

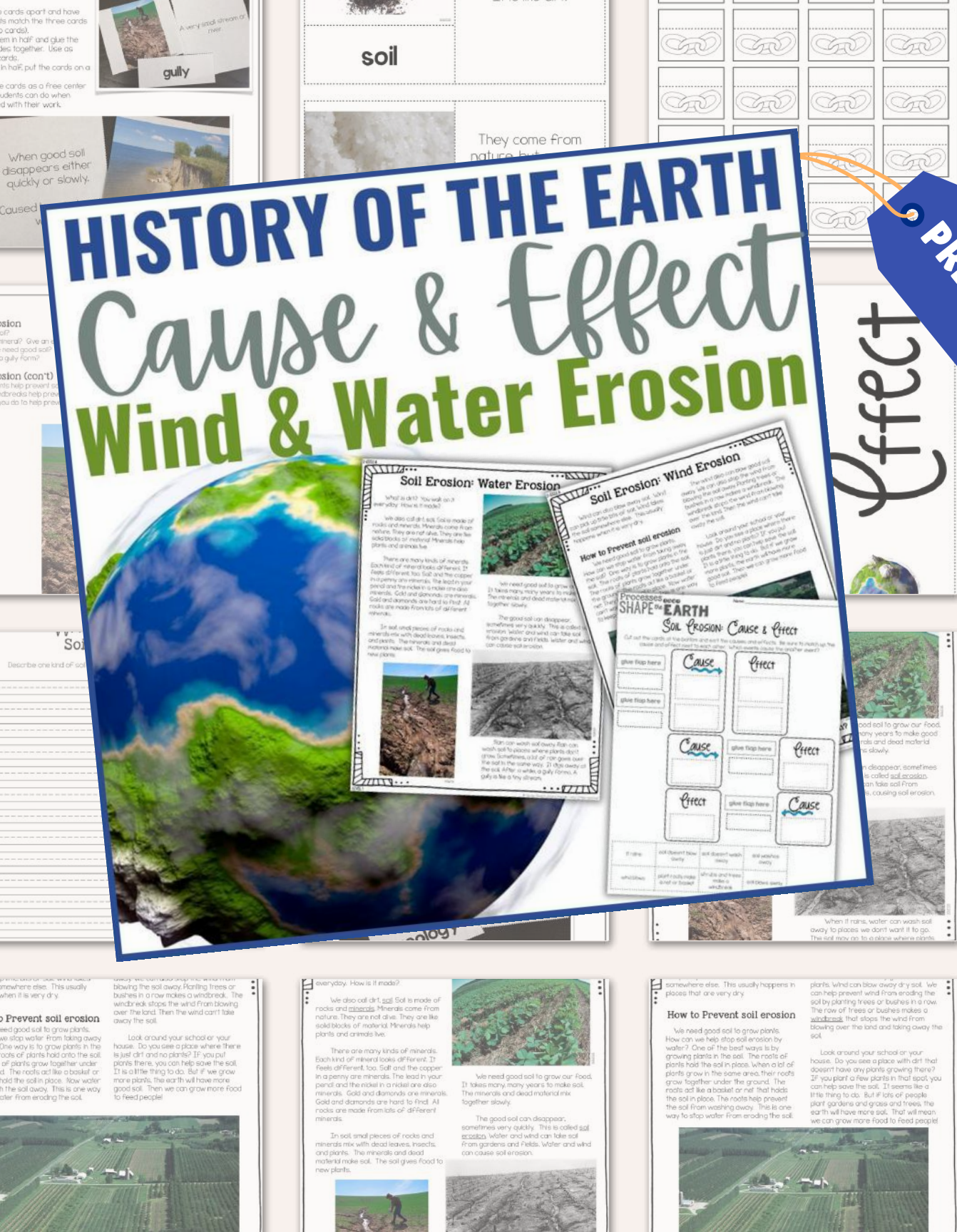
HISTORY OF PLANET EARTH

CAUSE & EFFECT

WIND & WATER EROSION

PREVIEW

KEEP SCROLLING TO SEE
WHAT'S INSIDE!

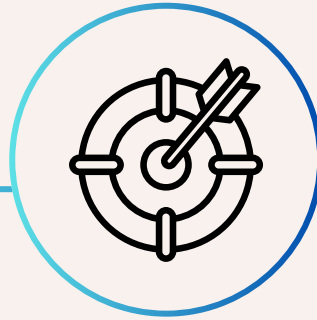


YOU WILL LOVE THIS BECAUSE



Differentiated Passages

Includes texts at different difficulty levels to help all students understand complex concepts, regardless of their reading skills.



