

Problem-Based Learning Unit Template

Topic

Weather phenomena and weather instruments

Goals/Objectives

We will meet Science Standard 4.6: The student will investigate and understand how weather conditions and phenomena occur and can be predicted.

Key concepts include

- a) weather phenomena;
- b) weather measurements and meteorological tools; and
- c) use of weather measurements and weather phenomena to make weather predictions.

The students will be able to discuss the different phenomena (thunderstorms, blizzards, tornadoes and hurricanes), students will be able to name and use weather tools appropriately and make weather predictions based off of the different phenomena and data collected.

Theme

Preparing people of Virginia for catastrophic weather events

Scenario

The Chesterfield County Board of Supervisors (CCBS) has received reports of the damage of Hurricane Sandy on New York and New Jersey. The hurricane was expected to hit Virginia just as severely but we were spared. The governor has asked the NWS and the Chesterfield County Board of Supervisors to organize local school districts to collect data to form a task force to prepare the state for future catastrophic weather events.

Culminating Activity

Develop a newscast using all the information they have learned about weather to answer the driving question. Students will be divided based on severe weather and a Virginia region. They will be able to use a PPT, Powtoons, songs/chants, skits, weather tool demonstration or creating a visual aid.

Problem Question

How can people of Virginia be prepared for catastrophic weather events?

Student Role

The students will be Junior Meteorologists hired by the CCBS.