

Kindergarten

Math Objectives	Arts Objectives
<p>Processes: Objectives – The students will be able to:</p> <ul style="list-style-type: none"> a. Select and apply appropriate strategies to solve a problem. b. Justify solutions to problems with logic and evidence. c. (Representation): Represent mathematical concepts in a variety of ways including visual, concrete, and abstract. 	<p>Art: Identify and use sources for ideas and procedures in order to create personal works of art. Drawing – Use drawing to express a complex idea from personal experiences. Experiment and use a variety of media, tools and techniques to apply the formal qualities of art in order to visually represent personal ideas.</p>
<p>Addition/Subtraction:</p> <ul style="list-style-type: none"> b. Model addition by combining sets of concrete objects and describe the results using words and pictures. c. Model subtraction by separating sets of concrete objects and describe the results using words and pictures. 	<p>Music: Rhythm 1.1: Students can demonstrate long and short sounds. Rhythm 1.2: Students can create an ostinato with long and short sounds.</p>
<p>Measurement:</p> <ul style="list-style-type: none"> a. Compare activities in terms of which takes more or less time to complete. 	<p>PE: Demonstrate a variety of the basic locomotor movements of walking, running, hopping, jumping, galloping, sliding, and skipping. Demonstrate use of movement concepts to directions, levels, pathways, and effort while performing locomotor skills.</p>
Science Objectives	Arts Objectives
<p>Goal 1:</p> <ul style="list-style-type: none"> a. Classify living things based on similarities and differences. (MLO) b. Describe how people are alike in some ways and unique in others. c. Describe some of the ways people change as they grow. 	<p>Art: Recognize characteristics that are alike and different among objects, environments and artworks using appropriate art vocabulary.</p>
Social Studies Objectives	Arts Objectives
<ul style="list-style-type: none"> a. Using photographs and pictures, recognize human-made features as modifications people have made to the land. 	<p>Art: Printmaking - Use printmaking processes to transfer personal symbols and imaginative images for one surface to another.</p>
<ul style="list-style-type: none"> b. Recognize that saying the Pledge of Allegiance and singing “The Star-Spangled Banner” are practices associated with being a citizen. 	<p>Music: World Cultures 1.1: Students will listen to American patriotic songs and identify them as music that is essential to American culture. Audience Etiquette 1.2: Students will experience being an audience member.</p>

1st Grade

Math Objectives	Arts Objectives
<p>Processes: Objectives – The students will be able to:</p> <ul style="list-style-type: none"> a. Select and apply appropriate strategies to solve a problem. (Problem Solving) (3.7.A.1.a- h) b. Justify solutions to problems with logic and evidence. c. (Representation): Represent mathematical concepts in a variety of ways including visual, concrete, and abstract. 	<p>Art:</p> <p>Identify and use sources for ideas and procedures in order to create personal works of art. Drawing – Use drawing to express a complex idea from personal experiences. Experiment and use a variety of media, tools and techniques to apply the formal qualities of art in order to visually represent personal ideas.</p>
<p>Measurement:</p> <ul style="list-style-type: none"> c. Measure different lengths using non-standard units. d. Measure the distance around a figure by counting linear units. h. Measure length of objects and pictures of objects to the nearest inch. (1.3.B.1.a) 	<p>PE:</p> <p>Demonstrate a variety of stationary manipulative skills (e.g., toss and throw to targets, bounce and catch, toss and catch, kick to a target, strike a paddle, dribble, roll, trap, volley with hand.)</p> <p>Music:</p> <p>Rhythm 1.1: Students will measure how long a quarter note is using sound exploration.</p>
<p>Algebra, Patterns, Functions:</p> <ul style="list-style-type: none"> c. Represent and analyze growing patterns kinesthetically. (1.1.A.2.a) 	<p>PE:</p> <p>Demonstrate the ability to combine educational gymnastic movements into sequences, including balance, roll, transfer of weight, and flight.</p> <p>Music:</p> <p>Rhythm 1.2: Students will echo and create patterns.</p>
Science Objective:	Arts Objectives:
<ul style="list-style-type: none"> 1.) The weight of materials or objects will affect the amount of forces needed to move them. 2.) Energy is needed to make things go, run, or happen. 	<p>PE: Identify movement concepts in body management, games, dance and locomotion (e.g., personal/general space, levels, speeds, light/heavy force, balance, twist.)</p> <p>Identify each component of the FITT (frequency, intensity, time, type) principle.</p>
Social Studies Objective:	Arts Objectives:
<ul style="list-style-type: none"> 1.) Students will utilize before, during, and after reading strategies during a Read-Aloud. They will then analyze various pictures of different forms of communication and will participate in act-it-outs to demonstrate the benefits of each type of communication. 	<p>Music: Form 1.1: Students will explore and demonstrate call/response form.</p> <p>Audience Etiquette 1.2: Students will demonstrate audience behavior.</p>

