

Lesson Title:

Angles in Action! (Precursor to Getting into shape!)

Content Area & Arts Discipline:

Math, Visual Arts, Music, & Movement/Dance

Grade Level:

Fourth or Fifth Grade

Big Idea & Learning Objectives

 Students will know how to identify the different types of angles and will be able to recognize how they are used to create movement in various forms of visual art and how they are incorporated into dance movements to show rhythm.
 Students will identify acute, obtuse, right, and straight angles.
 Students will understand how angles are put together to create 2 dimensional shapes.

Overview of the Lesson

The students will use their prior knowledge of rays and line segments to understand the way that angles are created in various shapes. The lesson will begin with an activity where students create the different angles with their bodies. Students will then come up with different dance moves that represent each angle and they will be used to create rhythms: i.e acute angles are smaller so movements could be done at a faster pace, obtuse angles may be done more slowly or take up more beats. As an extension students will view art prints or photographs of people in action and will identify the angles being made by their body motions.

Procedures

Engaging Students ("The Hook"):

The teacher will engage the students by showing them a slide show of pictures of people in action on the Promethean Board. Have students identify geometric figures that they recognize in these images. (Sports images and dancing images work best)

Proposed Time Frame: 2 hours (2 class periods)	Building Knowledge: The teacher will build knowledge by asking students to make various lines and angles using their own bodies. Make a set of parallel lines, perpendicular, and intersecting. What are the similarities and differences between the types of lines. When two lines connect what do they form? What if the two lines connect and stop at that point? Make body angles using the elements of space (size, level, place) Teacher should pose the question: How could we use movement to bring these lines and angles together to create new shapes?
Date Lesson Created: February 2013	 Modeling the Experience: The teacher will model the experience by guiding groups to make different angles with their bodies and combine body movements to create a dance sequence using angles and a corresponding rhythm. Ask students what type of tempo would correspond with each type of angle. The teacher will guide the students by leading them to create a class dance sequence set to jazz/blues tempo. Split students into groups and allow them to create sycopated dance sequences that uses space, lines, and angles. Set the criteria for two total counts per move. Give the students ample time to construct a routine. Then count them off (5, 6, 7, 8) and let each group perform. Have the students point out the moves that showcased each type of line or angle. If students do well without teacher guidance allow them to select music to accompany their dance sequences.
Lesson Author: Rachel Beasley, Kathy Palmer, Vicky Linder, Courtney Wilemon, and Kristen Roberts Room Requirements &	Applying Understanding: • Students will compare their movements with those of a classmates. • Students create a chance and a dance sequence that demonstrates their understanding of geometric concepts. Opportunities for Reflection (Closing):
Arrangement: classroom -large open space -uncluttered -carpet/rug	•By reflecting on their own dance sequences as well as those of their peers, students will gain a deeper understanding of how lines and angles are constructed.

Material Equipment:	Assessing the Learning:
 Magnetic boards, tables or easels for display of art prints and/or photographs IPod/Cd player for musical element 	The teacher will assess the students' learning by creating a rubric for the dance sequence and an exit slip in which students identify different types of angles in art prints and/or images.

Resources:

-Elements of Dance sheet -Dance Warm-ups

Standards & Principles

State Content Standards:

4.G Draw and identify lines and angles, and classify shapes by properties of their lines and angles.
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
4.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.

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

4.MD.7Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Dance/Movement

D.4.1 Demonstrate a basic understanding of movement skills. (CP, CA)

D.4.2Demonstrate a problem-solving experience integrating kinesthetic awareness of movement. (CP, CA)

D.4.2a Use improvisational skills to problem-solve through assembling or sequencing movement and creating new movement.

D.4.2b Discuss and justify own movement choices and evaluate movement choices presented by others.

D.4.3a Explore one or more elements of dance simultaneously: space, time, shape and energy through improvisation.

D.4.3bCollaborate with a partner (sharing weight, mirroring, leading, copying) to create and explore movement possibilities.

Vocabulary:	Principles of Universal Design for Learning:
 shape angles(right, obtuse, acute) lines, line segments, and rays additive dance elements 	 I. Provide Multiple Means of Representation 2.5 Illustrate through multiple media. 3.4 Maximize transfer and generalization II. Provide Multiple Means of Action and Expression 6.3 Facilitate managing information and resources 6.4 Enhance capacity for monitoring progress III. Provide Multiple means of engagement 7.2 Optimize relevance, value, and authenticity. 8.3 Foster collaboration and community.
	Appendix
	Extended Learning Activities: