

Notes/Reflections:

ATLANTA BALLET

Centre for Dance Education

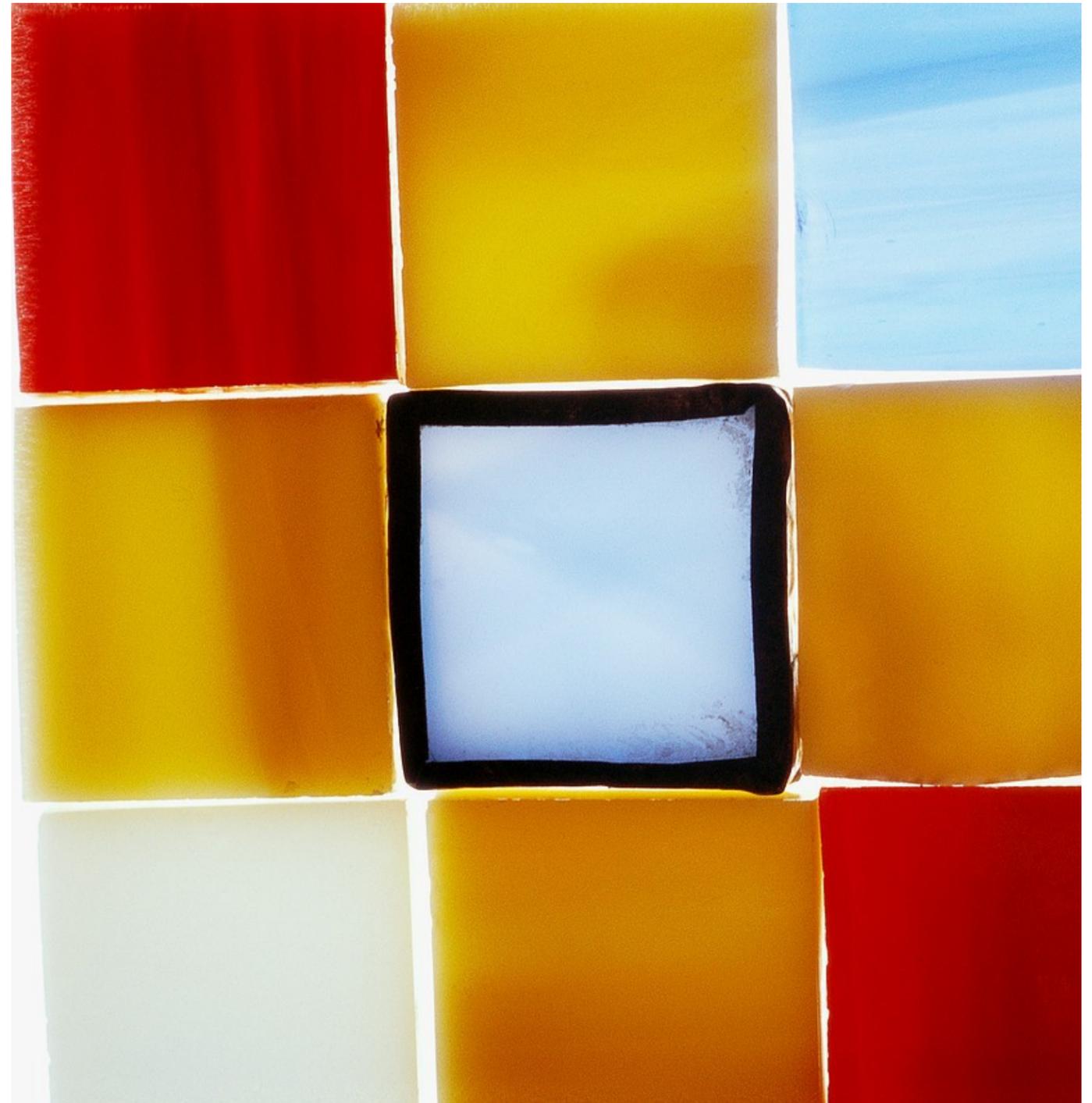
Idea Contributed by Melissa Dittmar-Joy

ArtsNow[®]
Teaching and Learning Across the Curriculum

Curriculum guides provide differentiated ideas and activities aligned to a sampling of standards. The guides do not necessarily imply mastery of standards, but are intended to inspire and equip educators.

