

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute 1988 Volume VI: An Introduction to Aerodynamics

Weather Awareness

Guide for Curriculum Unit 88.06.09 by Beverly B. Stern

"Weather Awareness'" objective is to develop student awareness of the atmospheric conditions in which we live. Just as fish living in the conditions at the bottom of an ocean of water, we are people living in the conditions of an ocean of air.

The unit is structured around two main activities: 1) keeping a daily weather log and; 2) developing answers to the following four questions. How is our weather dependent on the earth's gravity and the sun's energy? What are four major components of weather? How are storms created? What can we learn from weather reports?

The unit sounds more like a science unit than a math unit, but it depends on what you want to stress. I plan to stress skills from the following areas:

Statistics: Keeping a log requires reading data from either instruments or the morning weather report.

Statistics: Using many charts and tables.

Ratio and Percentage: There are many kinds of comparisons, like the gravities of two planets, or their diameters, etc.

Calculations: Using the Fahrenheit and Celsius formulas for conversion.

Greater than and less than: Applied use in the differences between temperatures of air masses or differences in air pressures.

Longitude and latitude: Locate the cities the paper gives the temperatures for in the weather report or track a hurricane.

There are four weeks of lesson plans.

(Recommended for Consumer Math classes, grades 9-12; Applied Mathematics classes, grades 9-12; General Science classes, grades 7-12; Earth Science classes, grade 8)

Key Words

Mythology Ancient Greek Aerodynamics Daedalus Orgins Science

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