

Unit #6 Meteorology

Content Area: **Science**
Course(s):
Time Period:
Length: **15 days**
Status: **Published**

State Mandated Topics Addressed in this Unit

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N/A	N/A

Meteorology

Learning Objectives

- Objective 1 - Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.
- Objective 2 - Analyze geoscience data and the results from global climate models to make an evidence- based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.

Essential Skills

- Essential Skill 1 - Name the six layers of the atmosphere and determine how the temperature varies in each layer
- Essential Skill 2 - Identify greenhouse gases and how this could affect the climate of the Earth
- Essential Skill 3 - Compare and contrast cold and warm air
- Essential Skill 4 - Name the properties of the four types of clouds and how clouds are formed
- Essential Skill 5 - Name properties of cold fronts and properties of warm fronts.
- Essential Skill 6 - Identify how major storms affect an area

Standards

- | | |
|---------------|--|
| SCI.HS-ESS2-4 | Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate. |
| SCI.HS-ESS2-5 | Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes. |

Instructional Tasks/Activities

- Build a model on a hurricane and identify the path of a tornado
- Draw out layers of the atmosphere and complete lab on temperature change in the atmosphere
- Foldables – organization of material (scientific method & features of living things)
- Group discussion
- Inquiry based lab- Complete computer based weather predictions based off of current weather patterns
- PowerPoint presentation of material
- Read and analyze a weather map
- Review game
- Think, pair, share (read assigned section of text individually, discuss with a partner, present material in pairs to class – use PowerPoint as a reference)

Assessment Procedure

- Classroom Total Participation Technique
- Classwork
- DBQ
- Essay
- Exit Ticket/Entrance Ticket/Do Now
- Journal / Student Reflection
- Kahoot
- Other named in lesson
- Peer Review
- Performance
- Problem Correction
- Project
- Quiz
- Rubric
- Teacher Collected Data
- Test
- Worksheet

Recommended Technology Activities

- Appropriate Content Specific Online Resource
- Appropriate Content Specific Online Resource
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here

- Copy/Paste Content Specific Link Here
- Gimkit
- GoGuardian
- Google Classroom
- Google Docs
- Google Slides
- Google Slides
- Kahoot
- MagicSchool AI
- Other- Specified in Lesson
- Quiziz
- Screencastify

Accommodations & Modifications & Differentiation

Accommodations and Modifications should be used to meet individual needs. Their IEP and 504 plans should be used in addition to the following suggestions.

Gifted and Talented

- Compare & Contrast
- Conferencing
- Debates
- Jigsaw
- Peer Partner Learning
- Problem Solving
- Structured Controversy
- Think, Pair, Share
- Tutorial Groups

Instruction/Materials

- alter format of materials (type/highlight, etc.)
- color code materials
- eliminate answers
- extended time
- extended time
- large print

- modified quiz
- modified test
- Modify Assignments as Needed
- Modify/Repeat/Model directions
- necessary assignments only
- Other (specify in plans)
- other- named in lesson
- provide assistance and cues for transitions
- provide daily assignment list
- read class materials orally
- reduce work load
- shorten assignments
- study guide/outline
- utilize multi-sensory modes to reinforce instruction

Environment

- alter physical room environment
- assign peer tutors/work buddies/note takers
- assign preferential seating
- individualized instruction/small group
- modify student schedule (Describe)
- other- please specify in plans
- provide desktop list/formula

Honors Modifications

Resources

- Resource 1
- Resource 2
- Resource 3
- Resource 4
- Resource 5

