

<p>Unit 3</p>  <p>Week 1</p>	<p><b>Small Groups: Making Wind Socks</b></p> <p>Medium Support</p>	<p>Math SG1</p>	<p><b>Standards:</b> MELDS.M.MD.PS.10 MELDS.M.MD.PS.11 MELDS.S.ED.PS.3</p>
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**Guiding Math Ideas:**

- Making sense of physical world using math- language, weather observations, measurement tools.
- Language of math- comparison words.

**Math Concepts from Unit Learning Progressions:**

- Using math to observe the weather.
- Math helps us describe and make sense of the physical world.
- Matching measurement tools to their purpose.

Note: This activity also meets Science standards.

**Materials:**

- toilet paper or paper towel cardboard tubes
- various colors of tissue or crepe paper cut into strips
- string or yarn
- Markers and/or stickers
- Stapler
- Pictures of Wind Socks and Anemometers in Google Drive folder (or real ones, if you have them)
- Journal for recording observations.



**Math Vocabulary:**

- speed- How fast something goes.
- anemometer- a tool that measures how fast the wind is blowing.
- wind Sock- a big tube that hangs from a pole and shows which way the wind is blowing.
- observation- a special way of looking closely at something to find out more about it.
- journal- a book we use to write down our math and science observations.

**Preparation:**

Prepare the cardboard tubes by stapling a looped string on one end for children to hold. Cut the tissue paper into thin strips, about 1 X 12 inches. Assemble materials in small group area.

**Procedure:**

Introduce the activity:

*We are reading books about the wind and dancing with scarves as we listen to wind sounds. What have we learned about the wind?*

Children give answers.

*Scientists and mathematicians measure the wind to see how fast it is blowing and where it is coming from. Here are some pictures that show how people use special measuring tools to keep track of the wind. The tool for measuring how fast the wind is blowing is called an anemometer. The tool for telling the direction (where wind is coming from) is called a Wind Sock.*

Show pictures.

*Today we are going to make our own Wind socks. We will use them later on outside. We can use them all week to help us see how strong the wind is blowing. We will make some **observations**. An observation is a special way of looking at something very closely to find out more about it and remember. We will use our **journal** [Show journal] to keep track of what we observe.*

Invite children to make their wind socks.

They will decorate the tubes with markers and stickers, and choose the colors for their streamers. Assist them with stapling the streamers onto the tubes. If time permits, head outdoors for children to play with their wind socks. If not, save them and take them outdoors as soon as possible. Outdoors, children can stand still and see if the wind will blow their wind socks streamers on its own. Or run around holding the wind socks and notice how their streamers fly in the air. Be sure to talk about the speed of the wind during a whole group time throughout the week. Each day, encourage children to use their wind socks and observe the wind blowing the streamers. Write down any observations about the wind in journal and read to children at end of the week or unit.

### **Strategies to Provoke Math Thinking:**

- Measuring is a complex content area, although it is considered to be the most practical of all math areas. This activity introduces two specialized tools designed to measure wind direction and speed. Over the year, many different measuring tools will be introduced, along with their functions. Whenever possible, have actual measuring instruments available for children to experiment with on their own.

#### **Documentation:**

Keep track of how many measurement tools you introduce during the year and the associated vocabulary words.

#### **Provocation:**

Observations in the real world: Many buildings have anemometers installed on them. Encourage children to look for these special tools, as well as wind socks that are always located at airports, as they make connections between this activity and the physical world.