.1.Ka

PACING

DAY 1

Pages 1 - 3

ASSESSMENT TYPE

- Formative/ Greek Superheroes

ELEMENTS OF ART

- Shape
- Color



MATERIALS LIST

- 1" multi-colored construction paper squares divided into baskets for student groups
- Thick paper or tag board for the collage mat.
- Glue sticks

Lesson Objective:

Students will practice addition and subtraction through the art of mosaics.

21st Century Skills:

- Creativity
- Collaboration

Content Standards:

CCSS:

Math.content.K.OA.A.1:

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g. claps), acting out situation, verbal explanations, expressions, or equations. *Student will represent addition and subtraction through adding and subtracting colored tiles to and from their mosaic artwork.*

Essential Questions:

How can we represent addition and subtraction through the ancient art or mosaics?

Warm-Up Options - 10 Min

Pick from any of the warm-ups below. Directions for the warm-ups are in the back of this lesson packet.

- 1- Brain Connect
- 2- Color
- 3- Drawing Practice
- 4- Lettering
- 5- Line Poem
- 6- Pencils
- 7- Picture This
- 8- Sketch Stretch
- 9- Sketching from Life

Vocabulary

Mosaic
Tesserae

Arts Standards:

VA:Cr2.1.Ka.

Through experimentation, build skills in various media and approaches to art making. *Students will build skills in mosaic art production through the adding and subtracting of paper tiles.*

Lesson Sequence:

In this lesson students will learn about traditional greek mosaics and will examine mosaics from Ancient Greece. Students will then create a mosaic using colored squares of construction paper and make a careful chart noting the numbers of each color tile used.

1 STEP 1

Students will be introduced to the concept of Greek mosaic through examining the artwork and accompanying Artful Thinking questions noted below.

The Greeks were the first people to ever create the art form we now know as mosaics.

Mosaics are pictures created with bits of stone, glass, and rock.

It was the Greeks, in 4th Century BC, who raised the pebble technique to an art form, with precise geometric patterns and detailed scenes of people and animals.

Artful Thinking Routine

Colors, Shapes, Lines routine. Have students answer the following questions regarding this mosaic, recently discovered in the ancient Greek city Zeugma.

- What colors do you see in this art?
- What shapes do you see? Big shapes? Little shapes?
- What kinds of lines do you see?

2 STEP 2

Go over the directions with students. Explain that today they will be creating mosaics using construction paper tiles.

To create their image students will “add and subtract” tiles from their composition to create their final artwork. Use your judgement regarding whether to offer students free reign of subject matter choice, or whether to give them a theme or idea to inspire their work.

The important focus in this lesson is not on the resulting composition but on how students use the concepts of addition or subtraction to add to or take away from their work.

Point out how the tiles are all squares and students must use creativity to form their images without cutting, ripping, or folding the squares into other shapes. Students should avoid overlapping the squares.

Arrange students into table style groupings so that several students can simultaneously access and utilize a basket of colored construction paper squares.

STEP 3: Main Activity/Project

Provide one basket of colored squares per table grouping. Have students spin spinners (or roll number die) four times and choose the number of colored squares that correlates with their spinner or dice number each time. Students should fill out the corresponding information on their resource paper.

Explain to students that they will be using the colored paper squares they've added to create a mosaic. To begin, provide students with a thick paper to use for their background. Students should use their colored squares to form an image, and when they have finalized that image, they should glue the squares down using a glue stick. Any colored tiles not used in the image should be noted as "subtracted" on the resource paper.

Ask: How does mosaic involve addition and subtraction?

Estimated Time: 15 minutes

4 STEP 4

Have students complete the exit ticket reflecting on their mosaic and how it related to addition and subtraction.

Teacher To Teacher



- This lesson requires tons of construction paper tiles. If you have a parent volunteer or students who like to help out, recruit help with cutting all the small paper squares in the days leading up to this lesson!

TEACHER SCORING GUIDE

Use the scoring guide below to help assess student participation in the Mosaic activity.

Criteria	Distinguished (Level 4)	Excelled (Level 3)	Adequate (Level 2)	Basic (Level 1)
<i>The student is able to represent addition and subtraction through working with paper tiles.</i>	The student is able to accurately add and subtract tiles on their resource page.	The student is mainly able to add and subtract tiles with accuracy.	The student has only a preliminary knowledge of how to add and subtract tiles.	The student does not yet understand how to add and subtract paper tiles.
<i>Students are able to create a mosaic through their work with paper tiles.</i>	The student creates an image or pattern using tiles that demonstrates organization and creativity.	The student creates an image or pattern using tiles that demonstrates thought.	The student uses the tiles to create a mosaic.	The student does not organize the tiles to create a mosaic.
<i>The student is able to space the tiles appropriately and glue the tiles completely.</i>	The student spaces the tiles so that they do not overlap and glues all corners of each tile down completely to the paper.	The student spaces the tiles with minimal overlapping and carefully glues all pieces.	The student overlaps some of the tiles and/or cuts/folds/bends the tiles and does not thoroughly glue tiles to the paper.	The student overlaps tiles entirely, bends, folds or cuts tiles and does not glue tiles securely.

Mosaic Mathematics



Name: _____ Date: _____ Class: _____

Directions:

Use the self-assessment provided below to help guide your participation in the Mosaic lesson.

Criteria	1 = I need more practice 2 = I'm still learning 3 = I did it!
<i>I know how to add and subtract paper tiles.</i>	1 2 3
<i>I understand what a mosaic is and how to make one out of paper.</i>	1 2 3
<i>I carefully glued down all my paper mosaic tiles.</i>	1 2 3

RESOURCE PAGE



Name: _____ **Date:** _____ **Class:** _____

In the table below record how many colored squares you were able to take each time you spun the spinner (or rolled the die).

Number Options: 1 2 3 4 5 6

Spin 1= _____ colored squares

Spin 2= _____ colored squares

Spin 3= _____ colored squares

Spin 4= _____ colored squares

Colored Tile Math

Spin 1	+	Spin 2	=	?

Spin 3	+	Spin 4	=	?

In the space below, draw how many colored squares you have total.

EXIT TICKET



Name: _____

Date: _____

1. How many tiles? In the table below, list how many of each tile you used in your mosaic art.

Red Tiles	
Orange Tiles	
Yellow Tiles	
Green Tiles	
Blue Tiles	
Purple Tiles	

2. Can you add two of the colors of tiles together to find a total?

3. How many purple tiles would you have if you took two tiles away?

Create a Spinner!



Spinners: Put a paperclip through a brass fastener and then push the fastener through the black dot at the center of the spinner, leaving a bit of room before folding out the underside of the fastener so that the paperclip has room to spin.

