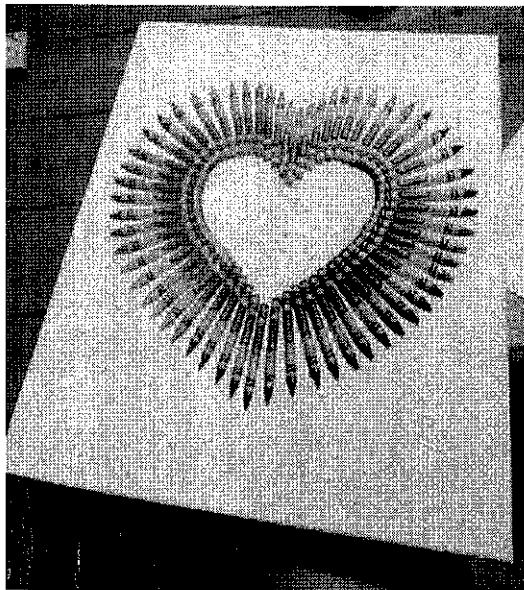


The HeART of Math

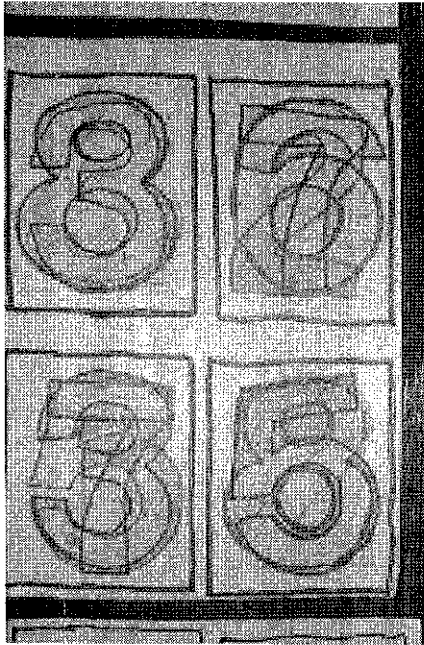
Integrating Arts and Humanities with Math



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Combinations:

This art is inspired from Jasper Johns famous paintings.

Students will be given a specific number and trace numbers

Overlaying another set of numbers to make their given

Number. The example here is for the combinations of 15.

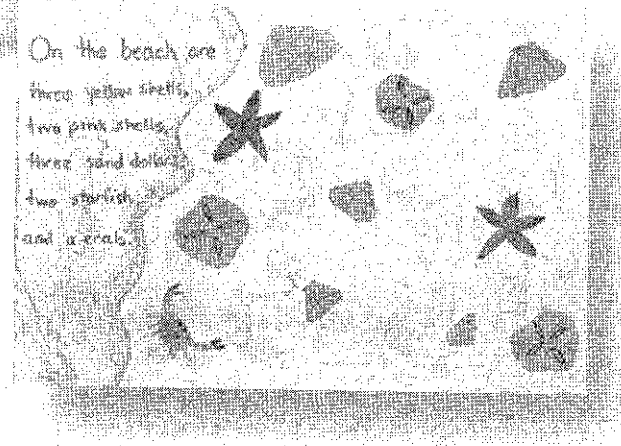
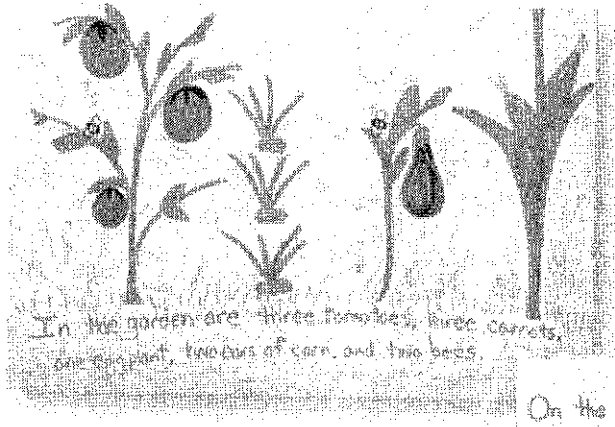
Do you see all of the ways they made the number 15? For

