



STEM Activity: Weather Measurements

Type of Teacher Tool: Whole Class

Targeted Grade Level(s): 5-8

Targeted Curriculum Areas: Science, STEM, STEAM, Meteorology

Learning Objectives:

The learner will:

1. increase his/her understanding of weather and the topics it incorporates.
2. demonstrate ability to document and record weather related topics.
3. gain understanding of scientific recording methods.

Featured National Standards:

1. [CCSS.ELA-LITERACY.RST.6-8.7](#)

Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

2. [CCSS.ELA-LITERACY.RST.6-8.9](#)

Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.

Resources/Materials Needed:

1. Weather 30: Explore! Weather
2. Weather 1: What Tools are used to forecast the weather
3. Weather 2: Why is the weather so difficult to forecast
4. Weather 3: How do computers create model that forecasters use?
5. Weather 31: The Science Behind Weather Forecasting
6. Paper, color pencils, Internet, and photo printer
7. Binder

Teacher Instructions:

1. Either as a whole class or in small groups, have students watch the videos from the list above that you find most helpful for their understanding of meteorology and learning through this activity.
2. Decide or have individual student(s) decide on 5 – 10 weather measurements/events/facts they believe should be recorded daily. (i.e.: if rainfall is one, have them put a container out and measure the rainfall in inches).

3. Have students monitor and record the weather for 10 days in a journal. Journal should include pictures they have drawn or printed.
4. Optional: Have students photograph and identify different clouds they see and determine any relationships they see between how the amount of clouds might have affected other measurements.
5. Have students calculate average measurements over the 10 days in each of their measurement areas. (i.e.: If they recorded high and low temperatures, what is their average? What was average rainfall over the 10 days? Etc.)
6. Next have students compare their results with other students.

Assessment/Evaluation Option:

1. Have students turn in Journal for grading on completion, accuracy and presentation.