2nd Grade

Math Objectives	Arts Objectives
<p>Processes: Objectives – The students will be able to:</p> <ul style="list-style-type: none"> a. Select and apply appropriate strategies to solve a problem. (Problem Solving) (3.7.A.1.a- h) b. Justify solutions to problems with logic and evidence. c. (Representation): Represent mathematical concepts in a variety of ways including visual, concrete, and abstract. 	<p>Art:</p> <p>Identify and use sources for ideas and procedures in order to create personal works of art. Drawing – Use drawing to express a complex idea from personal experiences. Experiment and use a variety of media, tools and techniques to apply the formal qualities of art in order to visually represent personal ideas.</p>
<p>Number Relations/Computations Objectives - The students will be able to:</p> <ul style="list-style-type: none"> a. Read, write, and represent halves, thirds, fourths, sixths, and eighths of a region and of a set using models and symbols. (2.6.A.2.a, 2.6.A.2.b) b. Match equivalent fractions for one whole. c. Match equivalent fractions for one-half. 	<p>Music:</p> <p>Rhythm: 1.3: Identify, perform and write quarter, eighth, half and whole note and quarter, half and whole rest.</p>
Science Objective:	Arts Objectives:
<p>An interaction takes place when a physical change (a change in size, shape, form, and appearance) takes place.</p>	<p>Art: Describe how artists use color, line, shape, texture, form and space to represent what people see, know, feel, and imagine.</p>
Social Studies Objectives	Arts Objectives
<p># c. Present social studies information in a variety ways, such as plays, skits, posters, songs, poems, murals, and oral presentations.</p>	<p>Art: Use art as play. Music: Melody 1.1: Students will sing and write music with d-r-m-s-l pitches. PE: Apply the basic movement concepts to change performance of locomotor, non-locomotor and manipulative skills by using feedback to improve skill.</p>
<p>#a. Connect certain people, symbols, songs and poems to the ideals they represent, such as George Washington portrays leadership, the American flag represents loyalty and respect, and the Star Spangled Banner represents courage and freedom.</p>	<p>Music: World Cultures 1.1: Students will identify and sing patriotic songs native to American history.</p>

3rd Grade

Math Objectives	Arts Objectives
<p>Processes: Objectives – The students will be able to:</p> <ul style="list-style-type: none"> a. Select and apply appropriate strategies to solve a problem. (Problem Solving) (3.7.A.1.a- h) b. Justify solutions to problems with logic and evidence. c. (Representation): Represent mathematical concepts in a variety of ways including visual, concrete, and abstract. e. Connect mathematical concepts to related concepts and/or connect mathematical concepts to real-world applications. (Connections) (3.7.D.1.a-d) 	<p>Art:</p> <p>Follow a multi-step process to solve an art problem Make choices during the art making process that are reflective and informed. Use a variety of media to reflect personal decisions and experiences. Identify themes in art that relate to content explored in other discipline areas.</p>
<p>Number Relations/Computations Objectives - The students will be able to:</p> <ul style="list-style-type: none"> b. Read and write a fraction for a given region or set (halves, thirds, fourths, fifths, sixths, eighths, and tenths). (3.6.A.2.b) c. Compare and order like fractions. d. Represent equivalent fractions using manipulatives and/or drawings equal to one whole and one half. 	<p>Music:</p> <p>Rhythm 1.1: Read, write and perform quarter, eighth, sixteenth, half and whole notes.</p>
<p>Probability</p> <ul style="list-style-type: none"> a. List possible outcomes for an event. (3.5.A.1, 3.5.A.1.b) b. Describe the likelihood of an event by using certain, impossible, more likely, less likely, and equally likely. (3.5.B.1.a) 	<p>PE: Apply the movement principles of relationships while moving alone in space. Apply the principles of relationships when working with a partner while moving. Predict skill proficiency in a variety of tasks based on an individual's experience, capabilities, and physical development.</p>
Science Objectives	Arts Objectives
Classify materials as translucent, transparent or opaque.	Art: Identify and utilize the formal qualities of art.
Identify materials that block the path of light and materials that allow light to pass through.	Art: Apply an understanding of visual relationships in a composition or art object.
Identify materials (e.g., prisms, soap bubbles, oil films, etc.) that produce colors from white light.	Art: Painting – Use painting techniques and color groups/schemes to represent a personal experience in a composition.
Observe and describe that prisms separate white light into its component colors	Art: Incorporate observed form with schema.
Pose questions about why objects appear to be different colors.	Art: Follow a multi-step process to solve an art problem.
Based on observations of objects that produce sound, relate vibrations to the back and forth motion of parts of the objects.	Music: Environmental sounds: Describe sounds with attention to rhythm.
Identify materials that vibrate and explain that sound vibrations are needed for hearing to occur.	Music: Instruments: Categorize by sight and sound and identify how sounds are made in various instruments.
Social Studies Objectives	Arts Objectives
Lesson 3: # e. Identify the natural, human, and capital resources needed to produce goods.	Art: Identify sources for ideas and describe the process used to create artwork.
Lesson 3: # f. Describe steps in the production process to make a product.	Art: Follow a multi-step process to solve an art problem.
Lesson 5: # h. Explain how producers make choices because of limited natural, human, and capital resources.	Art: Make choices during the art making process that are reflective and informed.