an extension, you could give students a product and they

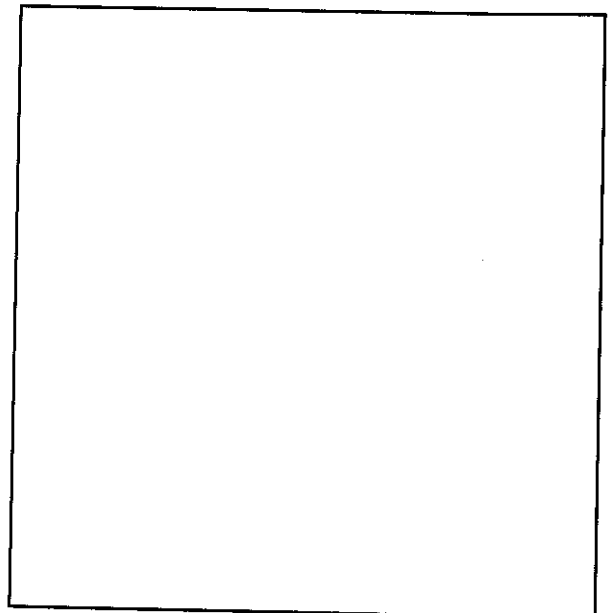
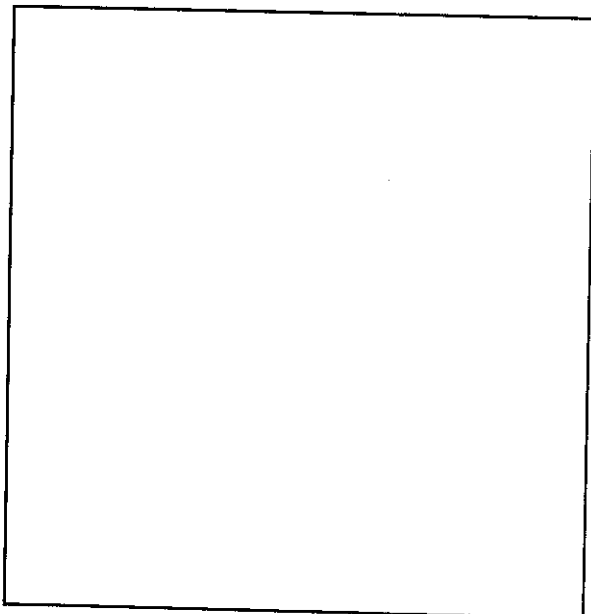
create the art by using the numbers that make that product.

Let's create one or two below!

Counting to X



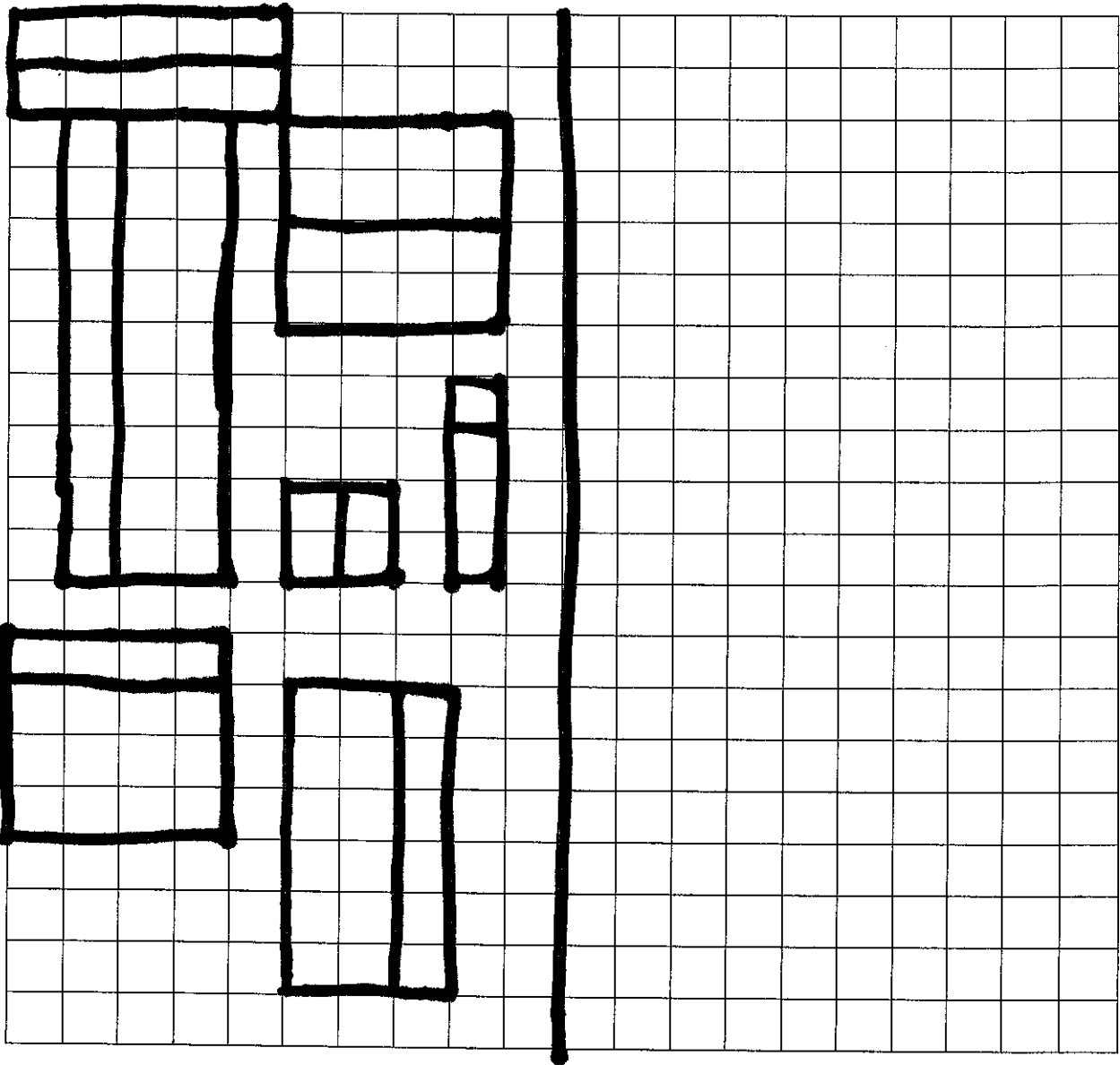
Students can work together to create a book on different numbers or just one specific number. This is a great way to look at different combinations! Create a couple of scenes in the boxes below.



