

Real Science. Real Thinking. Real Fun.

2ND GRADE

WIND & WATER CHANGES

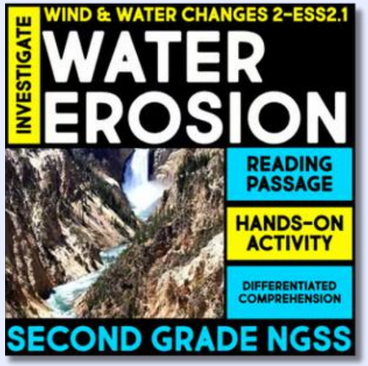
Weathering & Erosion Activities
2nd Grade Science Centers

KEEP SCROLLING TO SEE WHAT'S INSIDE!

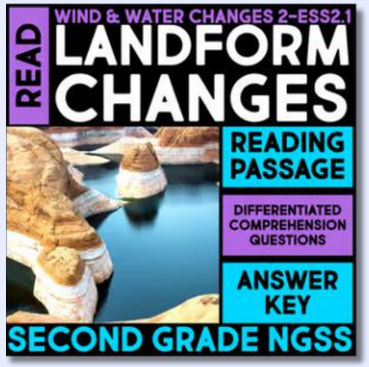
WHAT'S INCLUDED IN THE BUNDLE?

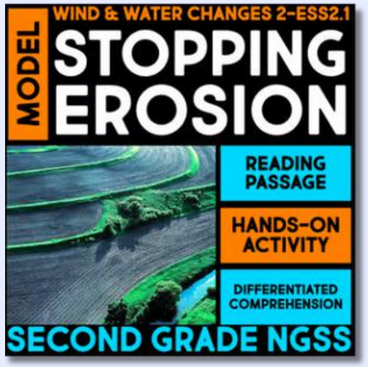
















- 8 Science Stations aligned with the NGSS for 4th grade
- 6 Reading passages
- Hands-on activities
- Differentiated comprehension questions
- Digital Videos & Video Games
- Digital Google Slides & Forms