4th Grade

Arts Connections 3rd Quarter

Math Objectives	Arts Objectives
<p>Processes: Objectives – The students will be able to:</p> <ol style="list-style-type: none"> Select and apply appropriate strategies to solve a problem. (Problem Solving) (3.7.A.1.a- h) Justify solutions to problems with logic and evidence. (Representation): Represent mathematical concepts in a variety of ways including visual, concrete, and abstract. Connect mathematical concepts to related concepts and/or connect mathematical concepts to real-world applications. (Connections) (3.7.D.1.a-d) 	<p>Art:</p> <p>Follow a multi-step process to solve an art problem Make choices during the art making process that are reflective and informed. Use a variety of media to reflect personal decisions and experiences. Identify themes in art that relate to content explored in other discipline areas.</p>
<p>Geometry: Shapes have properties that can be used when describing and analyzing them. Awareness of these properties helps us appreciate shapes in our world. Properties can be explored and analyzed in a variety of ways.</p>	<p>Art: Identify and utilize the formal qualities of art. Use art vocabulary to describe visual relationships and express opinions within art works in one’s world. Apply drawing techniques to represent forms in the environment. PE: Recall and demonstrate movement principles and concepts for selected motor patterns and combination skills (e.g., trajectory, force, speed.) Demonstrate the ability to analyze, evaluate, and correct another’s performance using preset criteria for skillful movement.</p>
<p>Measurement (Gr. 5) Measurement helps connect ideas within areas of mathematics and between mathematics and other disciplines. Measurement involves comparison of an item that is being measured with a unit that has the same attribute (length, volume, weight, etc.). Formulas help in finding area, perimeter, and volume of shapes.</p>	<p>Art: Select and use visual art processes and similar processes used in other content areas to express personal ideas. Apply an understanding of visual relationships in a composition or art object. PE: Recall and demonstrate movement principles and concepts for selected motor patterns and combination skills (e.g., trajectory, force, speed.)</p>
Science Objective:	Arts Objectives:
<p>a. Observe, describe, and cite evidence to show that erosion (by wind, water, and ice) shapes and reshapes the Earth’s surface as it moves Earth’s materials from one location to another.</p>	<p>Art: Discuss characteristics of artworks, including one’s own, works from various cultures and the works of master artists. Use a combination of personal experiences and observation to add detail and signify importance within an artwork.</p>
<p>b. Describe ways that the following processes contribute to changes always occurring on the Earth’s surface: Erosion, Transport, Deposit</p>	<p>Art: Sculpture - Construct a form in relief or in the round based upon personal experiences or the work of master artists PE: Investigate the variables related to external forces that affect motion of the body and objects.</p>
Social Studies Objectives	Arts Objectives
<p>Goal 2</p> <ol style="list-style-type: none"> Describe why loyalties to the North and the South were divided in Maryland. Compare the living conditions of slave families and free blacks. Describe the abolitionist movement in Maryland. Describe the conditions that promoted the growth of the Underground Railroad in Maryland. 	<p>Art: Discuss characteristics of artworks, including one’s own, works from various cultures and the works of master artists. Apply a schema using different processes and a variety of media to tell a story.</p>
<p>Goal 3: Describe the contribution of individuals and groups such as: Francis Scott Key, Benjamin Banneker, Mary Pickersgill, Frederick Douglass, Harriett Tubman, Freedmen’s Bureau and Clara Barton.</p>	<p>Music: World Cultures: Listen to and respond to music from various cultures and describe their impact on history.</p>
<p>Goal 4: * Write to learn and communicate social studies understandings through informal writing, formal writing, and timed, on-demand writing. * Identify, interpret, and synthesize information from primary and secondary sources to analyze a social studies question/topic/ situation/problem being studied. * Organize and display social studies information from print and non-print sources using charts, graphs, graphic organizers, maps, timelines and other visual representations.</p>	<p>Music: World Cultures: Research musicians and music from various cultures. Art: Use a variety of media to reflect personal decisions and experiences.</p>