Aligned with NGSS

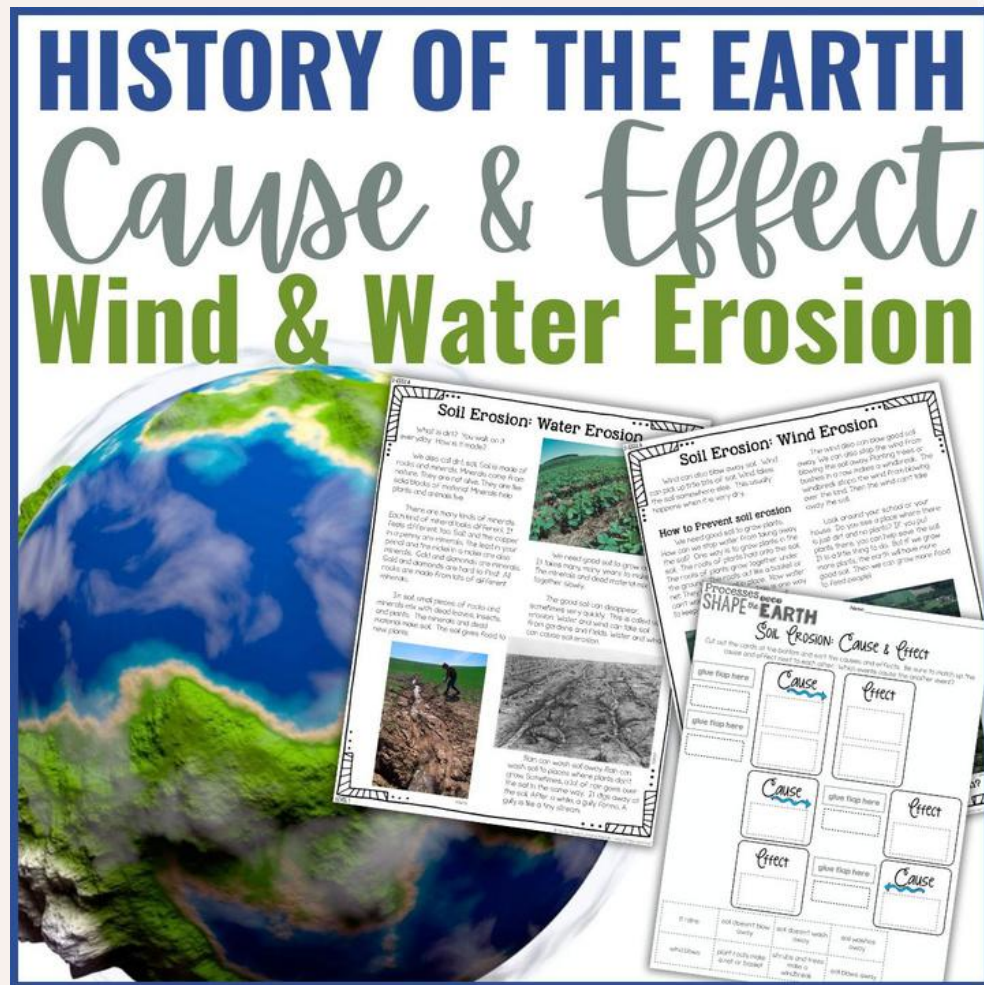
These lessons integrate science, reading, and language development and focus on using academic language with cause & effect.



Scaffolded Activities

Vocabulary cards and structured exercises help English learners and struggling readers understand key concepts and improve their comprehension skills.

ACTIVITY OVERVIEW



Processes ⁰⁰⁰⁰ SHAPE the EARTH

Table of Contents

Teacher Notes
About the Leveled Passages
Oral Language Routines

ESS1.C The History of Planet Earth: How the Earth Changes
Before Reading (Demonstrations, Vocabulary, Oral Language Development)
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
Before Reading (Demonstrations, Vocabulary, Oral Language Development)
During Reading (Text Dependent Questions)
After Reading (Oral & Written Language Comprehension Activity)
Writing Prompt Assessment

ESS2.B Plate Tectonics and Large-Scale System Interactions: Physical Maps
Before Reading (Demonstrations, Vocabulary, Oral Language Development)
During Reading (Text Dependent Questions)
After Reading (Oral & Written Language Comprehension Activity)
Writing Prompt Assessment

ESS2.C The Roles of Water in Earth's Surface Processes: Where is Water?
Before Reading (Demonstrations, Vocabulary, Oral Language Development)
During Reading (Text Dependent Questions)
After Reading (Oral & Written Language Comprehension Activity)
Writing Prompt Assessment

Processes ⁰⁰⁰⁰ 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 understood 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 written responses. Remove scaffolding as students become more successful with the language. During the writing assessment, provide individual students with sentence frames and a word bank as needed.



Table of Contents

Teacher Notes

Processes ⁰⁰⁰⁰ SHAPE the EARTH

About the Leveled Passages

There are two versions of each of the three texts for a total of six texts for each section.

Level Two 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 read a more challenging text. Each of these three passages are inferred 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
Earth looks blue from space. Most of Earth is water. Earth may be the only planet with water.