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Embodying Math Concepts • Angles • Plane Shapes •
Geometric Solids •



Explore math themes and concepts with your students
through the process of movement!

Use movement and the creation of human structures to aid in comprehension of angles, plane shapes and geometric solids.

Essential Question:

How can dance/movement aid in comprehension of angles, plane shapes, and geometric solids?

Process

- Basic movement warm-up
- Explore (with bodies) ways to create angles (right, acute, obtuse), plane shapes and geometric shapes.
- Break class into groups
- View dance photography
- Identify angles, plane shapes and geometric shapes found in photos. Outline each type in a different color crayon/marker.
- Students will select one type of: angle, plane shape and geometric shape and create human structures utilizing selection.
- Perform to whole group.
- Audience will identify shapes and angles within structure.

Assessment

- Students should correctly create given shape/angle.
- Students should correctly identify performed shape/angle.

Materials

- Music
- CD player
- Markers or crayons
- Dance photography
- Crape paper or string

Vocabulary

Pathway

The designs traced on the floor as a dancer travels across space; the designs traced in the air as a dancer moves various body parts

Space

An element of movement involving direction, level, size, focus, and pathway

Formation

The placement of dancers in a performance space

Choreography

The art of composing dances and planning and arranging the movements, steps, and patterns of dancers

Choreographer

A person who creates dances

Acute Angle

an angle less than 90 degrees but more than 0 degrees

Obtuse Angle

an angle between 90 and 180 degrees

Right Angle

An angle of 90°, as in a corner of a square

Plane Shape

A plane shape is a flat, 2-dimensional shape. Example: circle, triangle, square, etc.

Curved Shape

the trace of a point whose direction of motion changes

Angular Shape

a shape having one or more sharp angles

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.

Common Core Georgia Performance Standards

MATHEMATICS

GRADE 3

MCC3.G.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.

GRADE 4

MCC4.MD.5: Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

MCC4.G.1: Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

MCC4.G.2: Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

GRADE 5

MCC5.G.3: Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

Georgia Performance Standards

MATHEMATICS

GRADE 3

M3G1: Students will further develop their understanding of geometric figures by drawing them. They will also state and explain their properties.

M3P3: Students will communicate mathematically.

M3P4: Students will make connections among mathematical ideas and to other disciplines.

GRADE 4

M4M2: Students will understand the concept of angles and how to measure them.

M4G1: Students will define and identify the characteristics of geometric figures through examination and construction.

M4P3: Students will communicate mathematically.

M4P4: Students will make connections among mathematical ideas and to other disciplines.

GRADE 5

M5P3: Students will communicate mathematically.

M5P4: Students will make connections among mathematical ideas and to other disciplines.

DANCE

GRADE 3

D3FD.1: Identifies and demonstrates movement elements, skills, and terminology in dance

D3FD.2: Understands and models dance etiquette as a classroom participant, performer, and observer

D3CR.1: Demonstrates an understanding of creative and choreographic principles, processes, and structures

D3CO.4: Demonstrates an understanding of dance as it relates to other areas of knowledge

GRADE 4

D4FD.1: Technique - Identifies and demonstrates movement elements, skills, and terminology in dance

D4FD.2: Understands and models dance etiquette as a classroom participant, performer, and observer

D4CR.1: Demonstrates an understanding of creative and choreographic principles, processes, and structures

D4CO.4: Demonstrates an understanding of dance as it relates to other areas of knowledge

GRADE 5

D5FD.1: Identifies and demonstrates movement elements, skills, and terminology in dance

D5FD.2: Understands and models dance etiquette as a classroom participant, performer, and observer

D5CR.1: Demonstrates an understanding of creative and choreographic principles, processes, and structures

D5CO.4: Demonstrates an understanding of dance as it relates to other areas of knowledge

National Standards

DANCE

Standard 1: Identifying and demonstrating movement elements and skills in performing dance

Standard 2: Understanding choreographic principles, processes and structures

Standard 4: Applying and demonstrating critical and creative thinking skills in dance

Standard 7: Making connections between dance and other disciplines