

Math Standard	Arts Standard	Possible Assessment	Lesson Seed Idea
3.OA.A.3: Represent and solve problems involving multiplication and division.	TH:Cr.1.3.a: Visualize and consider various to problems/conflict from perspective of self and/or character.	Each group will present its dramatization. The class will provide feedback, and after all scenes, they will compare and contrast each group's solution and notate them in their math journals.	Have students work in small groups to dramatize and solve the same word problem. Students will perform their dramatization, showing both the problem and the solution.
3.NF.1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$ .	MU:Cr.2.1.3.b: Use standard and/or iconic notation and/or recording technology to document personal rhythmic and melodic musical ideas.	Have students create 4-beat rhythmic compositions, notated with fractions. Have students perform their compositions on small percussion, and also show their mathematical work to demonstrate how their rhythmic composition adds up to 1.	Have students practice clapping 4-beat rhythm patterns with known rhythms (whole, half, quarter, eighth, and sixteenth notes). Notate a 4-beat call, and have students create 4-beat responses. Notate the "call" with corresponding fractions ( $1$ , $1/2$ , $1/4$ , $1/8$ , $1/16$ ). Distribute music fraction manipulatives (see <a href="#">music fraction pizzas</a> or <a href="#">rhythm flip charts</a> ) and give students a chance to create various rhythm patterns and notating their fraction names. Ask students to add their rhythm fractions & see if they add up to 1.
3.MD.8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	VA:Cr.1.3.b: Apply knowledge of available resources, tools, and technologies to investigate own ideas through the art-making process.	Create a piece of artwork that includes various polygons (same/different area, same/different perimeter). Students can use manipulatives to guide their work.	Have students use manipulatives to determine how to find the area and perimeter of polygons. Examine existing pieces of geometric artwork by Piet Mondrian, determining the area and perimeter of various polygons within the artwork. Use manipulatives to create various examples of rectangles that have the same perimeter with different areas, as well as rectangles with different perimeter and same area.
3.G.2: Reason with shapes and their attributes.	DA:Cr.1.1.3.a: Experiment with a variety of self-identified stimuli (for example, music/sound, text, objects, images, notation, observed dance, experiences) for movement.	Groups will perform their composition, and the class will discuss what they see. Take photographs of each freeze and display with student captions explaining the mathematical concept.	Ask students to speculate on connections between dance and math. View a dance scene. Facilitate a discussion on examples of geometry in the scene, and make a list of these examples. Using this list, have groups of three to five students create a group composition using their bodies to show these geometric examples. Each group will explore diverse positions and shapes and choose one in which to freeze.