

1st Grade Weather Unit

Unit Overview

This weather unit, taught using *STC Weather*, gradually introduces students to concepts in weather while developing basic observational and experimental skills. By experimentally investigating concepts such as cloud cover, precipitation, wind, and temperature one at a time, students build their understanding about the weather. The information gathered by the class on the weather calendar can then be used as an overview to examine patterns and changes in various features of the weather over time.

Essential Question:

1. How does the weather change from day to day? How does the weather change from month to month? How does the weather change from year to year?

Unit Questions:

1. What happens to water left out in the open, such as puddles?
2. How can clouds be described?
3. What happens to clouds over time?
4. How can we use our senses to learn more about the weather?
5. What tools can help us learn about the weather?
6. Why is it important to keep accurate records or notes about things that are observed?

Lesson Summary (Paraphrased from page 3 in *STC Weather Teacher's Guide*)

Lessons 1-3: Lesson 1 serves as a pre-unit assessment of students' knowledge. The first lesson begins with a brainstorming session about weather. Lesson 2 introduces the concept of using the senses of sight, hearing, smell and touch to observe the weather. Students begin recording their observations on a long-term data collection device, the *Weather Calendar*, in Lesson 3. They will keep a record in order to track day to day and week-to-week changes in the weather.

Lessons 4 through 14:

Students focus on individual features of the weather: cloud cover, precipitation, wind, and temperature. These features are observed, discussed, measured, and recorded.

Lesson 4: In this lesson, students learn about the usefulness of a simple scale to estimate wind speed.

Lessons 5-9: After practicing reading model and real thermometers in Lessons 5 and 6, students take daily temperatures using the Fahrenheit scale and record them on a class temperature graph. In Lessons 8 and 9, students perform experiments, using temperature, to help them answer questions about water and air temperature.

Lessons 10-12: These lessons focus on precipitation. Students construct a rain gauge in Lesson 10 and learn how to measure rainfall. In lesson 11, they explore what happens to rain after it has fallen. Lesson 12 is an experiment where students test different fabrics for resistance to rainy weather.

Lesson 13-14: These lessons establish by observation that clouds change and are different from one another, but can be sorted into groups by type.

Lesson 15: Students compare an actual weather forecast with their own data.

Lesson 16: Data collected over a period of time is summarized. Students form generalizations about the weather since the beginning of the unit. A post-unit assessment, which complements the pre-unit assessment, follows lesson 16.