Title: Math Dance Activity

Learning Objectives:

Students will correctly classify triangles based on their angles.

Materials:

• Lyrics to the Triangle rendition of "Twinkle, Twinkle Little Star"

Instructional Plan:

The teacher will begin the class by reviewing with the students the difference between obtuse, acute, straight, and right angles. The teacher should call on various students in the class to share what they remember the definitions are for each type of triangle, and give a visual representation of each angle using their arms. Next the teacher will show the students the lyrics to "Twinkle, twinkle little star"-The Triangle version.

Acute, obtuse, straight and right I measure your opening, not your height.

Obtuse, you are a gigantic thing. More than 90 degrees you swing. Acute, you are really small. Less than 90 degrees you fall.

Acute, obtuse, straight and right I measure your opening, not your height.

Straight, you are open all the way. 180 degrees you stay. Right, you are like the "t" in test, 90 degrees, no more, no less.

Acute, obtuse, straight and right I measure your opening, not your height.

One the teacher shows the students the lyrics to the song and they practice singing them together, the teacher will ask the students to break up into groups of three or four to complete the second part of this activity.

The students will need to create a dance for this song that incorporates dance moves/hand gestures that correspond to the angles they are singing about. For example, when signing about

an acute triangle, the dance group should perform a dance move that shows an acute angle with their arms. The students will have the remainder of the class to work with their groups to create a unique dance to go with the song. During the following class period the students will perform their dances for the rest of their peers.

Assessment:

The teacher will assess the students by observing their dance moves and checking that the angles they create correspond to the proper term.

NYS Common Core Standards:

7.G Geometry

- Draw construct, and describe geometrical figures and describe the relationships between them.
 - 2. Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.
 - 3. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

NCTM Standards:

Geometry: instructional programs from kindergarten through grade 12 should enable all students to:

• Understand relationships among the angles, side lengths, perimeters, areas, and volumes of similar objects.

Math Dance Activity

Purpose of Activity: To reinforce obtuse, acute, straight and right angles learned during math activity -- using rhythm and rhyme.

Begin the class by discussing the pictures on each poster and the characteristics of each picture. Review the song that was learned in the math class about angles. This song is sung to the tune of "Twinkle, Twinkle Little Star."

Acute, obtuse, straight and right I measure your opening, not your height.

Obtuse, you are a gigantic thing. More than 90 degrees you swing. Acute, you are really small. Less than 90 degrees you fall.

Acute, obtuse, straight and right I measure your opening, not your height.

Straight, you are open all the way. 180 degrees you stay. Right, you are like the "t" in test, 90 degrees, no more, no less.

Acute, obtuse, straight and right I measure your opening, not your height.

Divide the class into small groups of 3-4 students. Each group will create a dance to go along with the song. The dance moves should look like lines, rays and angles. Students should be given five minutes to create the dance and five minutes to practice the dance. Everyone will perform the dance at the same time while the class sings the song together.

(Adapted from PE Central)