Juggling Shapes

**Introduction:** When learning to use critical attributes to define geometric shapes or solids, this activity will be helpful to the students. The students will actually become parts of various shapes and also have some fun with small bean bags.

**Grade Level and Subject:** Fifth Grade Math and P.E.

**TEKS:** Math 7B
P.E. 1B, 1C, 1K, 1L, 2C, 3A, 5A, 7A

**Materials:** small hand-held bean bags (one for every student), pieces of string cut 5 feet long (one for every student)

**Resource:** *201 Games for the Elementary Physical Education Program* by Jerry D. Poppen. ISBN: 0-13-042061-1

**Activity:** After teaching the students about geometric shapes and solids, the teacher will want to take the students to the playground for this activity.

Once on the playground, the students should wait for the teacher’s instructions. Each student should have a small, hand-held bean bag and a piece of string.

The teacher will begin the activity by calling out a shape that the students have been studying. Once called out, the students are to make the shape on the playground using themselves as the vertices of the shape and the string for the lines of the shape. For example, if the teacher calls out “triangle,” the students will assemble themselves in groups of three with their bodies being the vertices of the triangle. Each student is to lay his or her string down between himself/herself and another student in the group, forming a line between the vertices. Once the shape is formed and has been identified as correct by the teacher, the students can begin throwing their bean bags to each other. They can toss the bean bags orderly or randomly, with the members of the group deciding how they want to do this activity. When the teacher gives the signal, the students are to stop throwing their bean bags, pick up their strings, and assemble again close to the teacher. The teacher will call out another shape, and the students will continue developing shapes and tossing the bean bags to each other. Some shapes the students can make could be a square, triangle, rectangle, polygon, pentagon, hexagon, heptagon, etc.

Encourage the students to make shapes with various members of the class and not with the same students over and over again.

**Evaluation:** The teacher will check every group’s shape to be sure that the shape has been made correctly. If the students are confused, the teacher should help the students create the shape by discussing the shape, how many vertices it has, and how many lines the shape has.