6 READING PASSAGE

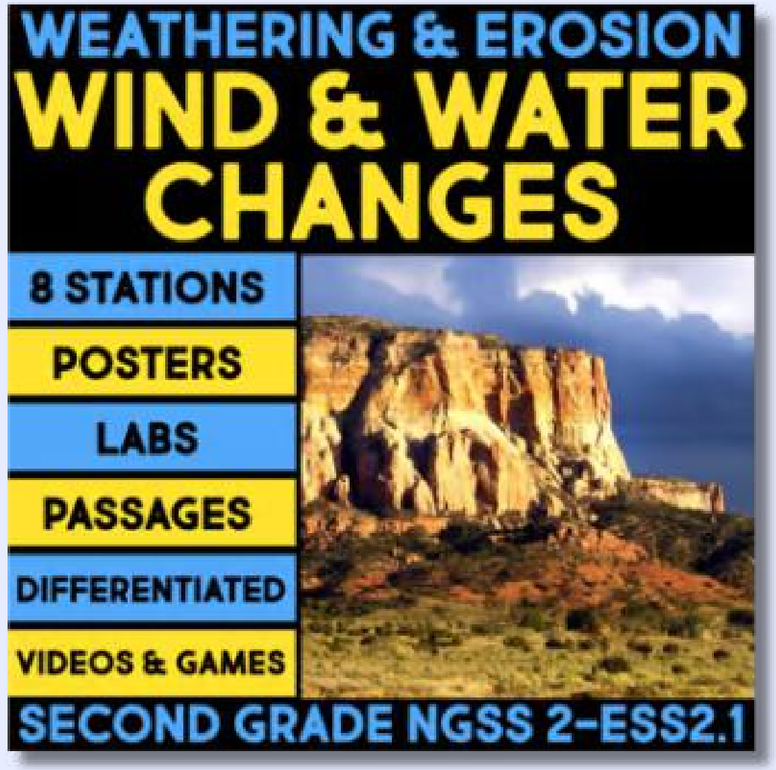


6 Reading Passages that provide all scientific background knowledge for each station

Available in two formats + Digital

Includes pictures and visuals

PAGE OVERVIEW



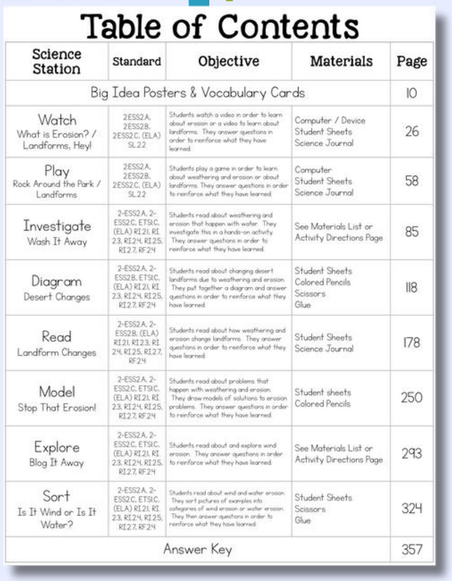


Table of Contents

Science Station	Standard	Objective	Materials	Page
Big Idea Posters & Vocabulary Cards				10
Watch What is Erosion? / Landforms, Hey!	2ESS2.A, 2ESS2.B, 2ESS2.C, (ELA) SL.2.2	Students watch a video in order to learn about erosion or a video to learn about landforms. They answer questions in order to reinforce what they have learned.	Computer / Device Student Sheets Science Journal	26
Play Rock Around the Park / Landforms	2ESS2.A, 2ESS2.B, 2ESS2.C, (ELA) SL.2.2	Students play a game in order to learn about weathering and erosion or about landforms. They answer questions in order to reinforce what they have learned.	Computer Student Sheets Science Journal	58
Investigate Wash It Away	2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7, RF.2.4	Students read about weathering and erosion that happen with water. They investigate this in a hands-on activity. They answer questions in order to reinforce what they have learned.	See Materials List or Activity Directions Page	85
Diagram Desert Changes	2-ESS2.A, 2-ESS2.B, ETS1.C, (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7, RF.2.4	Students read about changing desert landforms due to weathering and erosion. They put together a diagram and answer questions in order to reinforce what they have learned.	Student Sheets Colored Pencils Scissors Glue	118
Read Landform Changes	2-ESS2.A, 2-ESS2.B, (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7, RF.2.4	Students read about how weathering and erosion change landforms. They answer questions in order to reinforce what they have learned.	Student Sheets Science Journal	178
Model Stop That Erosion!	2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7, RF.2.4	Students read about problems that happen with weathering and erosion. They draw models of solutions to erosion problems. They answer questions in order to reinforce what they have learned.	Student sheets Colored Pencils	250
Explore Blog It Away	2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7, RF.2.4	Students read about and explore wind erosion. They answer questions in order to reinforce what they have learned.	See Materials List or Activity Directions Page	293
Sort Is It Wind or Is It Water?	2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) RI.2.1, RI.2.3, RI.2.4, RI.2.5, RI.2.7, RF.2.4	Students read about wind and water erosion. They sort pictures of examples into categories of wind erosion or water erosion. They then answer questions in order to reinforce what they have learned.	Student Sheets Scissors Glue	324
Answer Key				357



Science Stations Overview

Watch a Video
At this station, students will watch a video relevant to the topic and answer questions. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Read a Passage
Students read a short passage about the topic and answer questions about the information in the passage. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Play a Video Game
Students play an online video game and answer questions about the experience. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

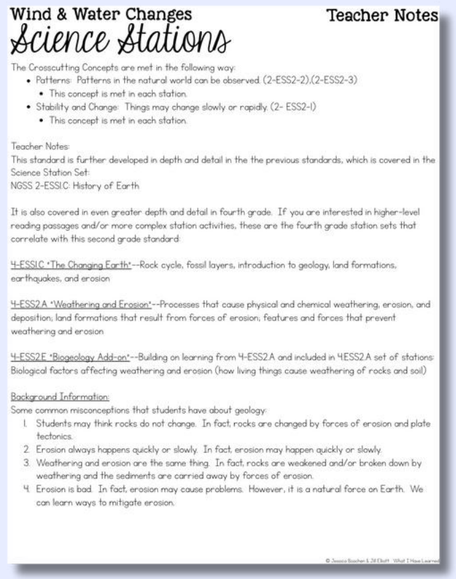
Create a Model
Students use materials to illustrate the science concept and answer questions. You have the option of the included worksheet with the questions or use task cards and have students respond in their science journals.

