

MS-ESS3 California Grade 7 Science - Full Standard

Preferred Integrated Model

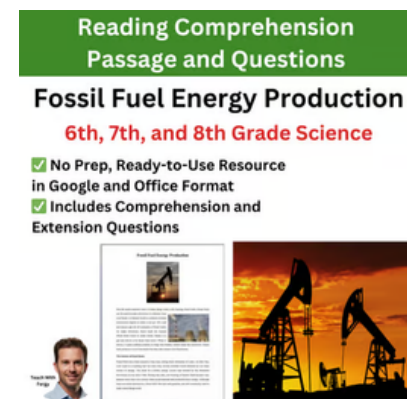
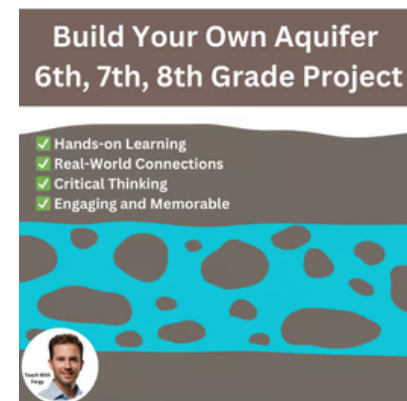
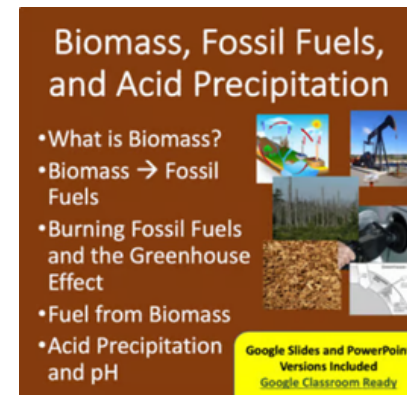
- ✓ **Earth and Human Activity**
- ✓ **Complete MS-ESS3 Standard for California 7th Grade**
- Preferred Integrated Science Instruction Model**
- ✓ **Saves you over 75%**



Resources Included

MS-ESS3-1

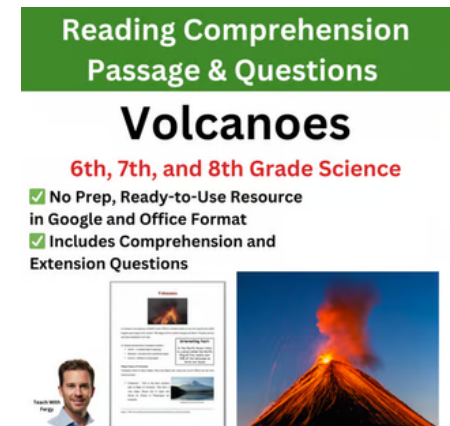
- Biomass and Fossil Fuels Lesson
- Biomass and Fossil Fuels Digital INB Pages
- Crash Course Worksheet - Can We Make Electricity without Fossil Fuels
- Crash Course Worksheet - Can We Keep Warm and Stay Cool Without Fossil Fuels
- Case Study - The Devastating Impact of Industrial Pollution on Local Water Source
- Fossil Fuel and Nuclear Energy Production - Scavenger Hunt
- Fossil Fuels Reading
- Nonrenewable Energy Sources Lab Station Activity
- Tectonic Plates Lesson
- Weathering, Erosion, and Deposition Lesson
- The Water Table Lesson
- Volcanoes Reading
- Earth's Natural Resources - Mineral, Energy, and Groundwater Lesson
- Crash Course Worksheet - Mineral Extraction
- Build Your Own Aquifer Project



Resources Included

MS-ESS3-2

- Earthquakes, Volcanoes and Tsunamis Lesson
- Earthquakes and Volcanoes - Scavenger Hunt
- Earthquakes and Volcanoes Lab Station Activity
- Earthquakes Reading
- Hurricanes Reading
- Volcanoes Reading
- Straw Tower STEM Engineering Challenge
- Paper Bridge STEM Challenge
- Pasta Tower STEM Challenge



Everything You Need to Teach 7th Grade Science in California using the Preferred Model for MS-ESS3

Lessons

Activities

Biomass, Fossil Fuels, and Acid Precipitation

- What is Biomass?
- Biomass → Fossil Fuels
- Burning Fossil Fuels and the Greenhouse Effect
- Fuel from Biomass
- Acid Precipitation and pH

Earthquakes, Volcanoes, and Tsunamis

- Earthquakes
 - Tectonic Plates, Boundaries, and Seismic Waves
 - The Great Chilean Earthquake
- Volcanoes
 - Types of Volcanoes
 - Volcano Dangers
 - Mount Tambora
 - Tsunamis

Tectonic Plates

MIDDLE SCHOOL – EARTH SCIENCE

- Earth's Layers
- The Plate Tectonic Theory
- Earth's Primary & Secondary Plates
- Continental Drift
- The Changing Earth
- Plate Boundaries
 - Divergent, Convergent, & Transform Boundary

The Water Table Lesson

- Groundwater
- Saturated (Phreatic) Zone
- Unsaturated (Vadose) Zone
- The Water Table
- Natural Effects on the Water Table
- Human Effects on the Water Table

Erosion, Weathering, and Deposition

MIDDLE SCHOOL – EARTH SCIENCE

- Physical Weathering
- Chemical Weathering
- Erosion
- Sediment Transport
- Deposition

