

Grade: 2

Subject Area: Science

Title: What Will the Weather be Tomorrow?

Duration: 15 minutes a day

Standards:

Scientific Inquiry

2.1.3 Describe, both in writing and verbally, objects as accurately as possible and compare observations with those of other people.

2.1.4 Make new observations when there is disagreement among initial observations.

Earth and the Processes That Shape It

2.3.1 Investigate by observing and then describe that some events in nature have a repeating pattern, such as seasons, day and night, and migrations.

2.3.2 Investigate, compare, and describe weather changes from day to day but recognize, describe, and chart that the temperature and amounts of rain or snow tend to be high, medium, or low in the same months every year.

Reasoning and Uncertainty

2.5.5 Explain that some events can be predicted with certainty, such as sunrise and sunset, and some cannot, such as storms.

Understand that people aren't always sure what will happen since they do not know everything that might have an effect.

Goals and Objectives

Cognitive

Students will be able to gather data about the weather using a Internet news and their senses in order to predict the weather with reasonable accuracy. Journal entries will show evidence of growth and progress.

Activities:

A. Predictions

1. Based on their prior knowledge of weather the students will make a prediction of tomorrow's high temperature.

B. Collect data

1. Observe the outside with their senses
2. Record their observations

C. Synthesize data

1. Create temperature chart,
2. Develop weather chart (sunny/cloudy/rainy/snowy/foggy)

Procedure:

1. At the end of each day, students will find tomorrow's predicted high on the internet news and record it on the chart.
2. A laminated class chart will be posted divided into thirds. The predicted temperature found on the internet news will be written on the middle area.
3. Students will take their name cards and choose where to post them. The first area is for 2 degrees less than the predicted temperature and the third area is for 2 degrees above it. The middle area is for the exact predicted temp.
4. They will also record this in their ongoing science journal.
5. The next morning, students will check the internet to find the actual high from yesterday and record it on the chart and in their journals.
6. Take names off the temperature chart and use those names for attendance. (Why not double it's use!)
7. Another chart containing two different colors of yarn will be posted. One color for predicted temperature and another color for actual temp. Make this task a weekly or biweekly job.
8. Students will also record the weather upon arrival each day. The choices we will use are sunny, cloudy, rainy, and snowy.
9. Students will observe the changes in weather over a period of a few days or a week and write in their journals.
10. Teacher will use information from the students' writing to drive the next mini-lesson. For example, if the student writes the sky is gray because it is a cloudy day, we want to make sure the student realizes the sky did not change colors, instead they are seeing the bottom of clouds.
11. After instructing various mini-lessons, post tests will be written in their journals.

Assessment:

- A. Use charting progress for a math goal in addition to science goal.
- B. Use journal writings to check for understanding.

Assessment Rubrics:

- 4 – Followed procedures and expressed understanding in journal
- 3 - Followed procedures and didn't express full understanding in journal.
- 2 – Either followed procedures or did their journaling
- 1 – Didn't follow procedures and didn't express understanding.

Assess as mini-lessons occur.