Level Two
From space, Earth looks like a blue planet. Water covers most of the Earth. We think that Earth is the only planet with water.

Level Three
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 ⁰⁰⁰⁰ 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 / repeats the sentence. Partner A just said. Students switch roles so that each student has an opportunity to choose what is being said.

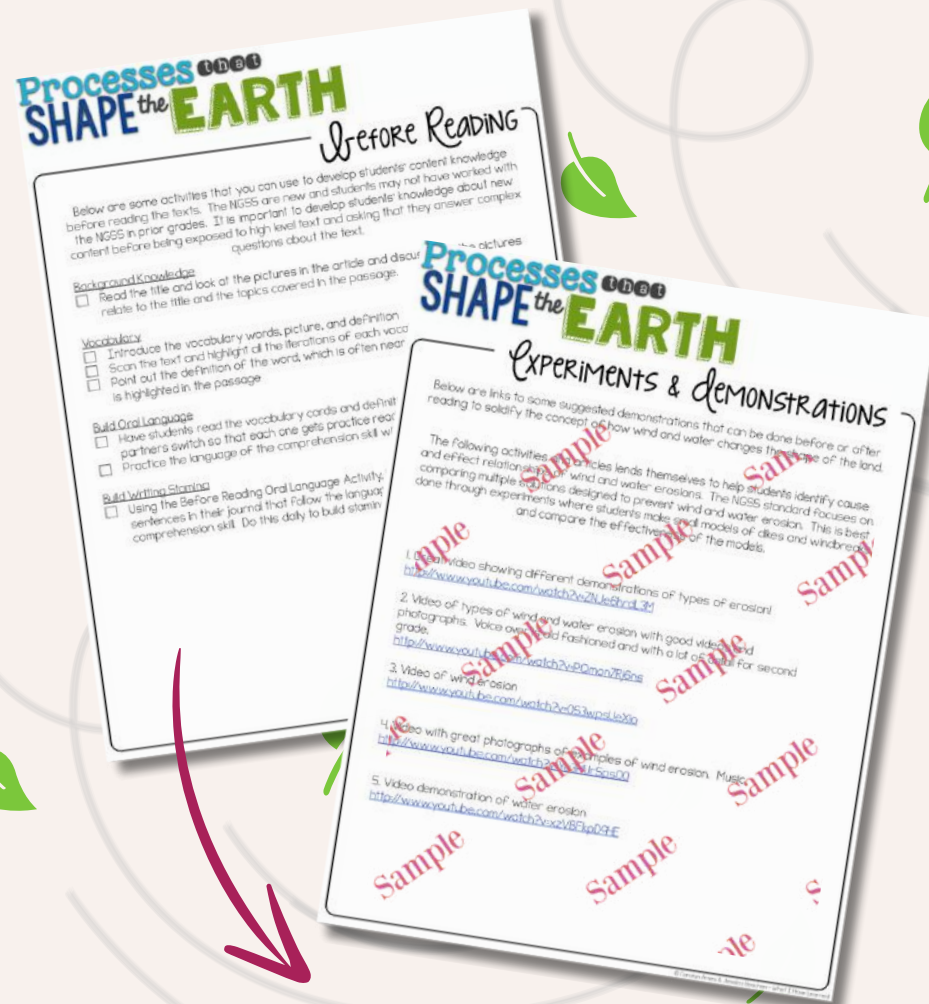
Think (Write) Partner Share with Sentence Frames
Using the sentence frames, each partner chooses their own sentence. Partners can write the sentence, or just remember it in their heads. After the allotted think time, the partners pair-share with one another. The teacher then asks for some students to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