Investigate
Students use materials to investigate the science topic by following directions and recording results. Students answer questions about the investigation.

Explore
Students create a sample and manipulate it using the new science concepts they have learned. Students answer questions based on the effects.

Draw a Diagram
Students draw and label a diagram specific to certain requirements. Students then explain how their diagram meets the requirements.

Sort
Students sort cards into groups or put them in a specific order. Students record the sort and then describe their reasoning.



Wind & Water Changes Science Stations — Teacher Notes

The Crosscutting Concepts are met in the following way:
- Patterns: Patterns in the natural world can be observed. (2-ESS2-2),(2-ESS2-3)
  - This concept is met in each station.
- Stability and Change: Things may change slowly or rapidly. (2- ESS2-1)
  - This concept is met in each station.

Teacher Notes:
This standard is further developed in depth and detail in the the previous standards, which is covered in the Science Station Set:
NGSS 2-ESSIC: History of Earth

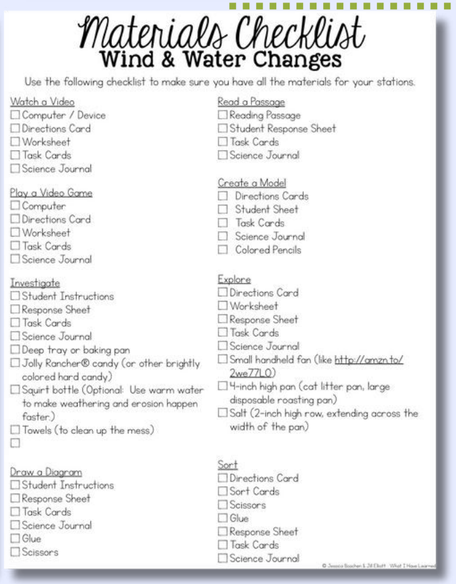
It is also covered in even greater depth and detail in fourth grade. If you are interested in higher-level reading passages and/or more complex station activities, these are the fourth grade station sets that correlate with this second grade standard:

4-ESS1.C "The Changing Earth"--Rock cycle, fossil layers, introduction to geology, land formations, earthquakes, and erosion

4-ESS2.A "Weathering and Erosion"--Processes that cause physical and chemical weathering, erosion, and deposition; land formations that result from forces of erosion; features and forces that prevent weathering and erosion

4-ESS2.E "Biogeology Add-on"--Building on learning from 4-ESS2.A and included in 4ESS2.A set of stations: Biological factors affecting weathering and erosion (how living things cause weathering of rocks and soil)

Background Information:
Some common misconceptions that students have about geology:
1. Students may think rocks do not change. In fact, rocks are changed by forces of erosion and plate tectonics.
2. Erosion always happens quickly or slowly. In fact, erosion may happen quickly or slowly.
3. Weathering and erosion are the same thing. In fact, rocks are weakened and/or broken down by weathering and the sediments are carried away by forces of erosion.
4. Erosion is bad. In fact, erosion may cause problems. However, it is a natural force on Earth. We can learn ways to mitigate erosion.



Materials Checklist
Wind & Water Changes

Use the following checklist to make sure you have all the materials for your stations.

