Common Core State Standards Math and National Coalition for Core Art Standards Curriculum Map

This Curriculum map is designed to authentically align and integrate Common Core State Standards Math and the National Coalition for Core Art Standards for grades Kindergarten through 5th.
Important notes:

- Grades Kindergarten through 5th are represented for both standards set.
- Not every Math standard are aligned. Standards were selected that aligned naturally with each other, you will find some standards are not mentioned for this reason.
- Each alignment has a lesson seed idea. These are for guidance into integration and are not set in stone plans.
- Each grade is color coded and each grade has one or two pages.
- The Math standards have their sub descriptions to help guide usage.
- The Art standards in addition to having the description of the standard have their anchor standard to help guide usage.

For the National Coalition for Core Art Standards of focus are:

Prepared by Kelly Betz

- VA=Visual Arts
- MU=Music
- TH= Theatre
- DA=Dance

Kindergarten »

Counting & Cardinality

Math Standard	Art Standard	Lesson Seed
Know number names and the count sequence. CCSS.MATH.CONTENT.K.CC.A.1	Engage exploration and imaginative play with materials. VA: Cr1.1.K.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could experiment with materials to create numbers out of objects, such as yarn or paper.
Count to tell the number of objects. CCSS.MATH.CONTENT.K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.	Respond in movement to a variety of stimuli (for example, music/sound, text, objects, images, symbols, observed dance). DA:Cr.1.1.K.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could work with educator in creating a dance move that represents each number. EXAMPLE: One shake right foot, two wiggle pointer figure ..etc.

Measurement & Data

Math Standard	Art Standard	Lesson Seed

Prepared by Kelly Betz

Describe and compare measurable attributes. CCSS.MATH.CONTENT.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	With guidance, generate musical ideas (such as movements or motives). MU:Cr.1.1.K.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students, working with educator could create representations of parts of an object. EXAMPLE: Heavy would sound loud and low. Light would be wind chimes.

Geometry

Math Standard	Art Standard	Lesson Seed
Identify and describe shapes. CCSS.MATH.CONTENT.K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.	With prompting and support, invent and inhabit an imaginary elsewhere in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama). TH:Cr.1.1.K.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students, with support of educator, could create a representation of each shape as a character.

Grade 1 »

Operations & Algebraic Thinking

Math Standard	Art Standard	Lesson Seed
Work with addition and subtraction equations. CCSS.MATH.CONTENT.1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 - 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.	Explore a variety of locomotor and non-locomotor movements by experimenting with and changing the elements of dance. DA:Cr.1.1.1.b Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could generate a dance related to how an equation would look.

Measurement & Data

Math Standard	Art Standard	Lesson Seed
Measure lengths indirectly and by iterating length units. CCSS.MATH.CONTENT.1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.	Brainstorm collaboratively multiple approaches to an art or design problem. VA:Cr.1..2.1.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could use different lengthed objects to create an art piece showing perspective.

Geometry

Math Standard	Art Standard	Lesson Seed
Reason with shapes and their attributes. CCSS.MATH.CONTENT.1.G.A.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.	With limited guidance, generate musical ideas in multiple tonalities (such as major and minor) and meters (such as duple and triple). MU.Cr.1.1.1.b Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could use shapes and their attributes to represent multiple tonalities. EXAMPLE: Triangles can be majors and squares can be minor.

Grade 2 »

Operations & Algebraic Thinking

Math Standard	Art Standard	Lesson Seed
Represent and solve problems involving addition and subtraction. CCSS.MATH.CONTENT.2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.1	Improvise rhythmic and melodic patterns and musical ideas for a specific purpose. MU:Cr.1.1.2.a Anchor Standard 1:Generate and conceptualize artist ideas and work.	Students could generate patterns to represent problems.

Measurement & Data

Math Standard	Art Standard	Lesson Seed
Measure and estimate lengths in standard units. CCSS.MATH.CONTENT.2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	Experiment with various materials and tools to explore personal interests in a work of art or design. VA.Cr.2.2.2.a Anchor Standard 2: Organize and develop artistic ideas and work.	Students could experiment with measure materials to create an art piece.