Imitation of Piet Mondrian

Fractions in Color- You can focus on the primary colors, secondary colors, warm colors, or just whichever you choose- the point of this activity is focusing on equivalent fractions. Assign each color that you work with a fraction- ie: yellow= $\frac{1}{3}$, Red= $\frac{1}{2}$, etc. you will then block out rectangles/squares on the grid paper and color the appropriate fraction of each shape.

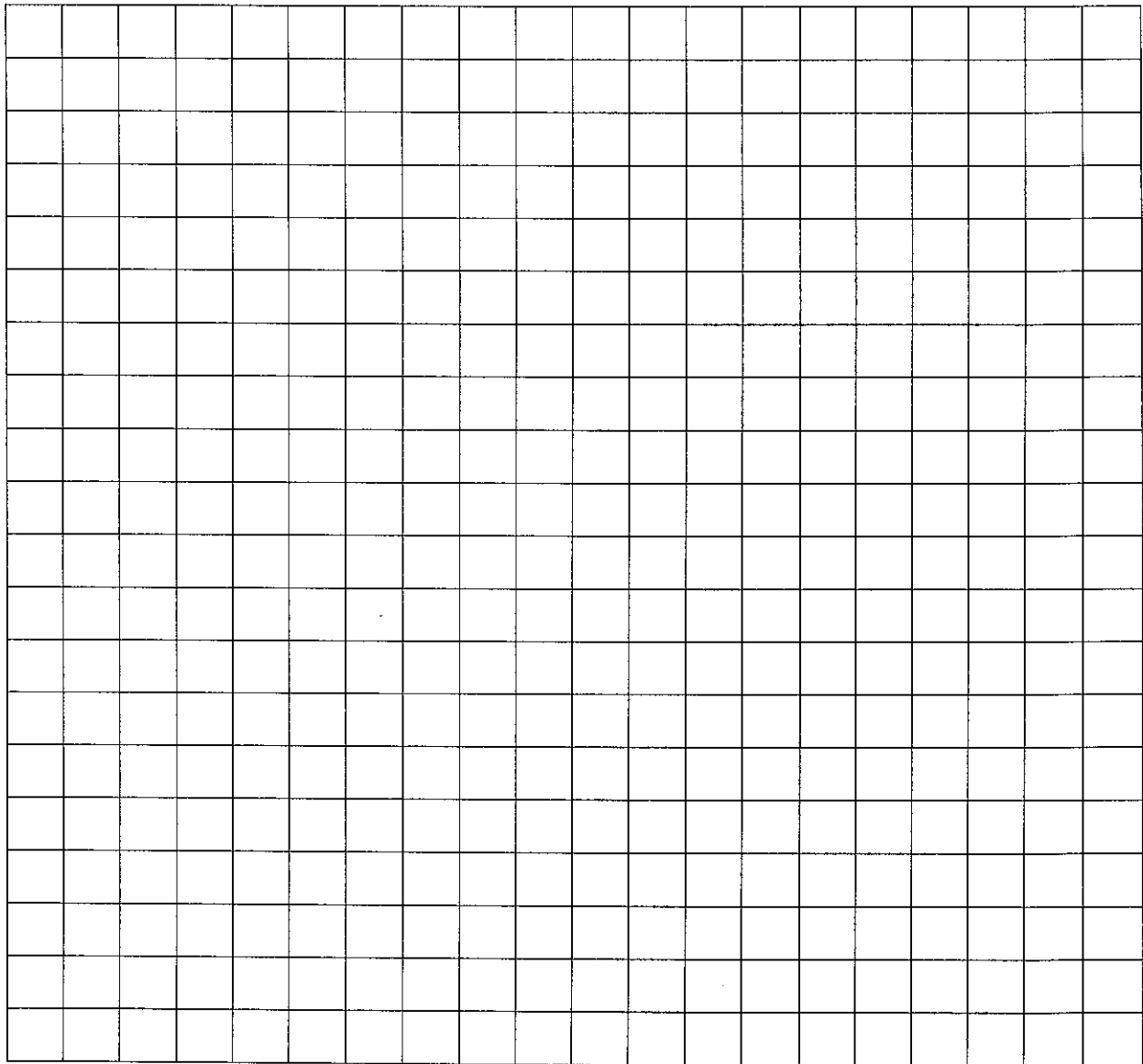
With Support...



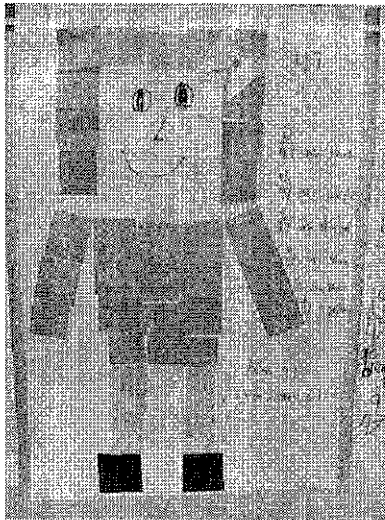
Without...

