



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
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Understanding and Maintaining the Classroom Weather Station

Guide for Curriculum Unit 94.05.07
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The curriculum unit is designed to be used with fifth-grade students. This unit should ignite students' interest and excitement over a natural phenomenon which occurs daily, the weather. Another feature which makes the unit even more exciting for students is that they construct most of the weather instruments mentioned in this unit. They even get to make the weather station which houses the equipment or instruments!

The word "weather" is used to denote the state of the atmosphere at a particular place for a short period of time. The variables that constitute the type of weather that we have at a given place and time are made up of the following elements: (1) air temperature; (2) humidity; (3) air pressure; (4) the type and amount of precipitation; and (5) the direction and speed of the wind. All of the instruments which meteorologists use to measure each of the previously mentioned variables will be discussed in detail later within this unit.

Upon completion of this unit, and with the reinforcement activities included throughout the prose, the student should be able to accomplish the following cognitive objectives:

- (A) Maintain a weather station throughout the course of this unit.
- (B) Maintain a weather journal including data from their weather station and other weather conditions.
- (C) Construct the following weather instruments, and state the importance of each in forecasting weather: (1) wind vane; (2) anemometer; (3) barometer; (4) psychrometer; and (5) rain gauge.

The classroom weather station will be the focal point of the unit. The station which your students will design will not be as sophisticated as the National Weather Service, but a wealth of knowledge and information can be obtained from the one your students design in your classroom. An excellent closure to this unit, or motivational aspect, would be to plan a field trip to a local weather station. Your students will discover that even though the weather station's instruments are much more sophisticated and technologically advanced than their models, both sets of instruments produce or obtain the same weather data.

(Recommended for General Science, grade 5)

Keywords

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