Mar. Climate Change

Content Area: Social Studies

Course(s):

Time Period: March
Length: 3 Weeks
Status: Published

Unit Overview

Students will learn about climate change and how it is affecting our planet.

Enduring Understandings

Climate change causes:

Extremes in weather

Long term changes in and to the planet

Affects populations and habitats of many multitudes of species.

Enduring Understandings: Students will be able to:

- Explain what is causing climate change
- Define climate change adaptation and climate change mitigation (exposure)
- Identify examples of climate change adaptation and mitigation ideas (exposure)
- Explain what students (we) can do on a daily basis to help minimize change

Essential Questions

What is climate change and why is it important to us?

https://cdn.naaee.org/sites/default/files/10_essential_questions_for_each_grade_band.pdf

Instructional Strategies & Learning Activities

DAY 1

Objective: SWBAT to understand what climate change is why it is important to planet Earth.

Procedure: Students will read booklet as a group, discuss and complete activities.

Materials: "Join the Lorax" Booklet from Energy Star

Differentiation: Provide short single step directions and one-to-one assistance when needed.

Assessment: Booklet activities and discussions

DAY 2

Objective: SWBAT to identify ways in which they can help save our planet.

Procedure: Students will learn to:

- 1. Conserve water by taking short showers and shutting water off when brushing teeth
- 2. Conserve electricity by shutting off lights and unplugging electronics when not in use (adult directed)
- 3. Change to fluorescent bulbs (adult directed)
- 4. Recycle paper, plastic, glass and cans
- 5. Ride your bike instead of taking a car (adult directed)
- 6. Pick up litter (adult directed)
- 7. Don't leave outside doors open longer than necessary

Materials: "You Can Be An Energy Star! A Who's Guide to Saving Our Planet "

Differentiation: Provide short single step directions and one-to-one assistance when needed.

Assessment: Booklet activities and discussions

Integration of Career Readiness, Life Literacies and Key Skills

PFL.9.1.2.CR.2	List ways to give back, including making donations, volunteering, and starting a business.
TECH.9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).

TECH.9.4.2.CT.1 Gather information about an issue, such as climate change, and collaboratively brainstorm

ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2).

TECH.9.4.2.CT.2 Identify possible approaches and resources to execute a plan (e.g., 1.2.2.CR1b, 8.2.2.ED.3).

TECH.9.4.2.GCA.1 Articulate the role of culture in everyday life by describing one's own culture and

comparing it to the cultures of other individuals (e.g., 1.5.2.C2a, 7.1.NL.IPERS.5,

7.1.NL.IPERS.6).

Interdisciplinary Connections

LA.RI.1.1	Ask and answer questions about key details in a text.
LA.RI.1.3	Describe the connection between two individuals, events, ideas, or pieces of information in a text.
LA.RI.1.4	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
LA.RI.1.5	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
LA.RI.1.7	Use the illustrations and details in a text to describe its key ideas.
LA.W.1.1	Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.
LA.W.1.8	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
LA.SL.1.2	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
LA.SL.1.3	Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
1-ESS1-2.1.1	Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.
1-ESS1-2.3	Planning and Carrying Out Investigations

Computer and Design Integration

CS.K-2.8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
CS.K-2.8.1.2.DA.1	Collect and present data, including climate change data, in various visual formats.
CS.K-2.8.1.2.DA.3	Identify and describe patterns in data visualizations.
CS.K-2.8.1.2.DA.4	Make predictions based on data using charts or graphs.
CS.K-2.8.1.2.NI.2	Describe how the Internet enables individuals to connect with others worldwide.

Data can be used to make predictions about the world.

Computer networks can be used to connect individuals to other individuals, places, information, and ideas. The Internet enables individuals to connect with others worldwide.

Individuals collect, use, and display data about individuals and the world around them.

Computing technology has positively and negatively changed the way individuals live and work (e.g., entertainment, communication, productivity tools).

Differentiation

- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.
- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.

• Definitions of Differentiation Components:

- Content the specific information that is to be taught in the lesson/unit/course of instruction.
- o Process how the student will acquire the content information.
- o Product how the student will demonstrate understanding of the content.
- Learning Environment the environment where learning is taking place including physical location and/or student grouping

Differentiation occurring in this unit:

Provide short, single step directions and one-to-one assistance when needed.

Have student repeat directions.

Modifications & Accommodations

Refer to QSAC EXCEL SMALL SPED ACCOMMOCATIONS spreadsheet in this discipline.

Modifications and Accommodations used in this unit:

Provide appropriate modifications and accommodations based on IEP and 504 plans

Benchmark Assessments

Benchmark Assessments are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.

Schoolwide Benchmark assessments:		
Aimsweb benchmarks 3X a year		
Linkit Benchmarks 3X a year		
DRA		
Additional Benchmarks used in this unit:		
Formative Assessments		
Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. Formative assessment refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).		
Formative Assessments used in this unit:		
Discussions and activity pages		
Summative Assessments		
Summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an		
instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.		
Summative assessments for this unit:		
Discussions and activity pages		

Instructional Materials

"Join the Lorax" (And Help Protect the Earth from Global Warming) Activity Book

"You Can Be An Energy Star! Activity Book"

Youtube - Claredon Learning - "Climate Change for Kids"

Miscellaneous articles, worksheets, and videos

Standards

Explain how all people, not just official leaders, play important roles in a community.
Describe how communities work to accomplish common tasks, establish responsibilities, and fulfill roles of authority.
Determine what makes a good rule or law.
Explain the different physical and human characteristics that might make a location a good place to live (e.g., landforms, climate and weather, resource availability).
With adult guidance and support, bring awareness of a local issue to school and/or community members and make recommendations for change.
Investigate a global issue such as climate change, its significance, and share information about how it impacts different regions around the world.
Collect data and consider sources from multiple perspectives to become informed about an environmental issue and identify possible solutions.