5th Grade

Math Objectives	Arts Objectives
<p>Processes: Objectives – The students will be able to:</p> <ul style="list-style-type: none"> a. Select and apply appropriate strategies to solve a problem. (Problem Solving) (3.7.A.1.a- h) b. Justify solutions to problems with logic and evidence. c. (Representation): Represent mathematical concepts in a variety of ways including visual, concrete, and abstract. e. Connect mathematical concepts to related concepts and/or connect mathematical concepts to real-world applications. (Connections) (3.7.D.1.a-d) 	<p>Art:</p> <p>Follow a multi-step process to solve an art problem Make choices during the art making process that are reflective and informed. Use a variety of media to reflect personal decisions and experiences. Identify themes in art that relate to content explored in other discipline areas.</p>
<p>Geometry: Objectives - The students will be able to:</p> <ul style="list-style-type: none"> a. Identify, describe, label, and draw points, lines, line segments, and rays. (5.2.A.1.a) b. Identify, describe, and classify lines as intersecting, parallel, or perpendicular. c. Classify, measure (using a protractor), draw and label acute, right, and obtuse angles. d. Identify, define, and classify triangles as equilateral, isosceles, right, or scalene. e. Identify polygons within a composite figure. (5.2.A.1.b) f. Identify the radius, diameter, and circumference of a circle. (5.2.A.1.c) g. Compare or classify quadrilaterals by length of sides and measure of angles. (5.2.A.2.a) h. Identify and classify pyramids or prisms as triangular pyramids, rectangular pyramids, triangular prisms or rectangular prisms by the number of edges, faces or vertices. (5.2.B.1.a) i. Identify and classify pyramids as triangular or rectangular by the base. (5.2.B.1.b) j. Analyze the relationship between plane geometric figures and surfaces of solid figures. k. Identify and model transformations: translations, reflections, and rotations (5.2.E.1.a) l. Identify, describe, and represent similarity and congruency of geometric figures and real- world objects using the appropriate symbols. (5.2.D.1.a) 	<p>Art: Refine observational skills working from life to show three-dimensional form, light and shadow, qualities of surface texture, detail and spatial relationships.</p> <p>PE: Conduct an investigation to examine the factors that influence dynamic balance in a variety of physical activities.</p> <p>Create and perform different types of rhythms/dance sequences</p>
<p>Measurement: Estimate and determine the perimeter of polygons and real world objects. (5.3.C.1.a)</p> <ul style="list-style-type: none"> e. Determine the lengths of the sides of a regular polygon, given the perimeter. (5.3.C.1.a) f. Estimate and determine (using formulas) the area of rectangles, squares, triangles, and parallelograms. (5.3.C.1.b) g. Determine perimeter and area of irregular polygons. 	<p>Art: Sculpture - Use additive and subtractive techniques to make a three-dimensional form.</p> <p>PE: Recall and demonstrate movement principles and concepts for selected motor patterns and combination skills (e.g., trajectory, force, speed.)</p>
Social Studies Objectives	Arts Objectives
<ul style="list-style-type: none"> f. Organize and display social studies information from print and non-print sources using charts, graphs, graphic organizers, maps, timelines and other visual representations. 	<p>Art: Use a variety of media to reflect personal decisions and experiences.</p>
<p>Use a variety of media to reflect personal decisions and experiences.</p>	<p>Art: Compare processes used in the visual arts and other content areas to express ideas.</p> <p>PE: Create educational dances, combine shapes, levels, pathways, and locomotor patterns which have an apparent beginning, middle and end.)</p>