



artsNOW

Integrated learning solutions

GEOMETRY GROOVE Grade Band: K-1 Content Focus: Dance & Math



LEARNING DESCRIPTION

In this lesson, students will use movement to understand types of shapes and their attributes. First grade students will then create movement phrases to demonstrate partitioning and combining shapes.

LEARNING TARGETS

Essential Questions	"I Can" Statements
How can dance/movement aid in comprehension of shapes?	<p>I can identify and create different types of shapes.</p> <p>I can create a movement using my whole body that demonstrates a type of shape.</p> <p>Grade 1: I can create a movement phrase that demonstrates either partitioning a shape or combining a shape to make a composite shape.</p>



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GEORGIA STANDARDS

Curriculum Standards	Arts Standards
<p>Kindergarten: K.GSR.8: Identify, describe, and compare basic shapes encountered in the environment, and form two-dimensional shapes and three-dimensional figures.</p> <p>Grade 1: 1.GSR.4: Compose shapes, analyze the attributes of shapes, and relate their parts to the whole.</p>	<p>Kindergarten: ESDK.CR.1 Demonstrate an understanding of the choreographic process.</p> <p>ESDK.CR.2 Demonstrate an understanding of dance as a form of communication.</p> <p>ESDK.PR.1 Identify and demonstrate movement elements, skills, and terminology in dance</p> <p>ESDK.RE.1 Demonstrate critical and creative thinking in dance.</p> <p>Grade 1: ESD1.CR.1 Demonstrate an understanding of the choreographic process.</p> <p>ESD1.CR.2 Demonstrate an understanding of dance as a form of communication.</p> <p>ESD1.PR.1 Identify and demonstrate movement elements, skills, and terminology in dance</p> <p>ESD1.RE.1 Demonstrate critical and creative thinking in dance.</p>

SOUTH CAROLINA STANDARDS

Curriculum Standards	Arts Standards
<p>Kindergarten: K.G.5 Draw two-dimensional shapes (i.e., square, rectangle, triangle, hexagon, and circle) and create models of three-dimensional shapes (i.e., cone, cube, cylinder, and sphere).</p> <p>Grade 1: 1.G.1 Distinguish between a two-dimensional shape's defining (e.g., number of sides) and non-defining attributes (e.g., color).</p> <p>1.G.2 Combine two-dimensional shapes (i.e., square, rectangle, triangle, hexagon, rhombus, and trapezoid) or three-dimensional shapes</p>	<p>Anchor Standard 1: I can use movement exploration to discover and create artistic ideas and works.</p> <p>Anchor Standard 2: I can choreograph a dance.</p> <p>Anchor Standard 3: I can perform movements using the dance elements.</p> <p>Anchor Standard 7: I can relate dance to other arts disciplines, content areas, and careers.</p>



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(i.e., cube, rectangular prism, cone, and cylinder) in more than one way to form a composite shape.

1.G.3 Partition two-dimensional shapes (i.e., square, rectangle, circle) into two or four equal parts.

1.G.4 Identify and name two-dimensional shapes (i.e., square, rectangle, triangle, hexagon, rhombus, trapezoid, and circle).

KEY VOCABULARY

Content Vocabulary	Arts Vocabulary
<ul style="list-style-type: none">● <u>Geometric shape</u> - Mathematical figures with a fixed structure that are precise and regular● <u>Angle</u> - A figure that is formed by two rays or lines that shares a common endpoint● <u>Side</u> - The line that connects two points of a shape	<ul style="list-style-type: none">● <u>Choreography</u> - The art of composing dances and planning and arranging the movements, steps, and patterns of dancers● <u>Choreographer</u> - A person who creates dances● <u>Shape</u> - This refers to an interesting and interrelated arrangement of body parts of one dance; the visual makeup or molding of the body parts of a single dancer; the overall visible appearance of a group of dancers● <u>Space</u> - An element of movement involving direction, level, size, focus, and pathway● <u>Formation</u> - The placement of dancers in a performance space

MATERIALS

- Sound source and music with a steady beat
- Markers or crayons
- Printed copies of dance photography

INSTRUCTIONAL DESIGN



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Opening/Activating Strategy

Classroom Tips: Set up chairs and tables in a circular format to maximize students' engagement and ability to see their peers during the activity and performance. Also establish parameters for acceptable movement choices and discuss audience behavior/etiquette with students.

