

MATH AND SCIENCE CARD SORT

Oklahoma Academic Standards for Science MS-ESS2-5: Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions. Math Content Standards in data analysis, specifically addressing measures of central tendency and outliers.

Students learn about an increasing need to respond to extreme weather events. They are shown that certain types of these events are projected to worsen in terms of impacts, intensity, and frequency due to climate change.

Important question:

- How can we use weather and climate models to predict tornadic activity? How do we prepare for the extreme weather events in our area?

Students engage in a lesson that utilizes scientific models and simulations to explore different phenomena related to weather and climate. Moreover, students learn about climatology from a climatologist to better understand how they use math and science in their career. In Math class, students pick variables from the simulation's overlays and graph information.

The teacher proposes two ideas: create a Public Service Announcement informing citizens what to do in the event of a tornado and prepare it for submission, or plan an organized walk to raise money and donate weather radios for families in need.

Students propose creating a lunch booth in the cafeteria to discuss the value of a "go bag," or creating a student to highlight different weather events each quarter.

The class chooses two ideas via vote.

Students are given time in their Math and Science classes. They receive a rubric, and these deadlines:

- 2 days to create a PSA. See rubric for project guidelines.
- 3 days to create your season's weather event for the class newsletter. See rubric for project guidelines.

Students' PSAs are aired on the cafeteria TVs at lunchtime.

Students submit their final newsletters to be published by the school's newspaper.

Groups of students review the newsletters created by other groups and suggest edits. Students revise their newsletter based on peer feedback.