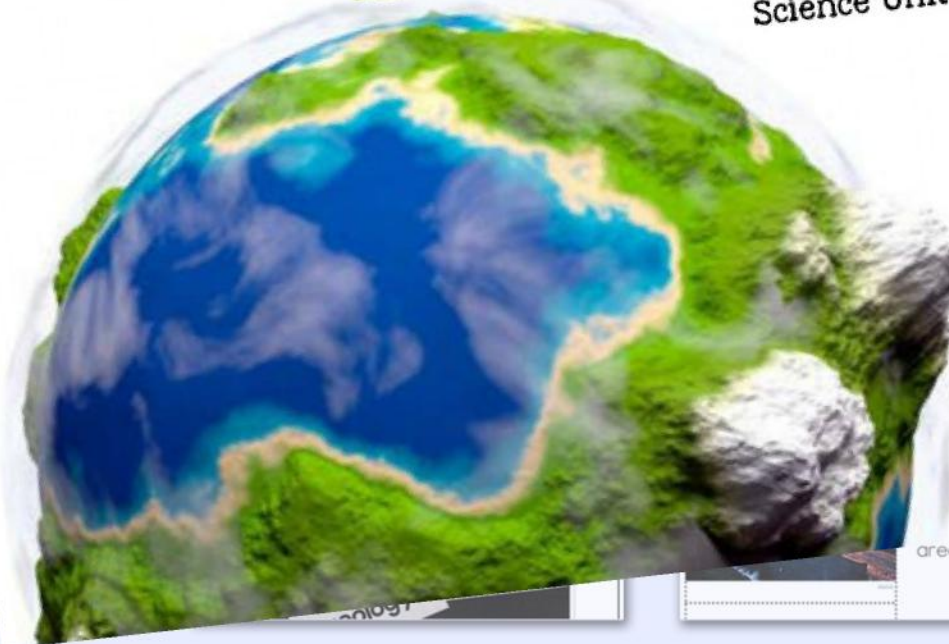


2ND
GRADE

Processes that SHAPE the EARTH

2nd Grade
Science Unit



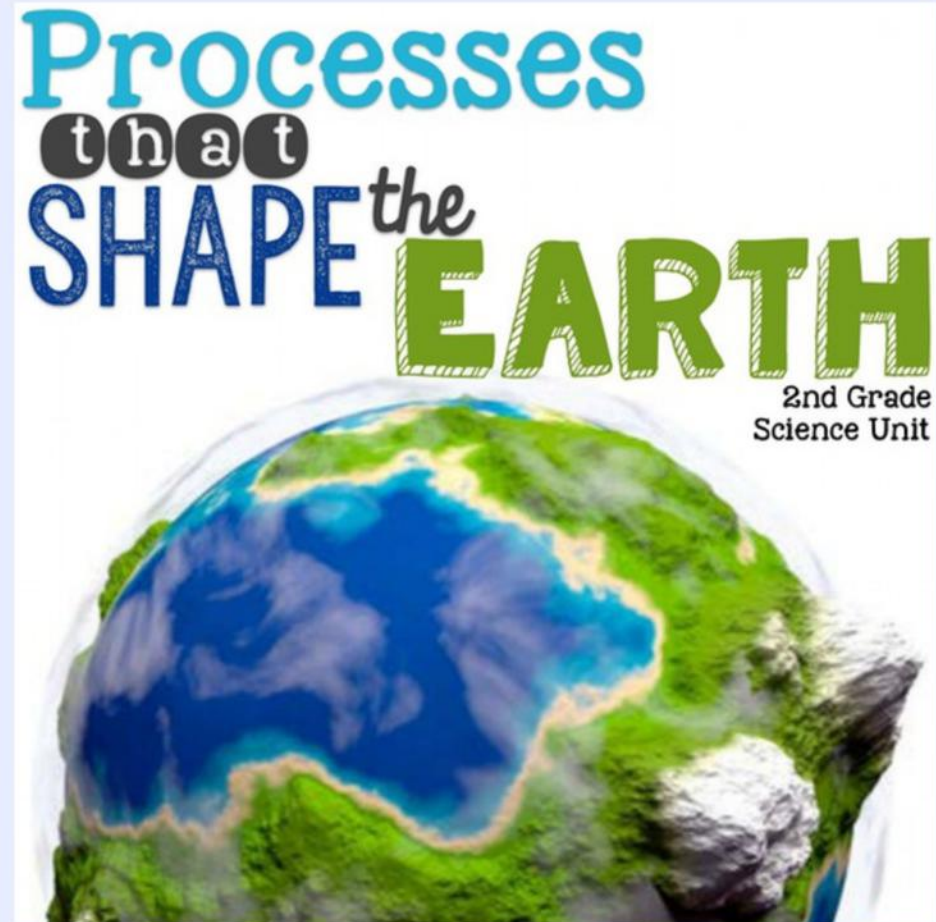
Processes that SHAPE the EARTH

SYSTEMS SCIENCE BUNDLE 2ND
GRADE NGSS SCAFFOLDED



KEEP SCROLLING TO SEE
WHAT'S INSIDE!

ACTIVITY OVERVIEW



Processes that SHAPE the EARTH
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ESS1.C The History of Planet Earth: How the Earth Changes
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During Reading (Text Dependent Questions)
After Reading (Oral & Written Language Comprehension Activity)
Writing Prompt Assessment

ESS2.A Earth Materials and Systems: Wind and Water Change the Land
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During Reading (Text Dependent Questions)
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Writing Prompt Assessment

Processes that SHAPE the EARTH
About the Leveled Passages

There are two versions of each of the first two for a total of six pages for each section.

Level One passage is appropriate for second grade level readers. Level One passage is for students who are slightly below grade level and need additional support with easier text. Level Three is for students who need a more challenging text. Each of these three passages are offered with and without the vocabulary words underlined for a total of six types of passages. Here are examples of text from each level and notable differences.

Level One	Level Two	Level Three
Earth looks blue from space. Most of Earth is water. Earth may be the only planet with water.	From space, Earth looks like a blue planet. Water covers most of the Earth. We think that Earth is the only planet with water.	When you look at Earth from space, the Earth looks like a blue planet. More than half of Earth is covered by water. It is the only planet that has water as far as we know.
Level one has simple sentences with familiar vocabulary. There are also fewer pronoun references that can be difficult for inexperienced English readers.	Level two uses more phrases and simple clauses. The tone tends to be informal. Sentence length is varied.	Level three is complex sentences with adverbial phrases and clauses. It has a more sophisticated use of language and higher level specific vocabulary.