Imitation of Piet Mondrian continued.....

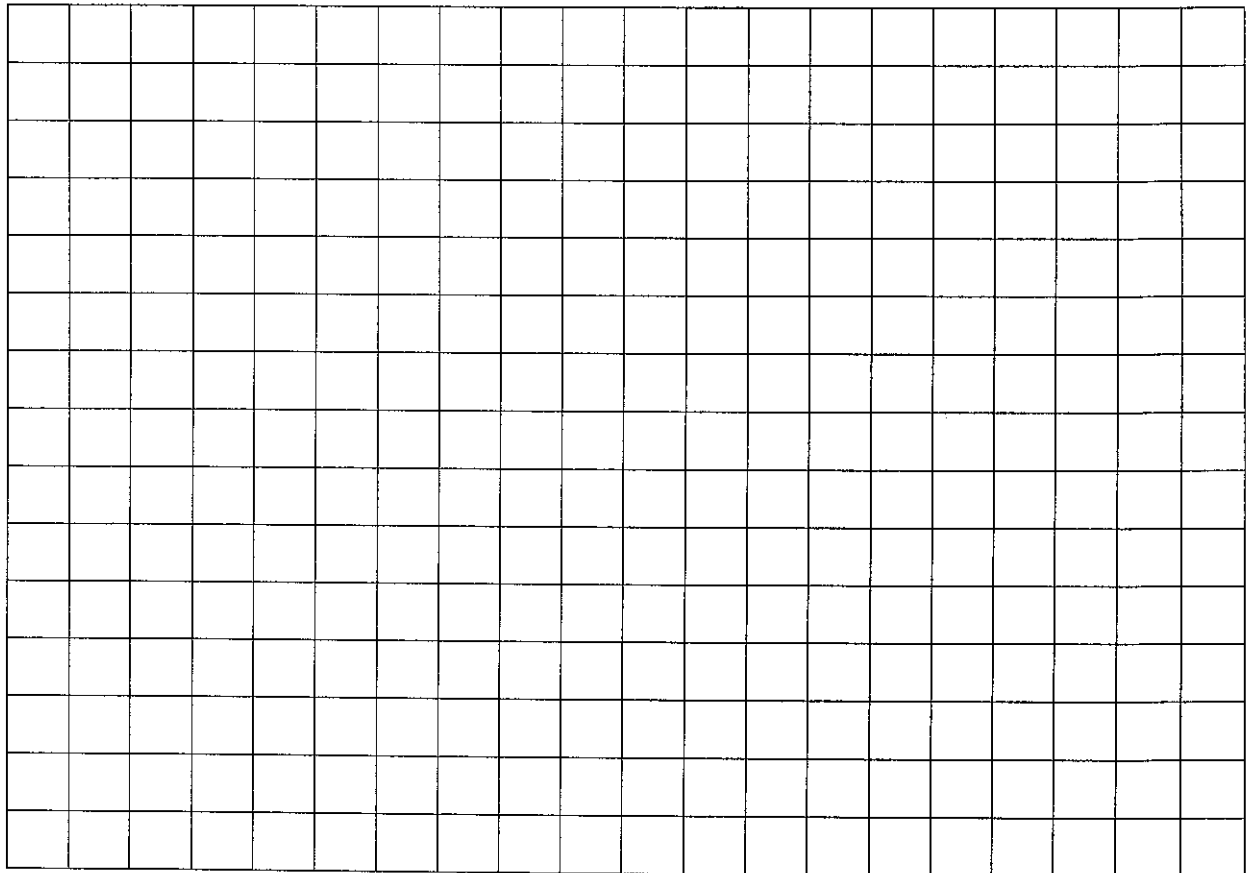
Arrays-In this activity, students will use grid paper to create arrays. You could have students write their problems and products directly on each array or you could have a separate place where students would write: yellow= $3 \times 5 = 15$...



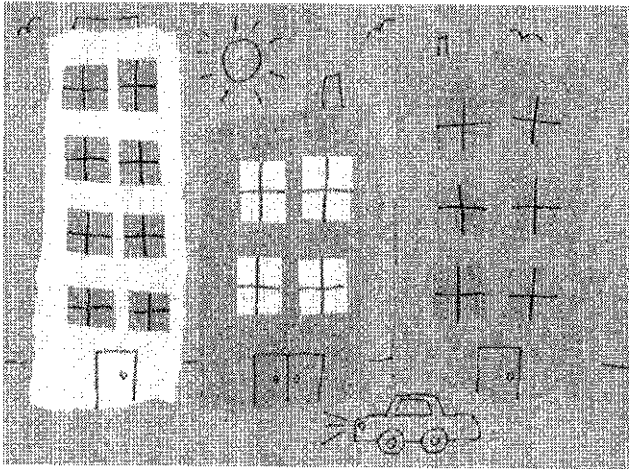
But first..... Let me take a Selfie.....



Have students create a self portrait on the graph paper. Students then will then find out how many squares it took to create their portrait and then find the fractions of how much brown, blue, orange, etc they used.--- You could do as this example and create a collage as well...



