

TEACHER INFORMATION

Exploring Math and Color

My Museum Classroom Kit



Teachers: you are probably asking yourselves, “What do I need to know to use this kit in my classroom?” Excellent question! The following will help answer that question in a user-friendly way for yourself and your students.

Each kit contains two close-looking videos, two art-making activities, and math extension activities. Please take the kit and use it in any way that fits your unique classroom and needs. Some teachers will work through the kit in the sequence as we present it; others will use the kit in pieces as bell-ringers or end of day activities; and still other teachers will use bits and pieces of the kit as they fit into their already planned curriculum. It’s your choice, so have some fun with the kit!

Cross-curricular activities are also a possibility for you in using any of the kits. For example, once the students create their own artwork based on the Rothko, you can have them write about their creative choices and process. Alternatively, you might ask students to do a bit of research into colors and why primary and secondary colors are so eye-catching; then they might write a paragraph about their favorite colors and why they like them. Either of these ideas will fit your ELA standards and encourage further creativity. Cross-curricular activities can also sneak some fun into another context, and we all need some fun right now.

The first artwork, *Loopy Doopy* by Sol LeWitt, is all about contrasting colors and the process of using grids to scale. In a lesson using the color wheel and grids in this kit, you can meet the following **Math standards**:

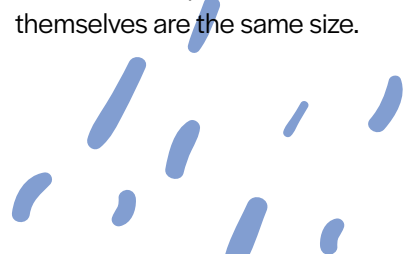
AR.Math.Content.3.OA.A.2 Interpret whole-number quotients of whole numbers.

AR.Math.Content.3.OA.A.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities.

AR.Math.Content.3.OA.C.7 Using computational fluency, multiply and divide within 100, using strategies such as the relationship between multiplication and division.

AR.Math.Content.3.NF.A.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts.


AR.Math.Content.4.NF.A.1 By using visual fraction models, explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ with attention to how the number and size of the parts differ even though the two fractions themselves are the same size.



AR.Math.Content.4.NF.B.3 Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$ (e.g., $3/8 = 1/8 + 1/8 + 1/8$): Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation and justify decompositions (e.g., by using a visual fraction model.)

AR.Math.Content.5.NF.A.1 Efficiently, accurately, and with some degree of flexibility, add and subtract fractions with unlike denominators (including mixed numbers) using equivalent fractions and common denominators.

AR.Math.Content.5.NF.B.5 Interpret multiplication as scaling (resizing), by: Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.



Mark Rothko's painting *No. 210/No. 211* gets us into geometry in addition to color, and it will help you meet the following **Math standards**:

AR.Math.Content.3.MD.C.5 Recognize area as an attribute of plane figures and understand concepts of area measurement.

AR.Math.Content.3.MD.D.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.

AR.Math.Content.3.G.A.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides) and that the shared attributes can define a larger category (e.g., quadrilaterals.) Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

AR.Math.Content.4.MD.C.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.

AR.Math.Content.4.G.A.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines • Identify these in two-dimensional figures.

AR.Math.Content.5.NF.B.5 Interpret multiplication as scaling (resizing), by: Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.

AR.Math.Content.5.G.B.4 Classify two-dimensional figures in a hierarchy based on properties.

Both artworks offer you the opportunity to extend into meeting **ELA standards** in the following ways:

W.3.1 Write opinion pieces on topics or texts, supporting the opinion with reasons.

W.3.1.A Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.

W.3.1.B Provide reasons that support the opinion.

W.4.1 Write opinion pieces on topics or texts, supporting the opinion with reasons and information.

W.4.1.A Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.

W.4.1.B Provide reasons that are supported by facts and details.

W.5.1 Write opinion pieces on topics or texts, supporting the opinion with reasons and information.

W.5.1.A Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.

W.5.1.B Provide logically ordered reasons that are supported by facts and details.

Mark Rothko's painting *No. 210/No. 211* will also help you meet the following **Social/Emotional Learning standards**:
Growth I can express emotions constructively.
Understanding I can articulate how I feel in various situations.



#MyMuseumKit