Oral Language Routines

About the Leveled Passages

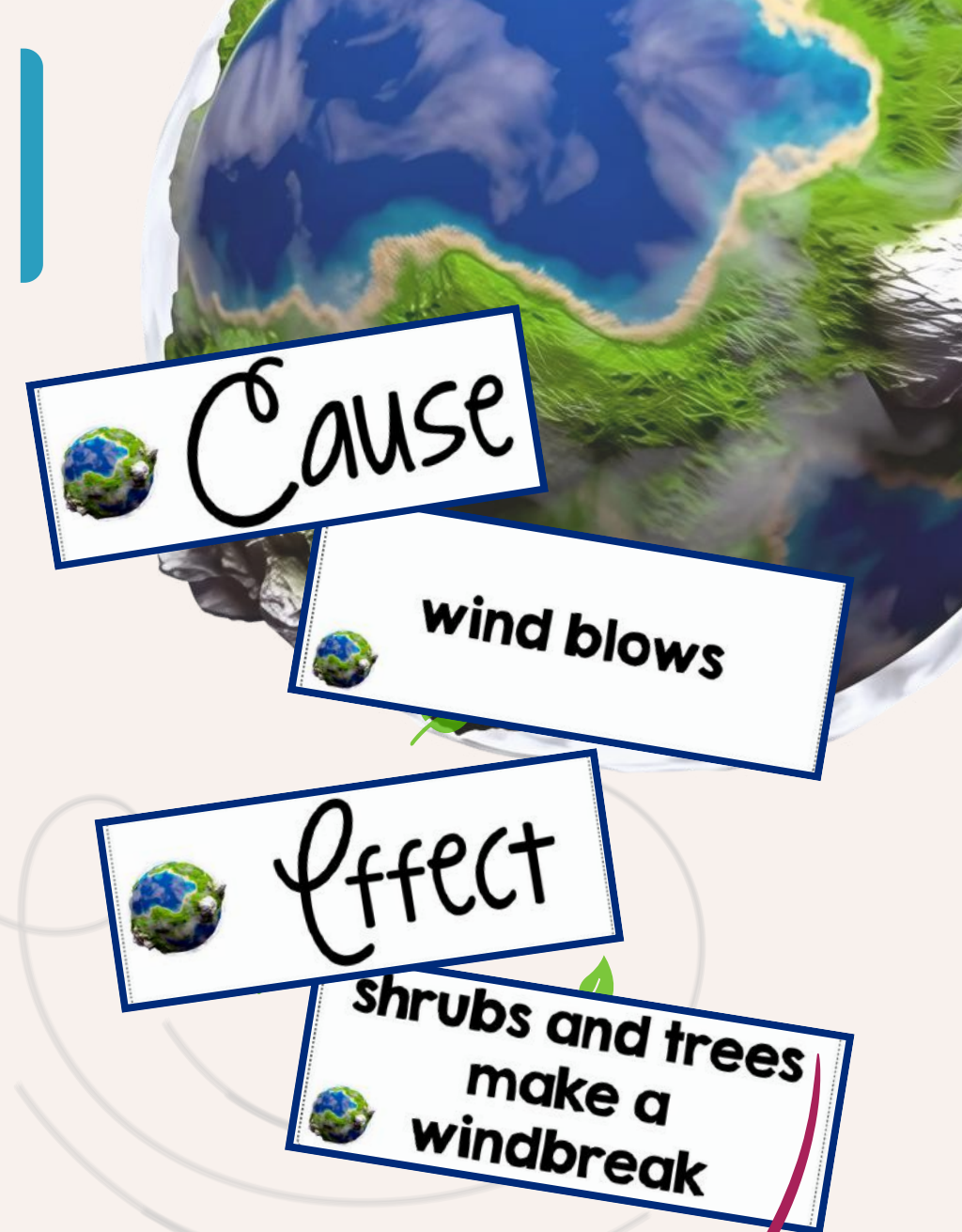
READINGS & ACTIVITIES



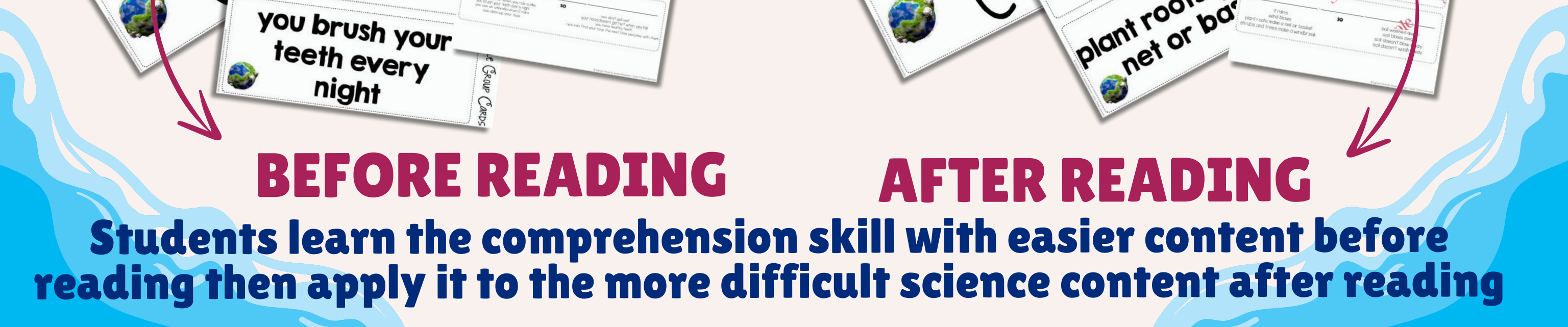
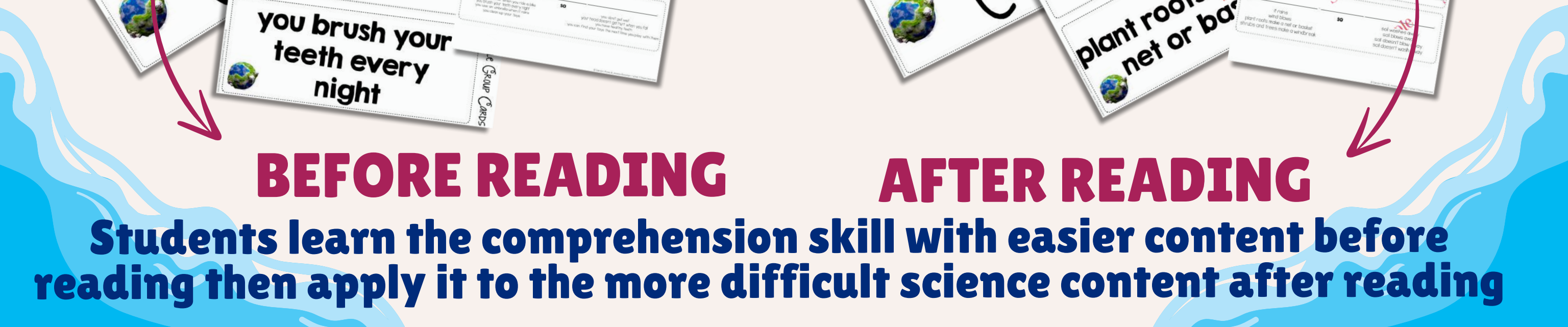
**BEFORE READING
ACTIVITIES &
DEMONSTRATIONS**



