

Will It Rain Tomorrow? CHRE Suggestions


Original Unit at:

<https://www.sabes.org/content/will-it-rain-tomorrow>

This contextualized lesson was designed as part of a **science unit on weather, climate, and climate change**, with the recognition that an understanding of basic probability and statistics is required to understand the scientific concepts. This lesson could also be used in a **math unit on probability** to provide a context for students to apply their math skills.

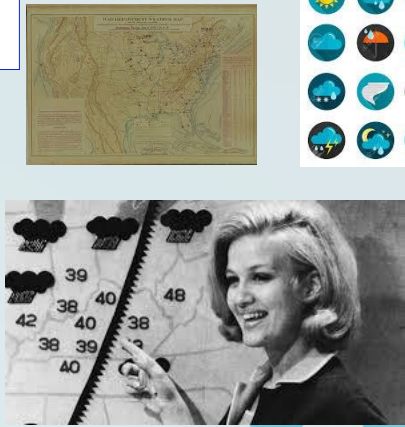
Weather Underground (wunderground.com)
The Weather Channel (weather.com)
Accuweather (accuweather.com)

Will It Rain Tomorrow?

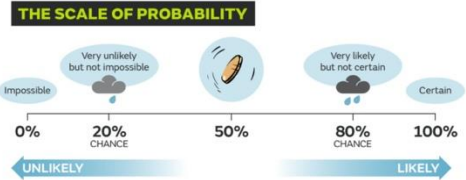



Early History

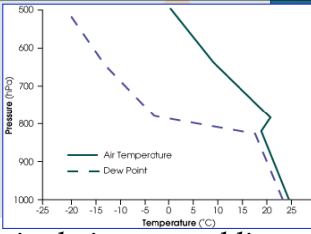
The art of weather forecasting began with early civilizations using reoccurring astronomical and meteorological events to help them monitor seasonal changes in the weather. Around 650 B.C., the Babylonians tried to predict short-term weather changes based on the appearance of clouds and optical phenomena such as haloes. By 300 B.C., Chinese astronomers had developed a calendar that divided the year into 24 festivals, each festival associated with a different type of weather.



THE SCALE OF PROBABILITY







Identity: Students will determine how they understand weather outcomes in their personal lives.

Skill: Students will:

- understand probability as the long run frequency of an event occurring
- identify general probabilities along a spectrum from “impossible” to “certain”
- connect probabilities with benchmark fractions and percentages from 0% to 100%, multiples of 10% only
- identify different terms, symbols, and numbers common to weather reports
- interpret a weather report to make decisions

Intellect: Students will learn about the history of short-term/long-term weather prediction; Students will learn about climate change; weather effects.

Criticality: Students will study the effects of climate change/ weather effects on the environment and humanity.

Joy: Students will determine the type of weather conditions that elevate their happiness and joy.