

THE IMPORTANCE OF WEATHER PREDICTION

STUART OGBURN, NORTON PARK ELEMENTARY SCHOOL

GRADE LEVEL AND CONTENT: 4th Grade Fine Arts, Technology, Mathematics, and Science

OVERVIEW

In this project-based learning unit that integrates, science, technology, engineering, the arts, and mathematics, students investigate how meteorologists measure and forecast the weather by engineering weather instruments, collecting and analyzing weather data, and producing a weather forecast. Throughout the unit students collect weather data using student-engineered weather instruments. Students then analyze and graph their data and utilize technology to develop a weather map. Finally, students create a script on the predicted weather patterns, record a weather forecast, and use editing software to finalize their videos.

STANDARDS ADDRESSED

Fine Arts: TAES.4.2c-e; TAES.4.3a-d; TAES.4.4a-b

ISTE (International Society for Technology in Education): ISTE.S.1; ISTE.S.2; ISTE.S.3; ISTE.S.4; ISTE.S.5; ISTE.S.6

Mathematics: M.4.MD.1; M.4.MD.4

Next Generation Science Standards: 3-5.ETS1.1; 3-5.ETS1.2; 3-5.ETS1.3

Science: S.4.E.4; S.4.CS.1; S.4.CS.2

AVAILABLE MATERIALS

- Video of Unit
- Daily Lesson Plans
- Weather News Station STE(A)M Project Rubric
- Forecasting Weather PowerPoint
- Weather Instrument Sort Activity Sheet
- Weather Data Recording Sheet



ABOUT THE TEACHER

Stuart Ogburn is currently a 4th grade Mathematics, Science, and Social Studies teacher at Norton Park Elementary School in Smyrna, GA. Mr. Ogburn holds a Bachelor's in Early Childhood Education and a graduate degree in Instructional Technology, both from Kennesaw State University. He currently serves on the school's Leadership and PBIS teams and coaches the school's chess and logic club.