

Weather Synopsis 2nd—6th, upper



Summary

Use scientific tools to gather pertinent data. Older groups will forecast what is to come. Activities help students to understand the water cycle, cloud formation, and larger global weather patterns. Students become meteorologists by analyzing data and presenting forecasts.

Goals & Objectives

This program will:

- Collect real weather data
- Interpret observations and data
- Forecast the weather based on observations and data (grades 4+)

Students will be able to:

- Accurately use a thermometer, wind gauge, compass to collect data
- Identify three main types of clouds.
- Record data as a group
- Create a weather forecast using data collected and tools used as props (grades 4+)

MN Academic Standards

supported during HNC program. More standards can be supported with pre- and post lesson activities.

Science

- 2.1.1.2.1 ~ scientific inquiry
- 2.3.2.2.1 ~ weather can be described in measurable quantities
- 3.1.1.1.1 ~ support claims with evidence
- 3.1.1.2.1 ~ find answers with scientific knowledge and observations
- 3.1.1.2.4 ~ use evidence to support claims
- 3.1.3.4.1 ~ use tools to improve observation
- 4.2.1.2.1 ~ solids, liquids and gases
- 4.2.1.2.2 ~ temperature changes matter
- 4.3.2.3.1 ~ water cycle
- 5.1.3.4.1 ~ use tools to gather, analyze, and interpret data
- 6.2.1.2.1 ~ physical changes
- 6.2.3.2.3 ~ energy transfer

Authenticity

Students collect their own weather data and compare it to HNC's weather station data and professional weather reports/forecasts.

Activities

In the Classroom

- Create A Cloud—students learn the main ingredients of a cloud and create a cloud in the classroom.

In the Field

- Use data sheets and tools to record various weather data. Make observations and discuss what they mean.
- Water cycle—Through skits or songs, create the water cycle using vocab words like condensation, precipitation, and evaporation.
- Students compile and analyze collected data to create their own weather forecast live from Hartley Park. Groups each present their forecast as if they were on the news. (grades 4+)

Bad Weather Alternative

- Water cycle—Through skits or songs, create the water cycle including vocab words like condensation, precipitation, and evaporation.
- Watch a weather forecast online and let students work in groups to create their own forecasts using tools, props, and maps.