**3 PART
VOCABULARY
CARDS**



**POCKET
CHART
CARDS**



The infographic is set against a background of stylized blue waves. At the top, several white cards with black text and small globe icons are shown. A red arrow points from the 'BEFORE READING' section to the first card, which says 'you brush your teeth every night'. Another red arrow points from the 'AFTER READING' section to a card that says 'plant roots make a net or bar'. The cards also contain smaller text about soil erosion and windbreaks.

BEFORE READING

AFTER READING

Students learn the comprehension skill with easier content before reading then apply it to the more difficult science content after reading

The infographic is set against a background of stylized blue waves. At the top, several sample cards are shown. On the left, under the 'BEFORE READING' section, a card reads 'you brush your teeth every night' with a small globe icon. To its right, another card partially shows text about 'your head doesn't get hot when you fall'. On the right, under the 'AFTER READING' section, a card reads 'plant roots make a net or bar' with a globe icon. To its right, another card partially shows text about 'if rain wind blows soil blows away'. Two red arrows point from the sample cards down to the central text.

BEFORE READING

AFTER READING

Students learn the comprehension skill with easier content before reading then apply it to the more difficult science content after reading

The infographic is set against a background of stylized blue waves. At the top, several sample cards are shown. On the left, under the 'BEFORE READING' section, a card reads 'you brush your teeth every night' with a small globe icon. To its right, another card partially shows text about 'your head doesn't get hot when you fall'. On the right, under the 'AFTER READING' section, a card reads 'plant roots make a net or bar' with a globe icon. To its right, another card partially shows text about 'if rain wind blows soil blows away'. Two red arrows point from the sample cards down to the central text.

BEFORE READING

AFTER READING

Students learn the comprehension skill with easier content before reading then apply it to the more difficult science content after reading

READING PASSAGE

LEVEL 1

LEVEL 2

LEVEL 3

DIFFERENTIATED
PASSAGE



2-ESS2.A

Soil Erosion: Water Erosion

What is dirt? You walk on it everyday. How is it made?

We also call dirt, soil. Soil is made of rocks and minerals. Minerals come from nature. They are not alive. They are like solid blocks of material. Minerals help plants and animals live.

There are many kinds of minerals. Each kind of mineral looks different. It feels different, too. Salt and the copper in a penny are minerals. The lead in your pencil and the nickel in a nickel are also minerals. Gold and diamonds are minerals. Gold and diamonds are hard to find. All rocks are made from lots of different minerals.

In soil, small pieces of rocks and minerals mix with dead leaves, insects, and plants. The minerals and dead material make soil. The soil gives food to new plants.



We need good soil to grow. It takes many, many years to make. The minerals and dead material together slowly.

The good soil can disappear sometimes very quickly. This is called soil erosion. Water and wind can take soil from gardens and fields. Water can cause soil erosion.



Rain can wash soil away to places we don't want it to go. Water may take it to a place where the soil can't help plants grow. Sometimes, a lot of the soil in the same way, the soil. After a while, a gully is like a tiny stream.

LEVEL 1

2-ESS2.A

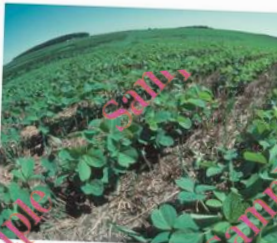
Soil Erosion: Water Erosion

What is dirt? You walk on it everyday. Do you ever wonder how it is made?

Soil is another word for dirt. Soil is made of tiny bits of rocks and minerals. Minerals come from nature. They are not alive. They are like solid blocks of material. Minerals help plants and animals survive.

