Unit 1a-Weather & Climate

Content Area: **Science**
Course(s): **Science K**
Time Period: **Marking Period 1**
Length: **MP 1**
Status: **Published**

Big Ideas

- Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region and time.
- People record weather patterns over time.

Essential Questions

- How can we record observations of the local weather and temperature?
- What patterns were observed in their observations?
- Does this pattern change with seasons?

Diversity Integration

Objective: Students will be able to relate how snowflakes are unique to how people are unique.

Activity: The students will listen to Snowflake Bentley on Bookflix. The teacher will lead a discussion about how people, like snowflakes, are all different but special in their own way. The students will create their own paper snowflakes and share them with the class.

Technology Integration

8.1.2.DA.4: Make predictions based on data using charts or graphs.

Activity: Students will keep track of daily weather and predict the weather for the next day

Technology Connection

8.1.2.DA.3: Identify and describe patterns in data visualizations

Science and Engineering Practices

Developing and Using Models:

- Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s).

Analyzing and Interpreting Data:

- Record information (observations, thoughts, and ideas).
- Use and share pictures, drawings, and/or writings of observations.
- Use observations (firsthand or from media) to describe patterns and/or relationships in the natural and designed world(s) in order to answer scientific questions and solve problems.
- Compare predictions (based on prior experiences) to what occurred (observable events).

Enduring Understandings

Weather and Climate

K-ESS2.D   Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time.

Student Learning Standards

Mathematics

K.MP.2   Reason abstractly and quantitatively.

K.MP.4   Model with mathematics.

K.CC.A   Know number names and the count sequence.

K.MD.A.1   Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.MD.B.3   Classify objects into given categories; count the number of objects in each category and sort the categories by count.

Focus Areas

Knowledge

- How to make qualitative and quantitative observations of the local weather and temperature. This will include descriptions of the weather (such as sunny, cloudy, rainy, warm).

Skills

- Measure these conditions to describe and record the local weather.
- Use daily data of weather to notice patterns over time.
- Use daily data of weather to compare two different seasons.

Understandings

- Use and share observations of local weather conditions to describe patterns over time.

Resources

Primary Resources

- BrainPop, Jr.
- NJCTL Unit 2 Weather
- Mystery Science

Core

- On Going - Observe and Graph Weather Daily
- Weather Observation Activity
- Analyzing Data – Weather Journal Lab
- Mystery Science "Have You Ever Watched a Storm?"
- Mystery Science "What Will Weather be Like on Your Birthday?"
- BrainPop, Jr. Fall, Winter, Spring, Summer

Supplemental

- Describing Weather- Temperature Lab
- Describing Weather – Wind Speed Lab
- Describing Weather – Wind Direction Lab
- Describing Weather – Clouds Lab
- Describing Weather – Precipitation Lab