Watch a Video
- ☐ Computer / Device
- ☐ Directions Card
- ☐ Worksheet
- ☐ Task Cards
- ☐ Science Journal

Play a Video Game
- ☐ Computer
- ☐ Directions Card
- ☐ Worksheet
- ☐ Task Cards
- ☐ Science Journal

Investigate
- ☐ Student Instructions
- ☐ Response Sheet
- ☐ Task Cards
- ☐ Science Journal
- ☐ Deep tray or baking pan
- ☐ Jolly Rancher® candy (or other brightly colored hard candy)
- ☐ Squirt bottle (Optional: Use warm water to make weathering and erosion happen faster.)
- ☐ Towels (to clean up the mess)
- ☐

Draw a Diagram
- ☐ Student Instructions
- ☐ Response Sheet
- ☐ Task Cards
- ☐ Science Journal
- ☐ Glue
- ☐ Scissors

Read a Passage
- ☐ Reading Passage
- ☐ Student Response Sheet
- ☐ Task Cards
- ☐ Science Journal

Create a Model
- ☐ Directions Cards
- ☐ Student Sheet
- ☐ Task Cards
- ☐ Science Journal
- ☐ Colored Pencils

Explore
- ☐ Directions Card
- ☐ Worksheet
- ☐ Response Sheet
- ☐ Task Cards
- ☐ Science Journal
- ☐ Small handheld fan (like http://amzn.to/2we77LQ)
- ☐ 4-inch high pan (cat litter pan, large disposable roasting pan)
- ☐ Salt (2-inch high row, extending across the width of the pan)

Sort
- ☐ Directions Card
- ☐ Sort Cards
- ☐ Scissors
- ☐ Glue
- ☐ Response Sheet
- ☐ Task Cards
- ☐ Science Journal

Table of Contents

Science Station Overview

Materials Checklist

Science Stations

BIG IDEA POSTERS

The Earth is changed by **wind & water.**



Wind, water and ice cause **erosion** of rocks & soil.



Erosion is when bits of rocks or soil are carried away.



Weathering



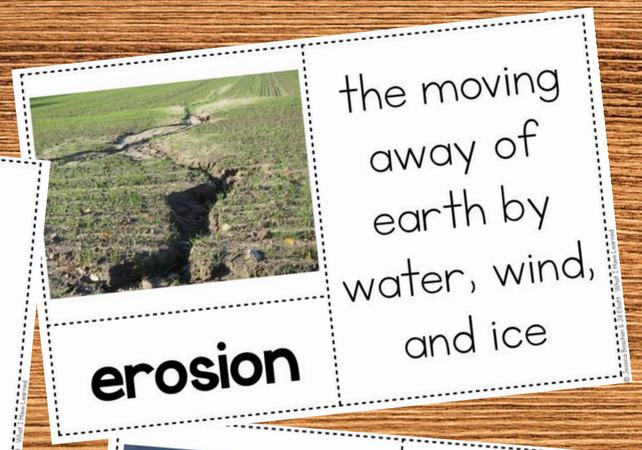
is when rocks or soil are broken into small pieces.

