

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute 1994 Volume V: The Atmosphere and the Ocean

Weather Basics

Guide for Curriculum Unit 94.05.05 by Raymond W. Brooks

This unit is designed for the student to have "hands-on" activities while learning about the basic weather elements and the instruments used to measure each element. All activity on the earth is the result of energy from the sun. Factors such as the shape of the earth, altitude, nearness to large bodies of water and the distance from the equator help determine amount and intensity of this radiation. That is why the unit begins by explaining and demonstrating how the earth is heated by conduction, convection and radiation.

The main thrust of the unit is on the seven basic weather elements and how each is measured and the part they play in the weather picture. The construction of weather instruments is suggested as this method increases student retention of material and also makes it more interesting to them. Whenever possible, it is suggested that students make different models of an instrument to show that there is more than one way to gather scientific data.

The unit fits into the science curriculum for eighth-grade science and also the trend for "hands-on" activities. This unit does not try to make a meteorologist of the student but makes them aware of the various weather phenomena. If students have an interest in certain areas of meteorology, it is possible to guide them into further research.

(Recommended for Earth Science, grade 8)

Keywords

Ecology Environmental Science Earth Meteorology Rainforest

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