- Begin the lesson by engaging students in movement that introduces students to a few of the Elements of Dance: Body, space and time.
 - Have students arrange themselves in the classroom with enough personal space to move freely without touching a neighbor.
 - Turn on instrumental music with a steady beat.
 - First, have students bring awareness to their bodies by leading them through gentle stretches starting from the head and moving to the toes (e.g., head circles, shoulder shrugs, toe touches, etc.).
 - Next, bring students' awareness to the rhythm of the music by having them walk in place to the beat of the music. Once students are walking to the beat, ask them to begin gently swinging their arms by their sides.
 - Now, direct students create shapes with their bodies; use geometric language such as curved or straight lines, angles, etc. to direct students.
 - Have students return to their seats or the carpet.

Work Session

- Discuss with students how they used their bodies to create shapes, lines and angles.
- Project different types of shapes on the board. Ask students to engage in a "seated dance" by making the shape with their upper bodies. Model how to do this and discuss how students can make angles, straight lines and curved lines with their bodies.
- Divide the class into partners.
- Pass out printed copies of dance photography to students.
 - Ask students to trace all the straight lines, curved lines, and angles they see in the photos. Ask students to trace any shapes that they find.
 - Project images of the photography on the board and allow time for students to share what they identified in the photos.
- Next, randomly pass out note cards with a type of shape written or drawn on it.
- Students must create that shape with their bodies.
 - Students can choose to each make the movement with their bodies individually, or can combine to make one large shape together.
- Now, tell students that dancers move to the beat of music. Students will have four beats to perform their movement. Tell students that by the count of four, they should be showing their shape with their bodies and should freeze in the shape.
 - Practice a four count to the beat of the music with students.
 - Allow time for students to practice using a four count to perform their movement.

Grade 1 Extension:

- Pass out an additional shape to students.
- Have students create a movement phrase (more than one movement) that demonstrates either combining the two shapes to make a composite shape or partitioning one of the shapes.

Closing/Reflection



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- The students will perform their movements for their classmates. Discuss appropriate audience participation and etiquette prior to performances.
- After each performance, the audience should be able to identify the shape and its attributes.

ASSESSMENTS

Formative

Teachers will assess students' understanding of the content throughout the lesson by observing students' participation in the activator, ability to identify types of shapes, and collaborative choreography.

Summative

CHECKLIST

- Students can identify and create different types of shapes.
- Students can create a movement using their whole body that demonstrates a type of shape.
- Grade 1: Students can create a movement phrase that demonstrates either partitioning a shape or combining a shape to make a composite shape.

DIFFERENTIATION

Acceleration:

- Challenge students to create a movement phrase that transitions from a two-dimensional shape to a three-dimensional figure that uses that shape (i.e., triangle to pyramid).
- Challenge kindergarteners to do the first grade extension.

Remediation:

- Scaffold the lesson by choosing a type of shape to create a movement for as a class. Then, have partners create a movement for their individual shape.
- Create movements for several types of shapes together as a class. Have students participate in brainstorming how to do this. After the class has established a movement to show a shape and the class has practiced it, ask if anyone has ideas of a different way to show the same shape. Bring students who are struggling with grasping the concepts to help as assistants to the demonstrations so that they can benefit from participating.

ADDITIONAL RESOURCES

NA

**This integrated lesson provides differentiated ideas and activities for educators that are aligned to a sampling of standards. Standards referenced at the time of publishing may differ based on each state's adoption of new standards.*



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Ideas contributed by: Melissa Dittmar-Joy. Updated by Katy Betts.

ATLANTA BALLET

Centre for Dance Education

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10 Glenlake Parkway, Suite 130, Atlanta, GA 30328
www.artsnowlearning.org