Suggestions for Use

There are a variety of ways to use these two passages. Some suggestions are:

- use the passages in small groups and differentiate based on the level of the group
- use the Level Two passage for your whole group and pull a small group for students who need extra support. Use the Level One passage with that group in either a pre-teaching or reteaching capacity.

Processes that SHAPE the EARTH
Teacher Notes

Thank you for your purchase!

This unit is all about Processes that Shape the Earth, from the Next Generation Science Standards Second Grade.

There are four sections in the unit. Each section has a **Before Reading**, **During Reading**, and **After Reading** activities in addition to a **Writing Prompt**.

The **Before Reading** activities develop vocabulary (including three-part vocabulary cards) and oral language activities that develop the language of the comprehension skill (including whole-group and partner/individual sorts).

The **During Reading** includes text dependent comprehension questions.

The **After Reading** activities provide students oral and written practice using sentence frames and the new content vocabulary to express the comprehension skill.

Also included for each section is a **Writing Prompt and Rubric** to assess how well students understand the content and learned the language of the comprehension skill.

Writing Prompts

Writing prompts are designed as a summative activity for students to show their understanding of the content and use of the language patterns specific to that comprehension skill. Using a Word Bank and Sentence Frames will help students with their language. During the writing assessment, provide individual students with sentence frames and a word bank as needed.

Processes that SHAPE the EARTH
Oral Language Routines

These following Oral Language Routines will help students become familiar with the vocabulary and language patterns orally, before being asked to respond to the written prompts. The more practice students have in whole group and partner settings, the better equipped they will be to answer the writing prompts using appropriate academic language.