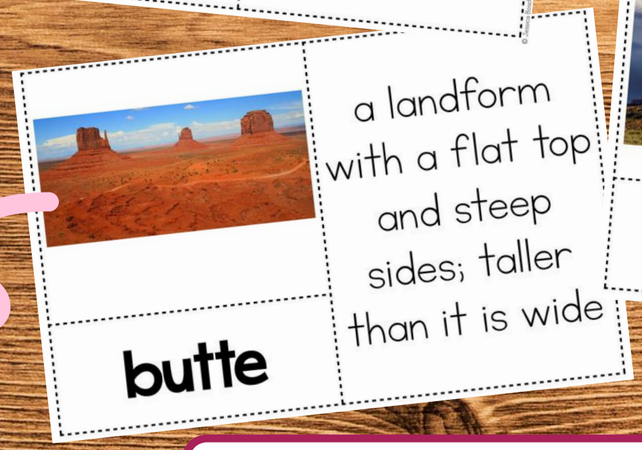


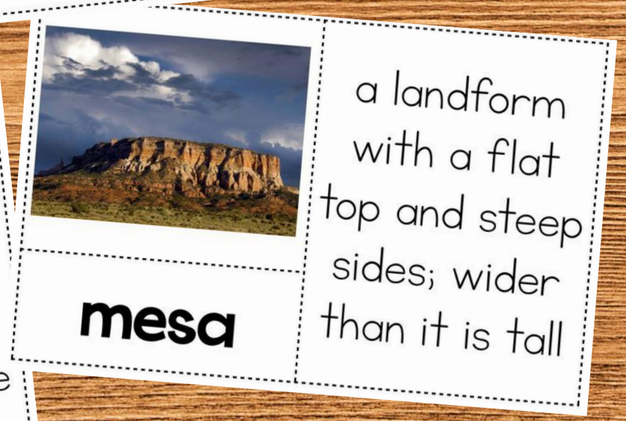
BIG IDEA POSTERS THAT EXPLAIN THE KEY CONCEPTS

VOCABULARY CARDS IN TWO FORMATS









WITH PICTURES



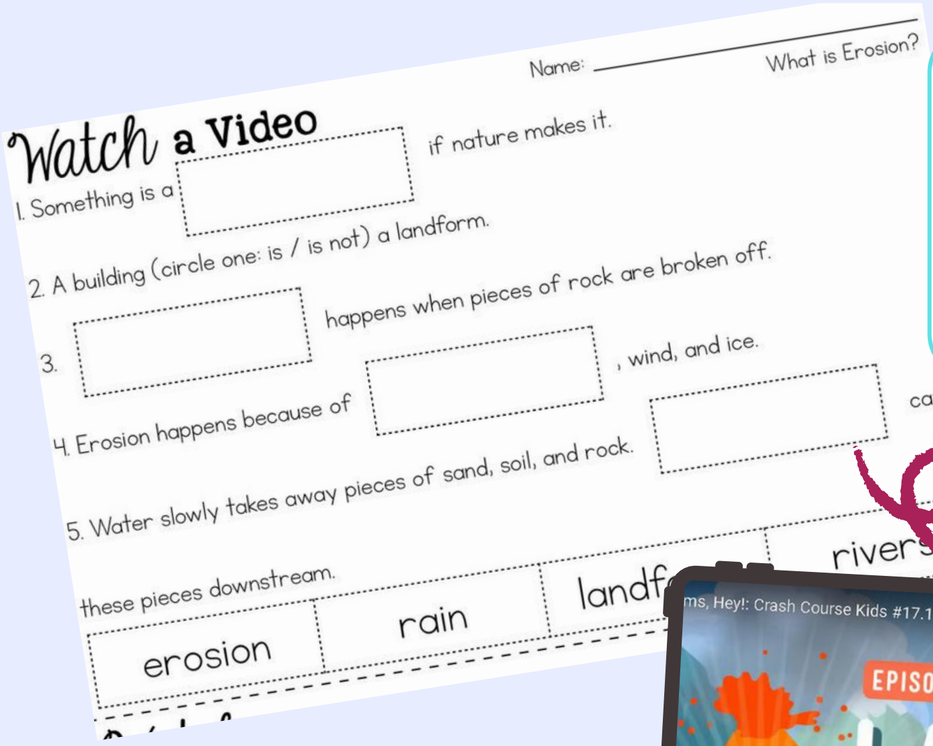






WITHOUT PICTURE

WATCH STATION



STUDENTS WATCH A VIDEO TO LEARN ABOUT EROSION OR A VIDEO TO LEARN ABOUT LANDFORMS.

THEY ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.





> This was exactly what I needed- completely prepped. Thank you!
> - Deborah B.