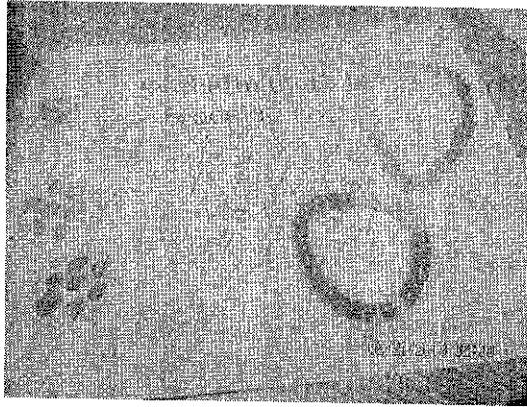
Cityscape Arrays



Students can create a cityscape by drawing or through collage. Each building's windows will be set up as arrays for a multiplication problem. Students can write their problems at the bottom of each of the buildings.

Create your cityscape below....

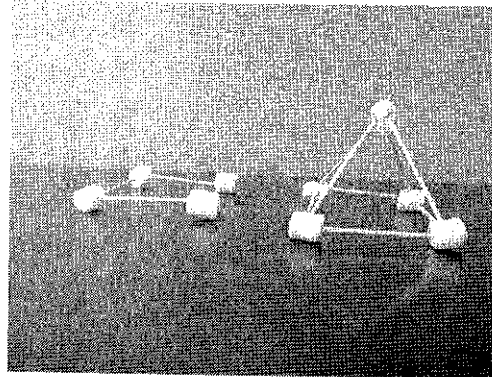
My Multiplication Bracelet Plan



Students will create a bracelet based on a problem they may be having difficulty with or one that is being worked on as a class to create a multiplication bracelet. You will need beads of various colors and string or pipe cleaners.*a cheaper alternative could be Fruit Loops type cereal.

Building Geometric Shapes

Students can build different geometric shapes/forms using toothpicks and marshmallows. This is a great way for students to tell the difference between 2-d and 3-d shapes.



Create a "Pixel" type drawing.

Using grid paper, you may assign each child a number... They must create a "pixel" type drawing with only that amount. (or they can create it and tell you how many squares it took)

Create a Base Ten Collage

Students create a collage using base ten block cut outs. You could also allow students to create a 3-d piece of art using actual base ten blocks. You could set limits on their creations such as using only 124 blocks create a 3-d piece.

Coin Rubbing-

Knowing the difference between coins always seems to be a hard task for students, but if they do a textured coin rubbing by placing a plain sheet of paper on top of a coin then gently rubbing a crayon across it, maybe that would help students to remember the different textures of the coins. (Don't forget to rub the sides too!. Also, you could talk about the portraits that are on the front of the coins.)

Name that Perimeter

Using the graph paper have students make block letters for their name (or special vocabulary words) they can then calculate the perimeter of their name or specific letter. They could have discussions why one A may be larger than another A, which letter in their name has the largest/smallest perimeter. You could also do this activity and instead of looking at the perimeter have students measure their names. Discussions would surely come up about why KIM may be longer than JILL even though there's fewer letters.

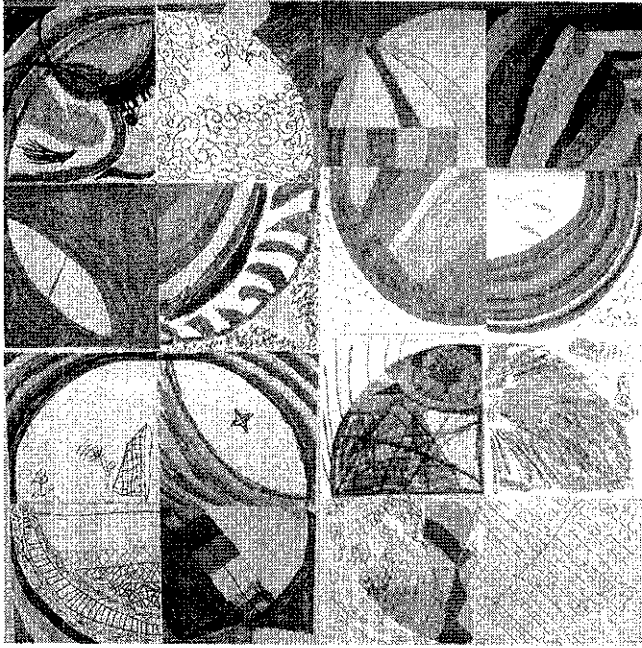
Give Me a Minute

What can you draw in one minute? We often give fluency assessments that last a minute-let students draw (or dance, sing, move) for one minute. Letting them have these creative moments might help with the concept of how long a minute really is.

