


<p>Unit 3</p>  <p>Week 5</p>	<p><i>Small Groups: Flags and Circles*</i></p> <p>Low Support</p>	<p>Math SG 1</p>	<p>Standards: MELDS.M.CCC.PS.4 MELDS.M.G.PS.1 MELDS.M.G.PS.3</p>
---	--	----------------------	---

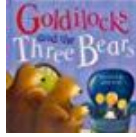


Image downloaded from Amazon.com

Guiding Math Ideas:

- Finding math in stories: Seriation
- Growing in Classification Skills: Attribute identification and comparison

Math Concepts from Unit Learning Progressions:

- Using manipulatives to represent relationships
- Discovering and describing some attributes of shapes
- Sorting strategies to organize collections

Materials:

- large triangular-shaped flags [pennants] cut from construction paper (see attached example)
- sets of 3 circles- small, medium large, sized to fit within the boundaries of the flag- 1 set per child (and extra)
- glue sticks
- markers
- hole punch
- yarn or string
- scissors
- *Goldilocks* retold by Delmege (reference)
- *Shape Capers* by Falwell (reference)

Math Vocabulary:

- pennant- a special flag that is shaped like a triangle

Preparation:

Cut out the pennants from 11 X 14 paper [must be an isosceles triangle to be a pennant]. Cut out sets of small, medium and large circles, making sure that each child has a set. To keep the focus on size and not color, make the circles all the same color. Pennants can be any color. Have extra pennants and sets of circles for children's use. Place materials in small group area.

Procedure:

*We have been talking about the wind. We made wind socks and read books about how the wind blows things. Today we are going to make some special flags, called **pennants**. People hang them up and they can blow in the wind. Sometimes people use pennants at sports games.*

What shape does this pennant remind you of?

Identify triangle if children do not name it.

Yes it is a triangle because it has 3 straight sides and 3 angles.

Here are some circles and a pennant.

Have children count and explore the circles, pointing out their different sizes. Invite children to glue their circles on their pennants. They can decorate with markers.

There is no “correct” way to do this. Some children may put the bigger circles at the bigger end of the triangle. Others work will be random, or they make many interesting arrangements, overlapping circles, placing them over the edges, etc.

Emphasize the connection to Goldilocks story:

Goldilocks went to a house where there were 3 sets of things. These 3 things were small medium and large. What do you notice about your circles that might remind you of our Goldilocks story?

Children may name beds, chairs, and bowls, and point out that there are 3 circles, and that the circles are different sizes.

Children can decorate their pennants after they finish gluing the circles. Introduce the markers after children have finished gluing the circles, in order to focus on the spatial aspects of this activity. If children want to hang their pennants, punch holes and string. They can take them outside, weather permitting, or hang them indoors.

Strategies to Provoke Math Thinking:

- It can be difficult to observe how individual children are grasping spatial concepts. From a child’s point of view, this is an open-ended art activity. Children will approach this task in many different ways. The varied the creations will reveal different things about children’s ideas about geometric figures, relationships, shape and size. Brainstorm about other ways to observe children’s understanding of relative positions of objects in space.
- Art and math are integral. This activity has key art ideas of perspective, balance, and pattern.

Documentation:

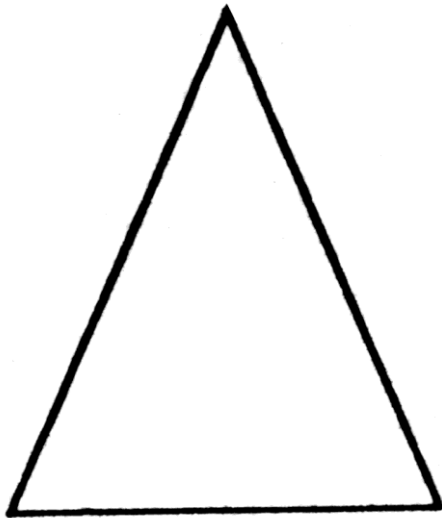
This activity is an excellent way to assess children’s understanding of spatial concepts and their abilities to seriate as they work on these pennants. Take photos of their work. Repeat this activity toward the end of the school year and note the differences.

Provocation:

Add seriated circles and triangles to the collage/art area for children to continue to explore relationships of size, shape and space. Place the book *Shape Capers* [from Unit 2] in the art area for

children to note ways that shapes are used to make pictures.

** This activity is adapted from a High Scope Small Group Activity.*



Isosceles.

Note: Use 11 X 14 paper. The base of your pennant will be the 11" side of the paper. Find the center point on the opposite end and connect lines to make a triangle. Size the circles to fit inside the pennant when glued.