

Weather Watching: The birth of forecasts

Brains On!

March 3, 2020

[Episode Link](#)

[Resources for Educators](#)

Humans have been predicting weather for a long time - way before modern technology. So how did they do it? We'll meet the man who invented the word "forecast" and brought weather reports to the newspaper.

Tags:

Weather and Climate, Ecosystems and habitats

Episode: Weather Watching: The birth of forecasts	Grade Level(s): Third Grade, Fifth Grade
Common Core Standard: <ul style="list-style-type: none">• 3-ESS2-1 (Third Grade): Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.• 3-ESS3-1 (Third Grade): Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.• 5-ESS3-1 (Fifth Grade): Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Lesson Objective: <p>Students will understand the history of weather forecasting, including the early methods used to predict weather, the invention of critical tools like the barometer and thermometer, and the development of modern forecasting techniques using technology.</p>
Key Vocabulary Words: <ul style="list-style-type: none">• ozone• atmosphere• telegraph• radar• barometer• forecasts	Materials: <ul style="list-style-type: none">• Brains On Universe KWL worksheet• Brains On Universe shows response sheet

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| <ul style="list-style-type: none"> • satellites • thermometer • astronomers • phenology • meteorology | |
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Engage

Connect to student's prior knowledge about weather forecasting and natural signs predicting weather. • How do you think people predicted the weather before modern technology? • What are some natural signs that might indicate a weather change? Task: Students fill in 'What I know' and 'What I want to know' sections of KWL chart about weather forecasting.

Explore

Play through episode asking probing questions like: • How did ancient civilizations like the Babylonians or Chinese try to predict the weather? • What tools were invented in the 1600s that changed weather prediction? • Who was Admiral Robert FitzRoy and what was his contribution to meteorology? • How did the telegraph help in spreading weather forecasts? Task: Students complete the response sheets as they are listening to the episode and answering probing questions from the teacher.

Extend

Activity: Students work in groups to create a simple weather station using items like thermometers and barometers. They then track the weather over a week and create their own weather forecast report. Open Response Sheet: Students will use their notes and knowledge from the episode to answer the open response question, 'How did the invention of weather monitoring tools change the way we predict weather?' Responses should include information directly from the episode.

Additional Learning

Listen to the section on the Mystery Sound. Students listen to the mystery sound and describe what they hear, making guesses based on evidence about what they think the sound is. Listen to the 'The lore of yore' segment. Students can explore historical weather proverbs and lore to understand how people historically predicted weather changes. They could also create their own weather proverbs based on observations.