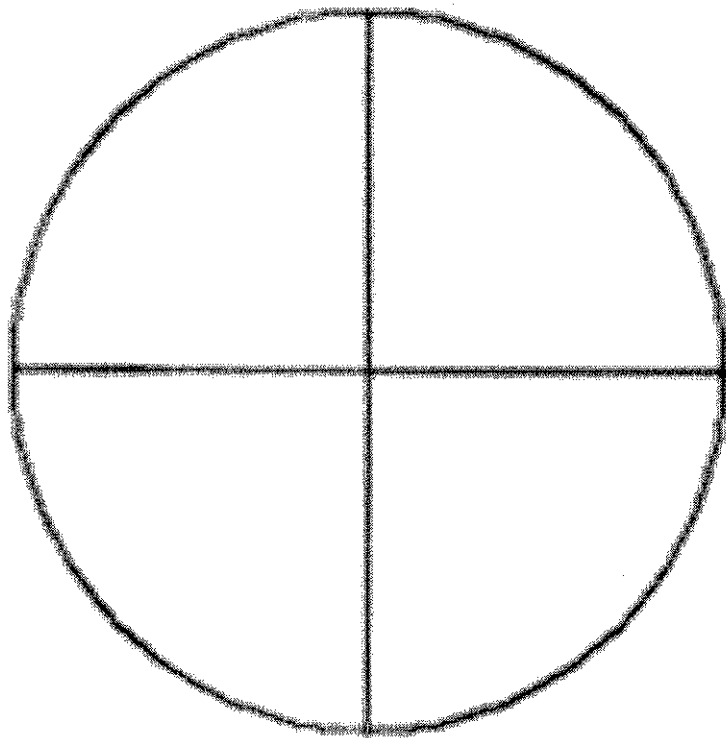
Looking for Patterns in Dance

Many of today's popular dances are complete repetition. Turn up the music and do the cha-cha slide, wobble or whatever to have students discuss the patterns involved in dancing. You could have students create a sequence of movements and teach to the class. Check out GoNoodle for some great brain break/dance inspiration ideas.

Fractional Circles

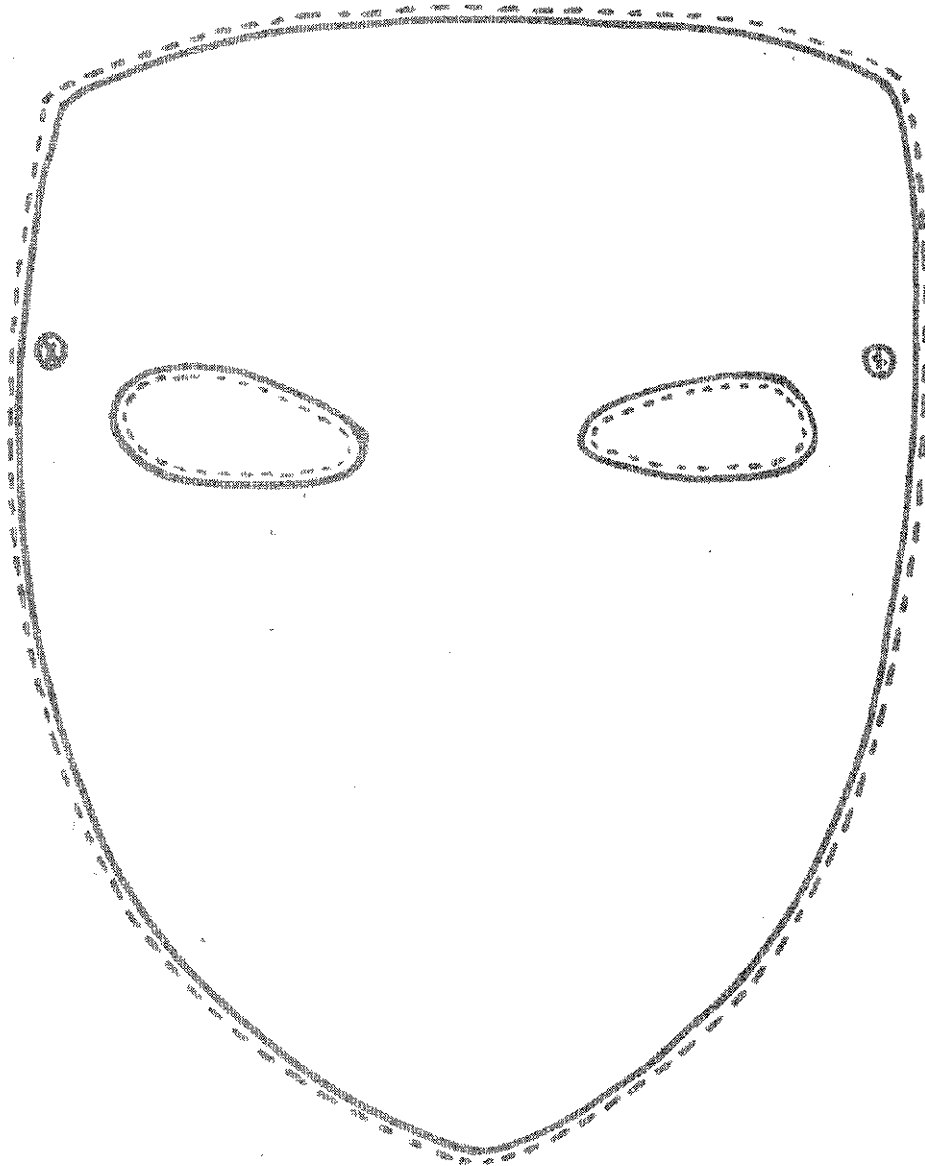


How pretty would this be for a schoolwide project?! Each student would color/decorate $\frac{1}{4}$ of a circle to decorate and each of those circles get put together to create a beautiful piece!-be sure the paper is square



Symmetry in Masks

Whether studying African culture or you want to create a mask for the play you are reading in literacy, have students create a symmetrical mask to go along with it. You could let them completely create this on their own, or you could do various designs on one half and let them replicate them on the other.