WATCH STATION

PLAY A GAME







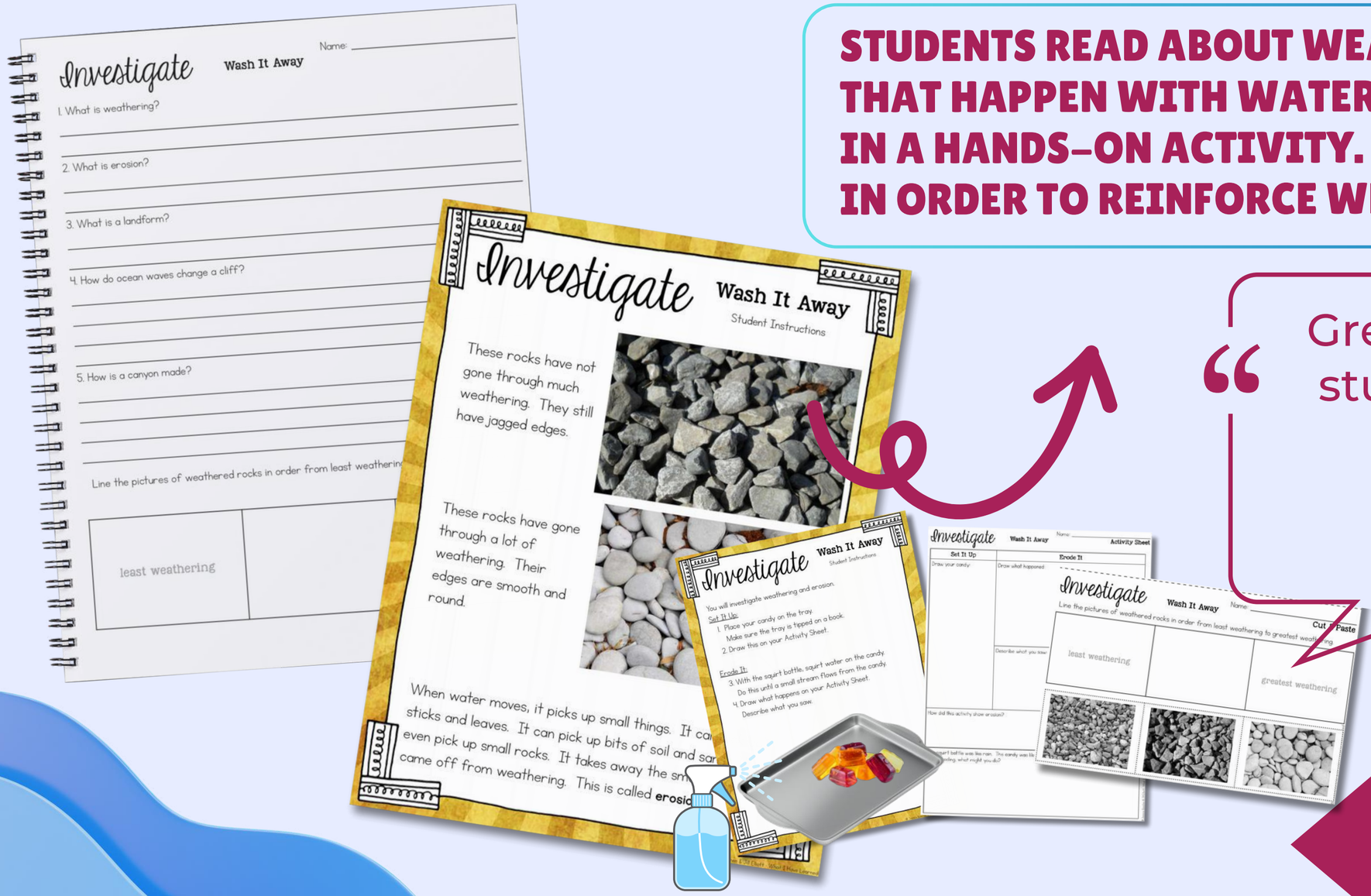
STUDENTS PLAY A VIDEO GAME, A BOARD G AME, A CROSSWORD PUZZLE, OR WORD SEARCH AND LEARN ABOUT HOW WIND AND WATER CHANGE THE SHAPE OF THE LAND. STUDENTS ANSWER QUESTIONS TO REINFORCE NEW LEARNING.

> "Great, engaging resource for online learning!
> - Tricia B."

PLAY STATION

INVESTIGATE WATER EROSION

STUDENTS READ ABOUT WEATHERING AND ER OSION THAT HAPPEN WITH WATER. THEY INVESTIGATE THIS IN A HANDS-ON ACTIVITY. THEY ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.



> Great resource for students to learn on google classroom.
> - Theodore J.