Whole Group

Whole Group Echo Talk (Choral Response)

In this routine, the teacher says a word, phrase or sentence, and the whole class echoes the word, phrase or sentence. Do the echo / response multiple times with many variations of the sentences. Change out the words, phrases, or change around the sentence. Provide students with many examples of ways to say the sentences.

Student be the Teacher Model

This routine has a student be the teacher. The student gets to choose the sentence, vocabulary, etc., and then the whole class echoes / responds with the student's choices.

Partners

Partner Echo Talk (Call & Response)

This routine works very similarly to the Whole Group Echo Talk, but instead partner A chooses a sentence, Partner B then echoes it while Partner A listens. Partner A just said. Students switch roles so that each partner has an opportunity to choose what is being said.

Think (Write) Pairs Share with Sentence Frames

Using the sentence frames, each partner chooses their own sentence. Partners can write the sentence, think / remember it in their heads. After the allotted time, the partners pair share with one another. The teacher then asks for some students to share out, either using random volunteers or having students volunteer to share.

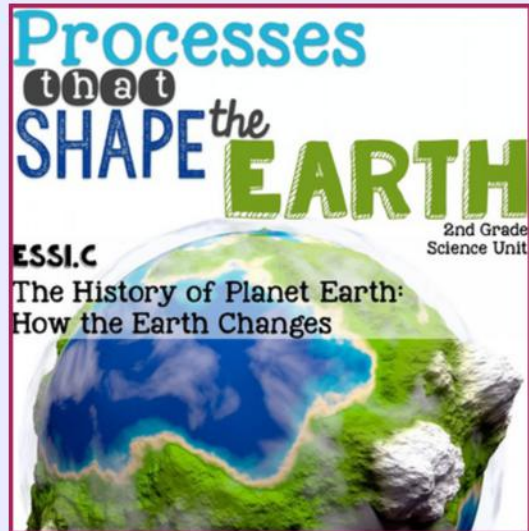
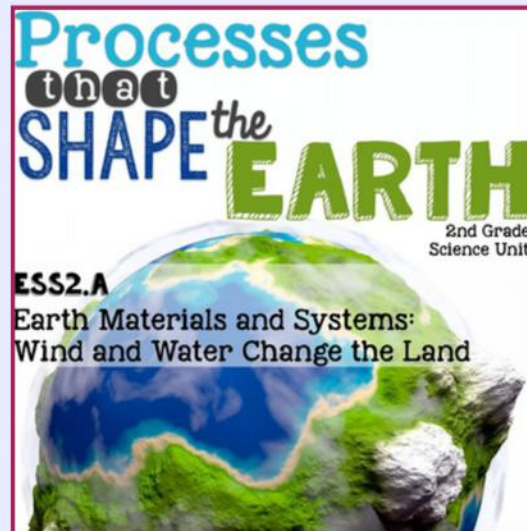
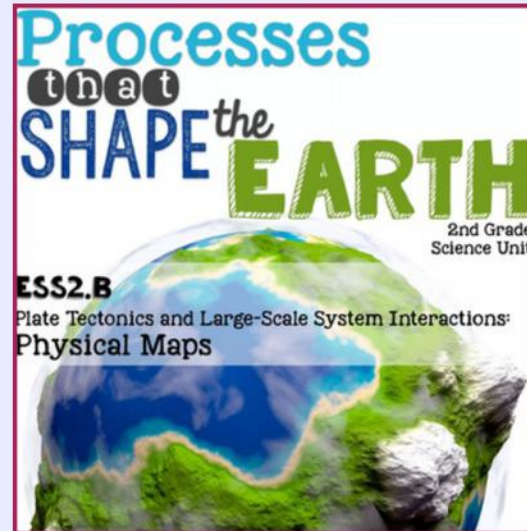
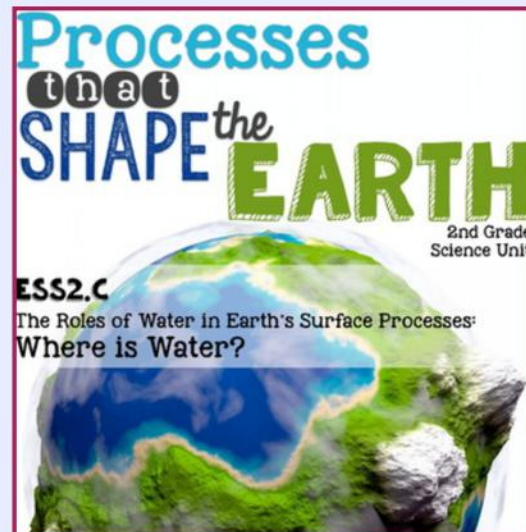
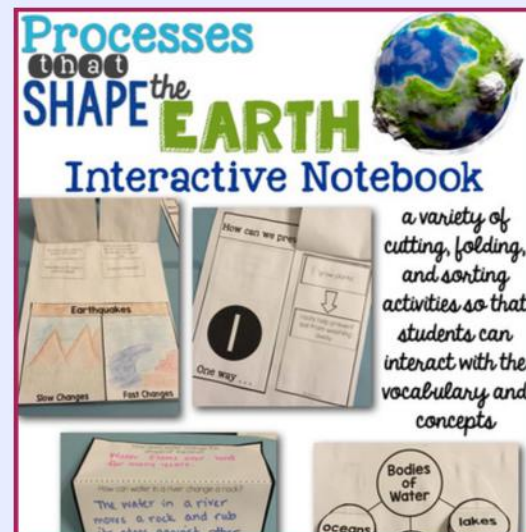
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Teacher Notes