Make the Shape

While working on shapes, have students walk the pathway to create a shape, or work together in teams and lay on the floor to create the shapes that you are studying.

Marketplace

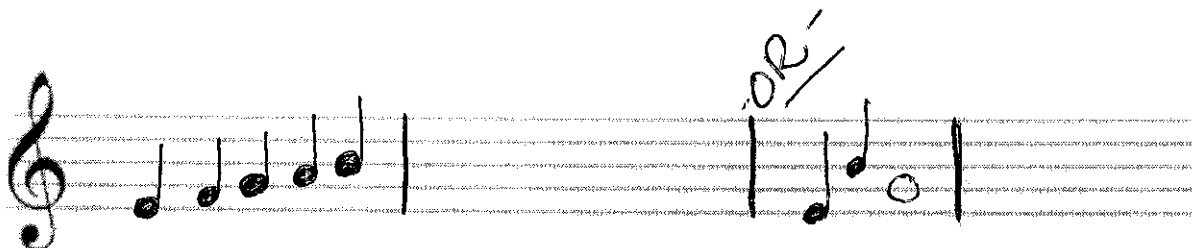
Have students become cashiers and customers as they spend their “earnings”. Whether it’s a reward system or simply various objects just for the activity, students will take their given amount and spend in the marketplace. The cashiers can use calculators to find the totals for each child. (I love activities that I can count in many areas- Drama, math, practical living!)

Patterns in Music

Look for the pattern in the value of notes or on the scale of the notes. Play a few keys on the keyboard or piano (there are some apps that you can use for a keyboard) see if students can hear the pattern of the notes that are being played. Students can also become the instruments by clap, clap, snap, clap, clap, snap, etc.











Symmetry in Music

Look for symmetry in music. What does it sound like? Look at the following and draw what the other measure would look like if it was symmetrical.



Value of Notes

Create math problems using the value of notes.

Whole Note 	4 Counts	Whole Rest 	4 Counts
Half Note 	2 Counts	Half Rest 	2 Counts
Quarter Note 	1 Count	Quarter Rest 	1 Count
Eighth Note 	$\frac{1}{2}$ Count	Eighth Rest 	$\frac{1}{2}$ Count
$\frac{1}{16}$ th Note 	$\frac{1}{4}$ Count	$\frac{1}{16}$ th Rest 	$\frac{1}{4}$ Count

$$\begin{array}{l}
 \textcircled{\bullet} + \textcircled{\bullet} = \underline{\hspace{2cm}} \qquad \text{—} + \textcircled{\bullet} = \underline{\hspace{2cm}} \\
 \textcircled{\bullet} + \textcircled{\bullet} + \textcircled{\bullet} = \underline{\hspace{2cm}}
 \end{array}$$

Or a way to CREATE music would be to give students an amount (8 for example) and they must draw out the notes/rests that would equal 8. What would your 8 beats look like?

Mirror Movements

In this activity, you will partner up students and they will take turns “mirroring” the moves of the other person. Whether it is facial expressions or full body movements you can share with students that this too is a form of symmetry.

Create a Geometric Collage

Create a collage using various shapes. You could have discussions about which shapes were used in your collage. –you could also allow students to use pattern blocks for this activity.

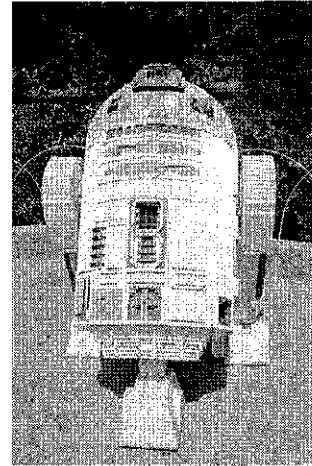
Drama Theatre

Using the Drama Theatre from Crayola that is found in this packet, students will create a story problem using the strip at the bottom of the paper. For example they may draw a pond with 3 ducks in the first scene. The second scene one flew away. The third would be 2 ducks are left. See if students can solve each other's story problems. – Create your own and share with someone at your table.

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Build a Lego Sculpture

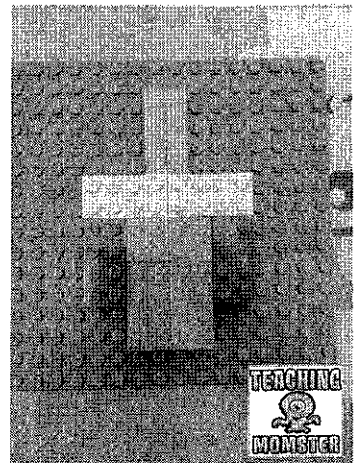
This activity will definitely thrill your students. You could let them just go to town and look at all the sculptures that they can create (take time and share some sculptures created for Lego Land! They are great!) Or you could take this a step further and assign each type of Lego a certain number (you could use the dots on top as the value) and have students find the value of their creation.-or you could give them a value that they have to use as their limit.



