

MOVING SHAPES Grade Band: 2-3 Content Focus: Dance & Math



LEARNING DESCRIPTION

These activities will allow students to discover the concepts of geometry through shape exploration and the creation of choreographic sequences.

LEARNING TARGETS

| Essential Questions | "I Can" Statements |
|--|---|
| How can I create shapes by moving my body? | I can identify shapes and attributes of shapes that a dancer makes when performing movements. |
| | I can copy the movements of a dancer to make shapes using my own body. |
| | I can perform movements so that other people can see shapes in my body when I dance. |



GEORGIA STANDARDS

Curriculum Standards Arts Standards Grade 2: Grade 2: MGSE2.G.1 Recognize and draw shapes ESD2.CR.1 Demonstrate an understanding of having specified attributes, such as a given the choreographic process. number of angles or a given number of equal ESD2.CR.2 Demonstrate an understanding of faces. Identify triangles, quadrilaterals, dance as a form of communication. pentagons, hexagons, and cubes. MGSE2.G.2 Partition a rectangle into rows and ESD2.PR.1 Identify and demonstrate movement columns of same-size squares and count to elements, skills, and terminology in dance. find the total number of them. ESD2.PR.2 Understand and model dance MGSE2.G.3 Partition circles and rectangles etiquette as a classroom participant, performer, into two, three, or four equal shares, describe and observer. the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as ESD2.PR.4 Understand and apply music two halves, three thirds, four fourths. concepts to dance. Recognize that equal shares of identical wholes need not have the same shape. ESD2.RE.1 Demonstrate critical and creative thinking in dance. Grade 3: MGSE3.G.1 Understand that shapes in ESD2.CN.2 Recognize connections between different categories (e.g., rhombuses, dance and wellness. rectangles, and others) may share attributes (e.g., having four sides), and that the shared ESD2.CN.3 Identify connections between dance attributes can define a larger category and other areas of knowledge. (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of Grade 3: quadrilaterals, and draw examples of quadrilaterals that do not belong to any of ESD3.CR.1 Demonstrate an understanding of these subcategories. the choreographic process. MGSE3.G.2 Partition shapes into parts with ESD3.CR.2 Demonstrate an understanding of dance as a form of communication. equal areas. Express the area of each part as a unit fraction of the whole. For example. partition a shape into 4 parts with equal area, ESD3.PR.1 Identify and demonstrate movement and describe the area of each part as 1/4 of elements, skills, technique, and terminology in the area of the shape. dance. ESD3.PR.2 Understand and model dance etiquette as a classroom participant, performer, and observer. ESD3.PR.4 Understand and apply music concepts in dance. ESD3.RE.1 Demonstrate critical and creative



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thinking in dance.

ESD3.CN.3 Identify connections between dance and other areas of knowledge.

SOUTH CAROLINA STANDARDS

Curriculum Standards

Grade 2:

- 2.G.1 Identify triangles, quadrilaterals, hexagons, and cubes. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.
- 2.G.2 Partition a rectangle into rows and columns of same-size squares to form an array and count to find the total number of parts.
- 2.G.3 Partition squares, rectangles and circles into two or four equal parts, and describe the parts using the words halves, fourths, a half of, and a fourth of. Understand that when partitioning a square, rectangle or circle into two or four equal parts, the parts become smaller as the number of parts increases.

Grade 3:

- 3.G.1 Understand that shapes in different categories (e.g., rhombus, rectangle, square, and other 4-sided shapes) may share attributes (e.g., 4-sided figures) and the shared attributes can define a larger category (e.g., quadrilateral). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
- 3.G.2 Partition two-dimensional shapes into 2, 3, 4, 6, or 8 parts with equal areas and express the area of each part using the same unit fraction. Recognize that equal parts of identical wholes need not have the same shape.

Arts Standards

Anchor Standard 1: I can use movement exploration to discover and create artistic ideas and works.

Anchor Standard 2: I can choreograph a dance

Anchor Standard 3: I can perform movements using the dance elements.

Anchor Standard 5: I can describe, analyze, and evaluate a dance.

Anchor Standard 7: I can relate dance to other arts disciplines, content areas, and careers.



KEY VOCABULARY

| Content Vocabulary | Arts Vocabulary |
|--|--|
| <u>Curved Shape</u> - Shape with no angles or vertices. | <u>Choreographer</u> - A person who creates dances. |
| Angular Shape - Shape with one or more angles. | Beat - Basic unit of musical time; can be heard as a regular pulse underlying music. |
| Two-dimensional - Flat figure or shape that does not have any thickness. | <u>Locomotor</u> - Movements that travel through space. |
| Three-dimensional - A figure or shape that has length, width, and depth. | Non-locomotor - A movement that does not travel through space. |
| Position - The place where something or someone is located. | |

MATERIALS

- Music recordings
- Method of playing the recordings including speaker, Bluetooth, HDMI, mp3
- Printed images of shapes
- Projector (to show images of shapes if they are not printed)

INSTRUCTIONAL DESIGN

Opening/Activating Strategy

- Project a selection of dance photos, and ask students to name shapes that they see in the photos
- Warm-up with students for approximately three minutes
- During dance warm-up, use movements that convey shapes that can be identified using mathematical vocabulary related to geometry. Include movements that can be divided into parts of two, three, or four, and ask students to make those movements with you.
- Use a handle question to prompt students to look for similar attributes in shapes as they dance and then identify them when the warm up is completed.

Work Session

PROCESS

- Discuss and explore the attributes of shapes, including number of sides, faces, angles. Ask students to group the shapes based on similarities of attributes among shapes, and then ask students to demonstrate the attributes using their bodies.
- Divide students into groups and have them create "shape dances" in which they create a select number of shapes, emphasizing the attributes that shapes share.
- Ask students to select one of the shapes from their dances. Ask them to partition the shape and create a dance that reflects the partitions.
- Students will then perform their "partition dances" for the class.



• During the performances, the audience will identify shapes presented with a rationale to substantiate their answers.

Closing/Reflection

- Ask students to name the body parts they used to create shapes and how those body parts moved to create the shapes.
- Ask students why they chose the shapes that they selected to show with movement.
- Ask students to describe the connection between math and dance that they experienced in this lesson.
- Ask students to describe what a choreographer does.
- Ask students to explain how they worked as choreographers during this lesson.

ASSESSMENTS

Formative

- Students perform/move to a steady beat.
- Students' dances match shape criteria (first shared attributes and second partitions) appropriately.
- Students identify the partitions being performed.

Summative

- Students identify shapes that dancers, including their peers, make when moving their bodies
- Students create shapes using their own movements, including pathways, and optional partnering.
- Students create and remember a short choreography.
- Students perform choreography clearly showing shapes in movement.
- Students move to the beat of a musical rhythm.

DIFFERENTIATION

Acceleration: Ask students to work on different planes (sagittal, vertical, horizontal) to create shapes.

Remediation: Ask students to name, describe, and demonstrate their shapes, shared attributes, and/or partitions.

ADDITIONAL RESOURCES

Classroom Tips: Clear desks to have an open space and be tolerant of noise and excitement- it is "working noise"!



*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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