There are many kinds of minerals. Each kind of mineral looks and feels different. Salt, and the copper in a penny are examples of minerals. The lead in your pencil and the nickel in a nickel are other minerals. Gold and diamonds are also minerals but they are hard to find. All rocks are made from different minerals.

To make soil, bits of rocks and minerals are mixed together with things that used to be alive. Dead leaves, plants and insects help make soil. The minerals and dead material in the soil help to feed new plants.



We need good soil to grow our. It takes many, many years to make soil. Mixing minerals and dead material together happens slowly.

Good soil can disappear, sometimes very quickly. This is called soil erosion. Water and wind can take soil from gardens and fields, causing soil erosion.



When it rains, water can wash soil away to places we don't want it to go. The soil may go to a place where plants don't grow. Sometimes, a lot of rain goes over the soil in the same way. It digs away at the soil. After a while, a gully forms. A gully is like a very tiny stream.

LEVEL 2

2-ESS2.A

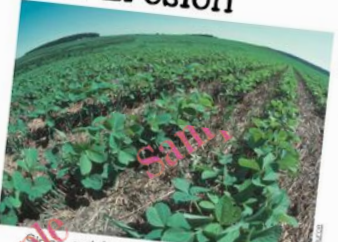
Soil Erosion: Water Erosion

What is dirt? You walk on it everyday. Do you ever wonder how it is made?

Soil is another word for dirt. Soil is made of tiny bits of rocks and minerals. Minerals come from nature and they are not alive. They are like solid blocks of material. Minerals help plants and animals survive.

There are many kinds of minerals. Each kind of mineral looks and feels different. Salt, copper in a penny, lead in your pencil and nickel in a nickel are minerals you might know. Gold and diamonds are examples of rare minerals. All rocks are made up of different minerals.

To make soil, bits of rocks and minerals are mixed together with things that used to be alive, like leaves that have fallen off of trees, dead insects, and plants. The minerals and dead material that make up soil help to feed new plants.



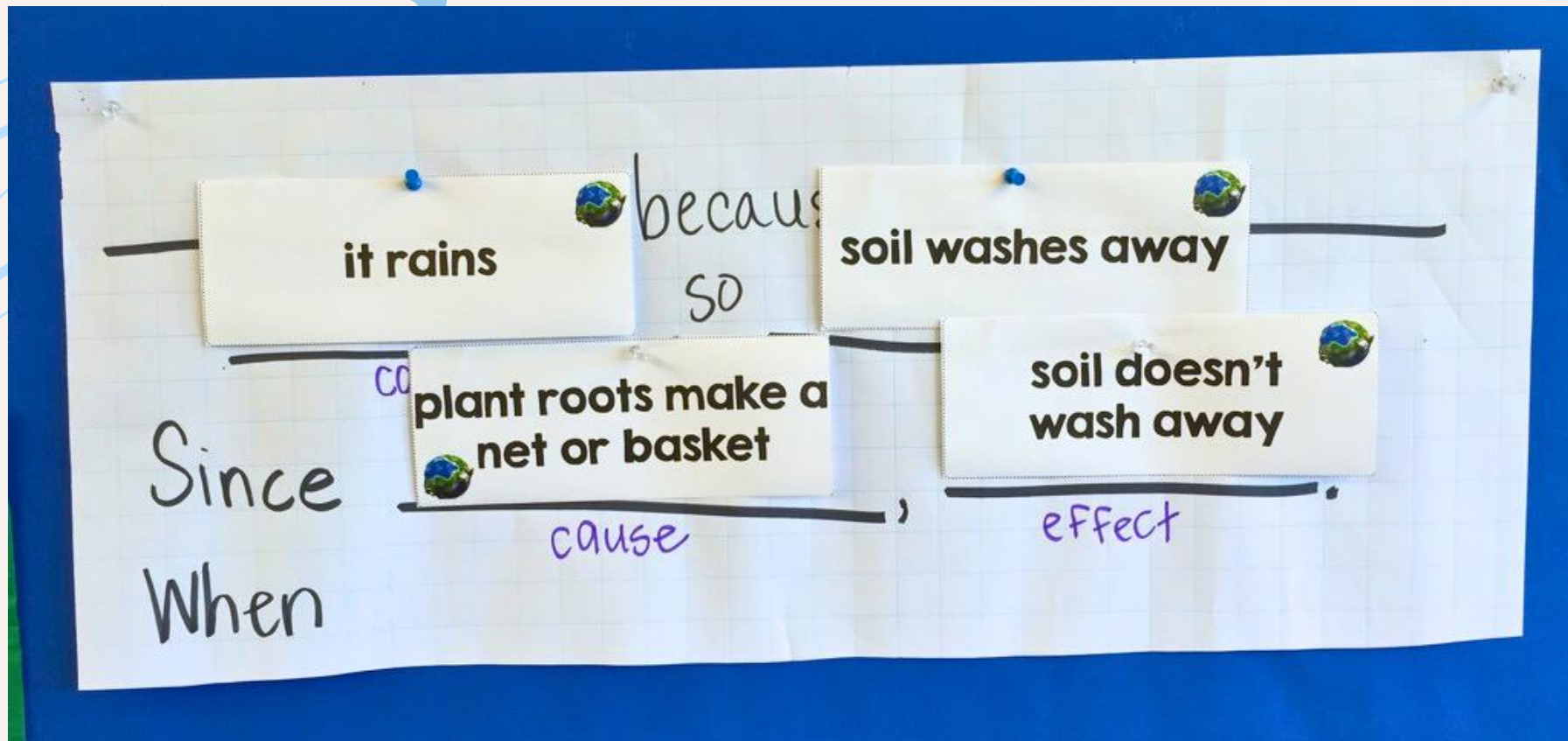
The good soil that plants need can disappear, sometimes very quickly. This is called soil erosion. Water and wind are two forces that can remove soil from gardens and fields, causing soil erosion.