Oral Language Routines

About the Leveled Passages

WHAT'S INCLUDED IN THE BUNDLE?



Unit Overview:

- ✓ 1. **ESS1.C: How the Earth Changes – Compare & Contrast**
- ✓ 2. **ESS2.A: Wind and Water Change the Land – Cause & Effect**
- ✓ 3. **ESS2.B: Physical Maps – Sequence of Events**
- ✓ 4. **ESS2.C: Where is Water? – Main Idea & Details**
- ✓ 5. **Interactive Notedbook**

WHAT'S INCLUDED IN THE BUNDLE?

Included Resources:

- **Leveled Passages:** High, Medium, Low for differentiation.
- **Before Reading:**
 - Three-Part Vocabulary Cards
 - Language development activity to introduce the comprehension skill.
- **During Reading:** Text-dependent questions.
- **After Reading:**
 - Comprehension skill reinforcement activity.
 - Language development practice with new content.
- **Summative Assessment:** Written comprehension test for each section.
- **Science Activities:** One hands-on activity per section.

Key Features:

- Ideal for all second graders, including English learners and struggling readers.
- Scaffolded activities with clear skill-focused language patterns.
- Supports reading comprehension through engaging science content.

READINGS & ACTIVITIES IN EACH PRODUCT



BEFORE READING AND DEMONSTRATIONS



3 PART VOCABULARY CARDS



POCKET CHARTS



READING PASSAGE

LEVEL 1

LEVEL 2

LEVEL 3

LEVEL 1

LEVEL 2

LEVEL 3

The History of Earth: How the Earth Changes

Geology tells us about the Earth. Geologists are scientists. They tell us how the Earth has changed. The shapes of mountains, rivers, and oceans have all changed. Even the shapes and sizes of the rocks have changed. Geologists look carefully at rocks, land and water to learn how the earth changes.

Geologists look at the different parts, or layers, of the earth. The layers help them know how the Earth has changed. The Earth is made of four layers, the crust, the mantle, the outer core and the inner core.

We see the surface of the Earth. The surface is soil or dirt and rocks. The crust is below the surface. The crust has giant pieces, or plates. The plates move very slowly. The plates are like pieces of a gigantic puzzle.

The plates are like pieces of a puzzle.

No one has ever gone below the crust. Scientists happen in earthquakes. The Earth's layers are different when they go. Different kinds of rocks. Seismic waves move, get about the layers of rock.

Under the crust is the mantle. The mantle is thick, hot rock, below the mantle. Seismic outer core is super hot. The inner core is a solid ball.