Geometry

Math Standard	Art Standard	Lesson Seed
Reason with shapes and their attributes. CCSS.MATH.CONTENT.2.G.A.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	Propose potential new details of plot and story in a guided drama experience (e.g., process drama, story drama, creative drama). TH:Cr.1.1.2.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could create a story using the shapes attributes as details.

Grade 3 »

Operations & Algebraic Thinking

Math Standard	Art Standard	Lesson Seed
Represent and solve problems involving multiplication and division. CCSS.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, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.1	Create roles, imagined worlds, and improvised stories in a drama/theatre work. TH:Cr.1.1.3.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could design characters roles based off multiplication and division roles within math.

Number & Operations—Fractions[1]

Math Standard	Art Standard	Lesson Seed
Develop understanding of fractions as numbers. CCSS.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; understand a fraction *a*/*b* as the quantity formed by *a* parts of size 1/*b*.	Explore a given movement problem. Select and demonstrate a solution. DA:Cr.1.1.3.b Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could create movement within groups to represent fractions.

Measurement & Data

Math Standard	Art Standard	Lesson Seed
Solve problems involving measurement and estimation. CCSS.MATH.CONTENT.3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).1 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.2	Apply knowledge of available resources, tools, and technologies to investigate personal ideas through the art-making process. VA:Cr.1.2.3.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could design boats using information gathered from resources and experiment with flotation and design.

Geometry

Math Standard	Art Standard	Lesson Seed

Reason with shapes and their attributes. CCSS.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.	Identify ways in which gestures and movement may be used to create or retell a story in guided drama experiences (e.g., process drama, story drama, creative drama). TH:Cr.1.1.c Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could create gestures/ movement that represent shapes attributes and tell a story using those gestures/movements.

Grade 4 »

Operations & Algebraic Thinking

Math Standard	Art Standard	Lesson Seed
Generate and analyze patterns. CCSS.MATH.CONTENT.4.OA.C.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. *For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way*.	Generate musical ideas (such as rhythms, melodies, and simple accompaniment patterns) within related tonalities (such as major and minor) and meters. MU:Cr.1.1.4.b Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could create a musical pattern based off of number patterns.

Number & Operations—Fractions[1]

Math Standard	Art Standard	Lesson Seed
Understand decimal notation for fractions, and compare decimal fractions. CCSS.MATH.CONTENT.4.NF.C.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100*.	Brainstorm multiple approaches to create art or design problem. VA:Cr.1.1.4.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could create a pixel image only using a certain fraction of colors for a 100 square area.

Measurement & Data

Math Standard	Art Standard	Lesson Seed

Solve problems involving measurement and conversion of measurements. CCSS.MATH.CONTENT.4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...*	Manipulate or modify choreographic devices to expand movement possibilities and create a variety of movement patterns and structures. Discuss movement choices. DA.Cr.2.1.4.a Anchor Standard 2: Organize and develop artist idea and work.	Students could create a representation for a certain amount of movement within a direction. EXAMPLE: 1ft could be two spins.

Grade 5 »

Operations & Algebraic Thinking

Math Standard	Art Standard	Lesson Seed

Write and interpret numerical expressions. CCSS.MATH.CONTENT.5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Improvise rhythmic, melodic, and harmonic ideas, and explain connection to specific purpose and context (such as social, cultural, and historical). MU:Cr.2.1.5.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could create a song representation of an numerical expression.

Measurement & Data

Math Standard	Art Standard	Lesson Seed
Represent and interpret data. CCSS.MATH.CONTENT.5.MD.B.2 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots.	Combine ideas to generate an innovative idea for art-making. VA:Cr.1.1.5.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could use data from paint mixing to create a plot line of how colors change with paint amounts.

Geometry

Math Standard	Art Standard	Lesson Seed
Classify two-dimensional figures into categories based on their properties. CCSS.MATH.CONTENT.5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.	Identify physical qualities that might reveal a character's inner traits in the imagined world of a drama/theatre. TH:Cr.1.1.5.a Anchor Standard 1: Generate and conceptualize artistic ideas and work.	Students could create a characters based off of two-dimensional figures and using their properties as character traits. EXAMPLE: All rectangles are grumpy and so are squares. But squares can be happy in the morning because all sides are equal.