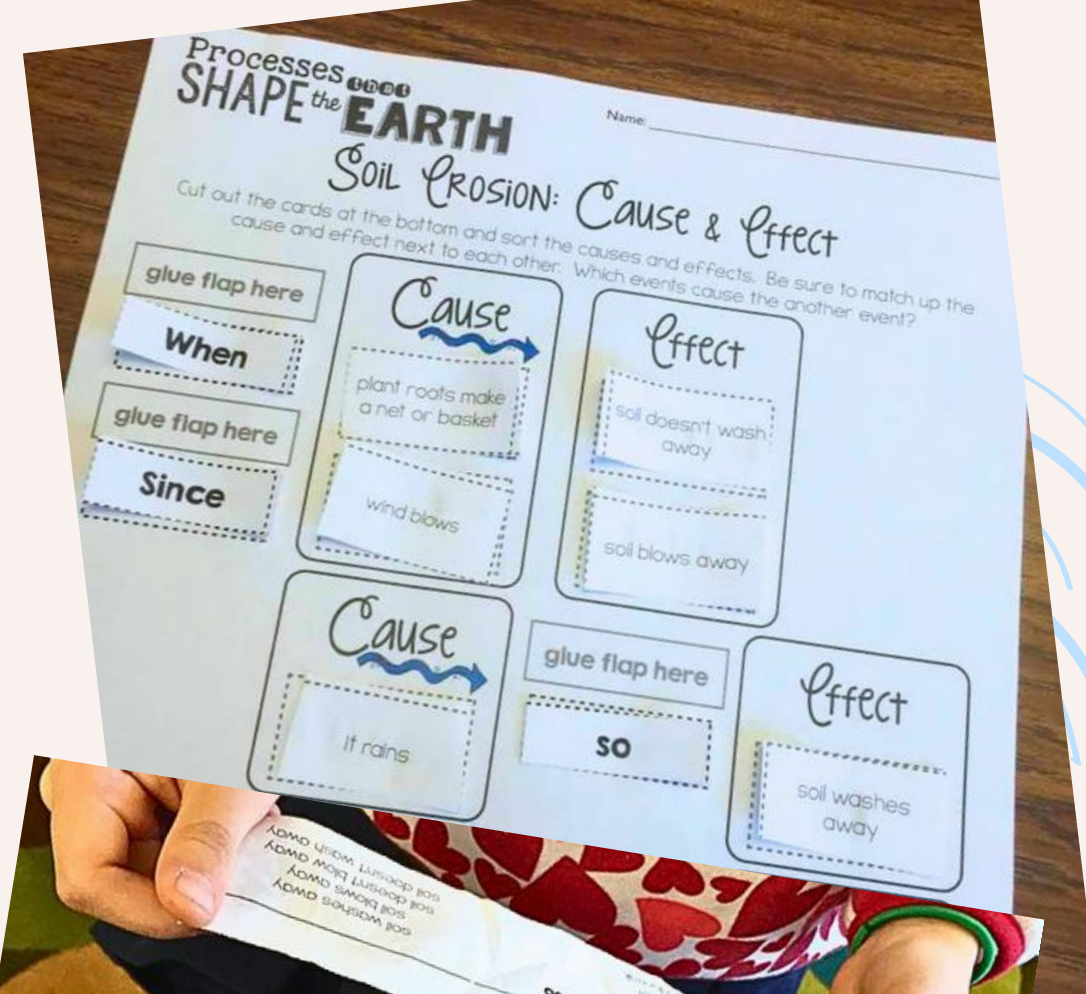
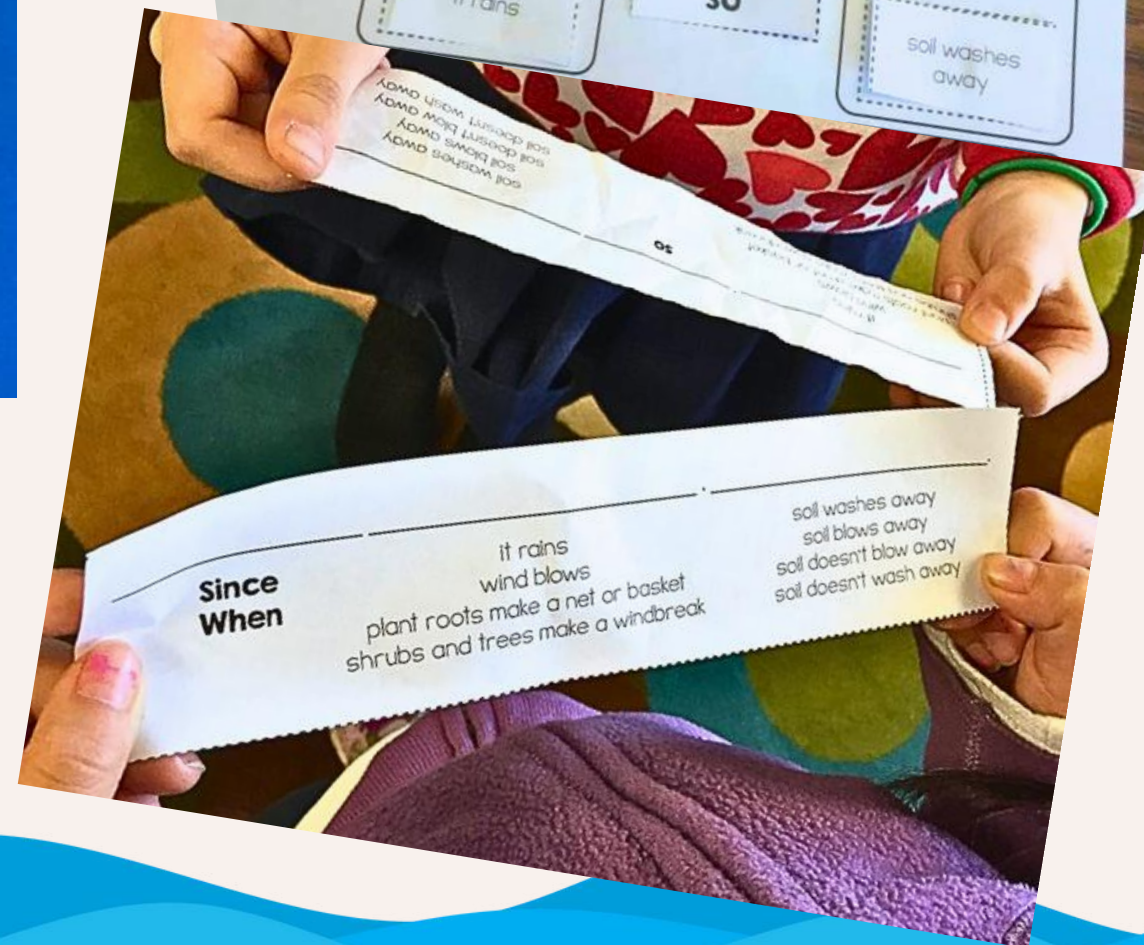
When it rains, water can wash soil away to places we don't want it to go. Water may take it to a place where the soil can't help plants grow. If there is a lot of rain, and water keeps flowing over the soil in the same pathway, it digs away at the soil. After a while, a gully forms. A gully is like a very tiny stream.