Earth's Natural Resources Lesson

Minerals, Energy, and Groundwater

- ✓ Covers: Minerals, energy sources, and groundwater
- ✓ For Each, the Lesson Teaches: Formation, location, extraction, and human impact of natural resources.
- ✓ Ideal for Middle School Science
- ✓ No-Prep Resource

Chapter 7: Biomass and Fossil Fuels

Digital Interactive Notebook Pages

- 100% Digital and Interactive
- Perfect for your Google Classroom or Microsoft OneDrive

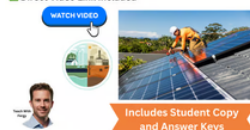
Crash Course Climate & Energy #5: Can We Keep Warm and Stay Cool Without Fossil Fuels?

- ✓ Classroom Ready - Just Print and Go!
- ✓ Active Engagement - Keep Students' Attention
- ✓ Direct Video Link Included



Crash Course Climate & Energy #3: Can We Make Electricity Without Fossil Fuels?

- ✓ Classroom Ready - Just Print and Go!
- ✓ Active Engagement - Keep Students' Attention
- ✓ Direct Video Link Included



Reading Comprehension Passage and Questions

Fossil Fuel Energy Production

6th, 7th, and 8th Grade Science

- ✓ No Prep, Ready-to-Use Resource in Google and Office Format
- ✓ Includes Comprehension and Extension Questions



Device-Based Scavenger Hunt

Earthquakes and Volcanoes

- Includes
 - 5 Unique Locations
 - Online form submission
 - Answer Key



PASTA TOWER ENGINEERING CHALLENGE

MIDDLE SCHOOL



Earthquakes and Volcanoes Lab Station Activity

7 Lab Station Activities to get your kids out of their seats and engaged in their learning



Device-Based Scavenger Hunt

Fossil Fuel and Nuclear Energy Production

- Includes
 - 5 Unique Locations
 - Online form submission
 - Answer Key



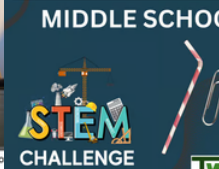
Nonrenewable Energy Source Lab Station Activity

7 Lab Station Activities to get your kids out of their seats and engaged in their learning



STRAW TOWER ENGINEERING CHALLENGE

MIDDLE SCHOOL



Build Your Own Aquifer

6th, 7th, 8th Grade Science

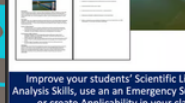
- ✓ Hands-on Learning
- ✓ Real-World Connections
- ✓ Critical Thinking
- ✓ Engaging and Memorable



Case Study

"Toxic Waters: The Devastating Industrial Pollution on a Local Water Source"

- ✓ No Prep, Ready-to-Use Resource in Google and Office Format
- ✓ Includes Comprehension and Extension Questions



Reading Comprehension Passage & Questions

Volcanoes

6th, 7th, and 8th Grade Science

- ✓ No Prep, Ready-to-Use Resource in Google and Office Format
- ✓ Includes Comprehension and Extension Questions



Reading Comprehension Passage & Questions

Earthquakes

6th, 7th, and 8th Grade Science

- ✓ No Prep, Ready-to-Use Resource in Google and Office Format
- ✓ Includes Comprehension and Extension Questions



Reading Comprehension Passage & Questions

Hurricanes

6th, 7th, and 8th Grade Science

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- ✓ Includes Comprehension and Extension Questions



PAPER BRIDGE ENGINEERING CHALLENGE

Middle School



The Standard is Explained and the Resources it Incorporates are Outlined

Next Generation Science Standards Package MS ESS3 Earth and Human Activity

Note: There are resources that overlap between the standards. Simply choose the order that best fits your classroom. Also, there are more resources here than you will most likely decide to use. I have provided extra so you can make the best decision for your students on what is best to include.

MS-ESS3-1. Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes. [Clarification Statement: Emphasis is on how these resources are limited and typically non-renewable, and how their distributions are significantly changing as a result of removal by humans. Examples of uneven distributions of resources as a result of past processes include but are not limited to petroleum (locations of the burial of organic marine sediments and subsequent geologic traps), metal ores (locations of past volcanic and hydrothermal activity associated with subduction zones), and soil (locations of active weathering and/or deposition of rock).]

Resources:

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MS-ESS3-2. Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.

[Clarification Statement: Emphasis is on how some natural hazards, such as volcanic eruptions and severe weather, are preceded by phenomena that allow for reliable predictions, but others, such as earthquakes, occur suddenly and with no notice, and thus are not yet predictable. Examples of natural hazards can be taken from interior processes (such as earthquakes and volcanic eruptions), surface processes (such as mass wasting and tsunamis), or severe weather events (such as hurricanes, tornadoes, and floods). Examples of data can include the locations, magnitudes, and frequencies of the natural hazards. Examples of technologies can be global (such as satellite systems to monitor hurricanes or forest fires) or local (such as building basements in tornado-prone regions or reservoirs to mitigate droughts).]

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Who is this Bundle for?

- **Teachers who teach grade 7 science in California and who use the ‘Preferred Integrated Model’**
- **Teachers who want a variety of resources at their fingertips in order to meet the standards**
- **Teachers who don’t have time to develop their own resources or organize what to teach and when**