Legos and Symmetry

You could also use your Lego blocks to practice symmetry.

You could also use Lego's to come up with story problems that students can share with each other to solve!



Other Ideas....

Quilt Blocks-You could talk about the Appalachian culture and look or create symmetry in a quilt block.
(Google barn quilts for some beautiful examples)

Eye Spy-The program reviews specifically mention exemplary pieces of art, so find some artworks and let the students play eye spy curvy lines, a cool color, a circle, etc.

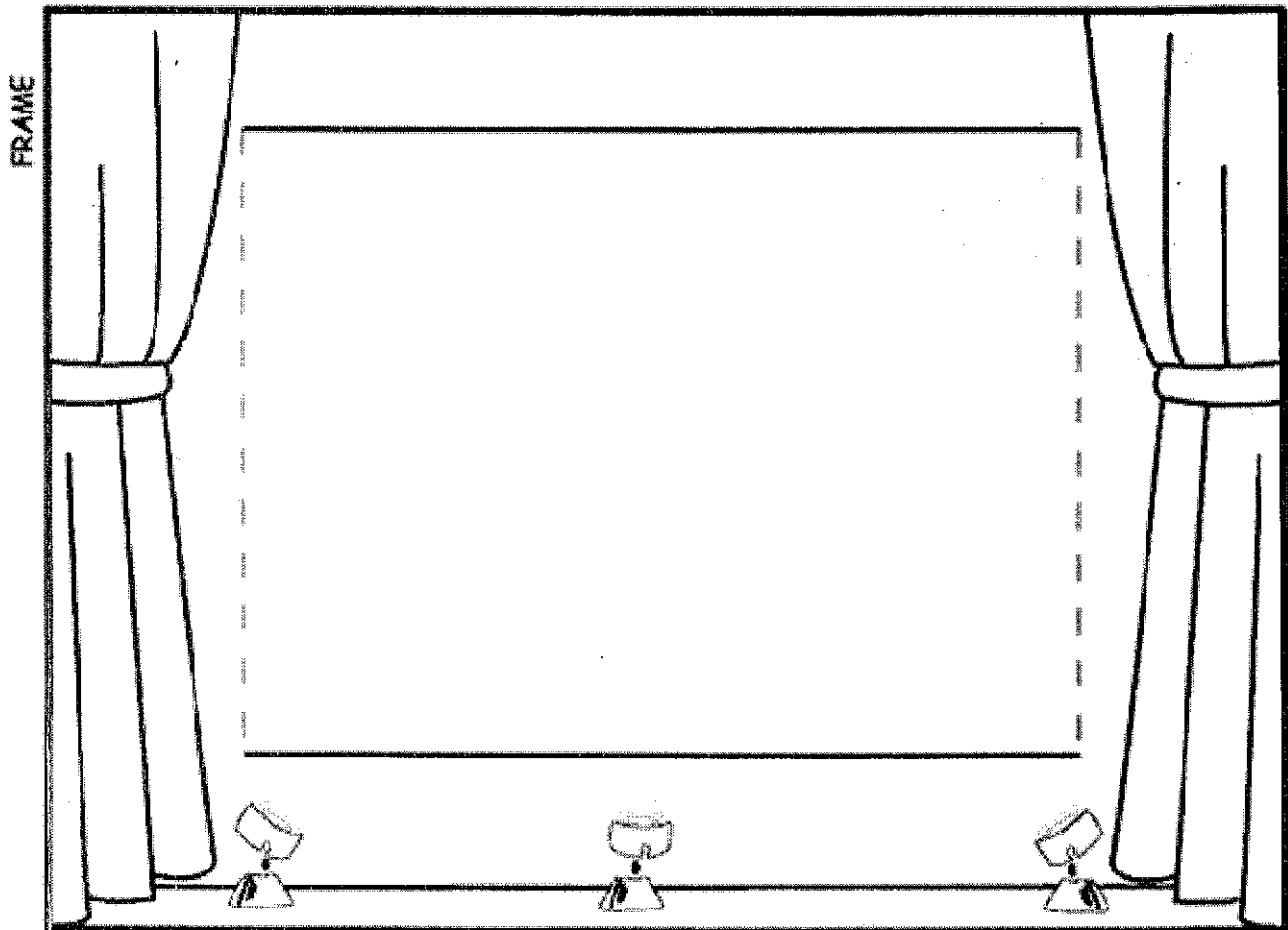
Adjectives- Again use the exemplary works, but have students use adjectives to describe the piece.

Collective Nouns-Let students create a book of collective nouns. They draw the picture and then write a sentence to describe it with the collective noun used.

Drama Theatre

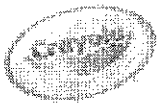
Create your own play!

Decorate the frame and cut out. Cut a slit along the dotted lines. Don't cut the whole inside square out.



Draw a picture in each box to show the scenes in your play or performance. Cut out the strip and slide through the frame. Tell the story as you pull the strip through the frame. Photocopy several STRIP copies and tape more picture boxes together if your performance is long.

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