LEVEL 3

TEACH ACADEMIC LANGUAGE



PRACTICE ORAL LANGUAGE



Processes that SHAPE the EARTH

during Reading Questions

Soil Erosion

What's in soil?
What is a mineral? Give an example.
Why do we need good soil?
How does a gully form?

Soil Erosion (con't)

How do plants help prevent soil erosion?
How do windbreaks help prevent soil erosion?
What can you do to help prevent soil erosion?



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TEXT DEPENDENT COMPREHENSIVE QUESTIONS

Processes **SHAPE** the **EARTH**

Write About It
Soil Erosion

Name: _____

Describe one kind of soil erosion and tell about a way to stop it.

Processes **SHAPE** the **EARTH**

Write About It
Soil Erosion

Name: _____

Describe one kind of soil erosion and tell about a way to stop it.

Processes **SHAPE** the **EARTH**

Write About It
Soil Erosion

Name: _____

Describe one kind of soil erosion and tell about a way to stop it.

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.

score _____

ASSESSMENT AND RUBRIC FOR EACH SECTION

TEACHERS LOVE IT!



A wonderful resource and an addition to my unit of study. The students were engaged, and I had less prep!

Sandra Morrisohn



Thanks for this great resource. This works hand in hand with your other science materials perfectly.

April G.



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**