The surface of the earth is always changing. Many things make the surface of the earth change. Some of the changes on the surface happen because of temperature, water and wind. Other changes happen because of events in the crust under the surface changes. For example, when there are volcanoes and earthquakes. Some of the changes on the earth's crust, or surface, are very fast, but others are so slow that we can't see them happen.

The History of Earth: How the Earth Changes

Geology is the story of our Earth. Geologists are scientists who study the Earth and tell us the story, or the history, of our Earth. The shapes of mountains, rivers, and oceans have all changed. Even the shapes and sizes of the rocks have changed over thousands and millions of years! Geologists look carefully at rocks and at the shape of the land and water to learn about how the Earth changes.

When geologists study the changes that have happened on earth, they look at the different parts, or layers, of the earth. The Earth is made of four layers, the crust, the mantle, the outer core and the inner core.

The surface is the part of the earth that we see, touch and walk on. The surface is made of soil or dirt and rocks. Underneath the surface is the crust. The crust has giant pieces, or plates, that are always moving very, very slowly. The plates are like pieces of a gigantic puzzle.

Under the crust is the mantle. The mantle is a layer of thick, hot rock. Below the mantle is the outer core. Scientists think the outer core is made of super hot, molten (liquid) rock. Scientists think the inner core is a solid ball.

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PASSAGES WITH
VOCABULARY NOT
UNDERLINED

PASSAGES WITH
VOCABULARY
UNDERLINED

COMPREHENSIVE QUESTION & ASSESSMENT

Processes that SHAPE the EARTH

during Reading Questions

The History of Earth: How the Earth Changes

What do geologists do?
What are the layers of the Earth?
How do geologists know about the insides of the Earth?

Rock Erosion and Weathering

Give an example of two things that work together to change rocks.
Describe the change.

Rock Erosion and Weathering (con't)

What difference does the hardness of a rock make with sand erosion?
Describe how the Wave or a Hoodoo was formed.

Earthquakes and Volcanos

Describe what causes an earthquake.
Describe an effect of an earthquake on the surface of the Earth.
Describe a shape that the hard lava can make.
Give an example of a slow change and a fast change.



TEXT DEPENDENT
COMPREHENSIVE
QUESTIONS

Processes that SHAPE the EARTH

Write About It
Changes to the Earth's Surface
Describe one event that happens quickly and one event that happens slowly to change the shape of the Earth's surface.

Processes that SHAPE the EARTH

Write About It
Changes to the Earth's Surf
Describe one event that happens quickly and one event that happens slowly to change the shape of the Earth's surface.

Processes that SHAPE the EARTH

Writing RUBRIC

5	Student is able to respond to the topic in-depth with almost no support of the classroom anchor charts and sentence frames. May use charts for help with spelling.
4	Student is able to respond to the topic appropriately with little support of classroom anchor charts and sentence frames.
3	Student is able to produce on-topic response with the language of the comprehension skill, but requires heavy support from classroom anchor charts and sentence frames.
2	Student is able to produce on-topic sentences with some support. Sentences answer the prompt, but may not demonstrate understanding of how to use the language of the comprehension skill.
1	Student is not able to produce on-topic sentences without one-on-one support.

ASSESSMENT AND RUBRIC
FOR EACH SECTION

YOU WILL LOVE THIS BECAUSE



Transform Your Earth Science Lessons

Make complex concepts simple and engaging for your second graders.



Aligned with NGSS

These lesson plans aren't just random; they're laser-focused on Next Generation Science Standards. No more curriculum guesswork!



Save Time, Teach More

Ready-to-use activities that build comprehension and confidence.

TEACHERS LOVE IT!



My students loved this unit!! It was a great resource to speak of earth and its characteristics! We loved it!

Nicole E.



This resource has everything you need to teach earth science for 2-3 grade! Thank you for creating this incredible resource!

Enilda V.



My passion is making learning accessible to all students.
I love scaffolding learning, breaking down the concepts and
building them up so that students can see the connections.
I love figuring out the small components that build up to
the big ideas and helping students see it all.



What I have **LEARNED**