

WEEK 6 Lesson 2

Science and Engineering:
Observing the Sky: Wind Speed-Building Anemometers

S & E Big Ideas	Wind is moving air. Meteorologists use wind scales to describe the strength of the wind. Meteorologists use anemometers to measure the speed of the wind.
S & E Guiding Question	How strong is the wind today?
Content Objectives	I can use my five senses to gather information about the wind. (1-ESS1-1) I can use evidence to support my claim about wind speed. (Practice 7)
Language Objective	I can use the data I gathered to discuss what I noticed about anemometers. (SL.3.1.a)
Vocabulary	calm: a wind classification that describes when there is no wind gentle breeze: a mild gust of wind moderate breeze: an average gust of wind strong breeze: a hard gust of wind anemometer: a weather instrument used to measure wind speed
Materials and Preparation	<ul style="list-style-type: none"> ● t-pin or push pin, 1 per group ● masking tape, 4 pieces per group ● small cups (dixie cup size), 4 per group ● pieces of strong cardboard, 2 per group ● pencil, 1 per group ● fan, optional ● DIY anemometer- 1 Minute Science video (https://www.youtube.com/watch?v=Gab07UaoeZI) Use the video link to guide the construction of the anemometer. Prepare a model. ● Beauford Scale- Wind Speed on Land visual, project or print out

	Children will work in small groups. If needed, prepare these groups ahead of time.
Opening 3 minutes	<p><i>Meteorologists use many tools to help them study the weather. One tool they use is called the Beauford Scale to determine wind speed. Let's take a look at this scale. What do you notice about the pictures? How are they the same and how do they change?</i></p> <p>Show the Beauford Scale visual.</p> <p><i>An anemometer is another tool meteorologists use. This tool is used to measure wind speed. Here is a model of an anemometer. How do you think this is used to measure wind speed?</i></p> <p>Show the anemometer model.</p> <p><i>Today we will build this model and measure wind speed. A meteorologist uses a computer to count the number of times the anemometer spins. Today we will observe if the anemometer is spinning slowly, quickly, or rapidly, very fast.</i></p>
Investigation 20 minutes	<p>Support children with building the anemometers.</p> <p>Take children outside to test the wind speed. Encourage children to describe if the anemometer is spinning slowly, quickly, or rapidly.</p> <p>If there is time, also have children test their anemometers with a fan on varying speeds.</p>
Discussion 6 minutes	<p>Back in the classroom, discuss observations in the whole group.</p> <p><i>What did you notice about the wind speed when we went outside? How did this compare to what you noticed when you used the anemometer next to the fan? Why is measuring wind speed important to the people in our community?</i></p>
Closing 1 minute	<p><i>You have made many interesting observations. We will record our thinking in our science journals.</i></p>
Standards	K-ESS3-2: Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.
Ongoing assessment	<p>Listen in and take notes as children make observations about wind speed.</p> <p>How are children collecting information about the wind?</p> <p>What do children understand, and what evidence do they cite to support their understanding?</p> <p>Identify their questions and record their observations.</p>

Beauford Scale-Wind Speed on Land