INVESTIGATE STATION

DIAGRAM WEATHERING

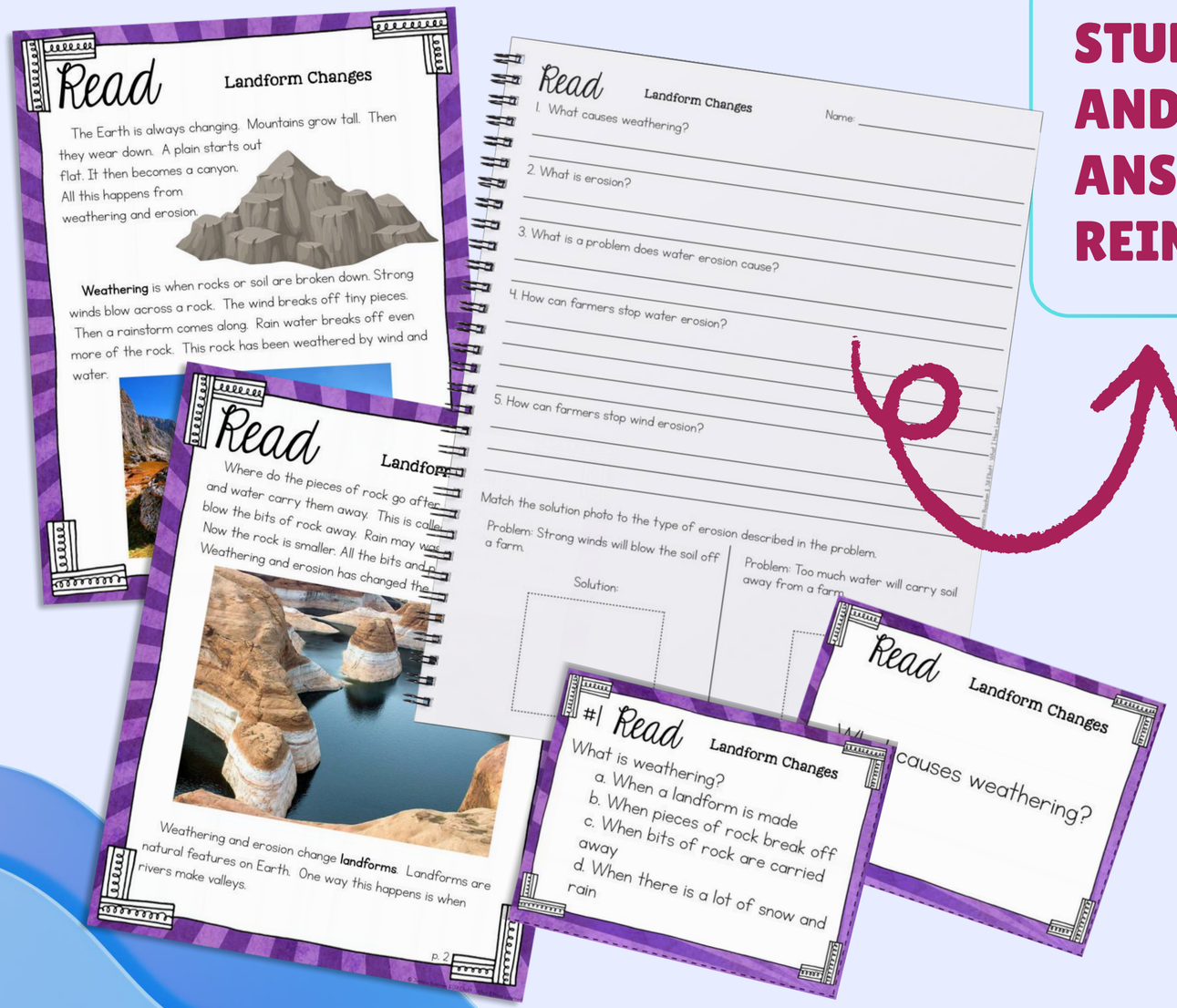
STUDENTS READ ABOUT CHANGING DESERT LANDFORMS DUE TO WEATHERING AND EROSION. THEY PUT TOGETHER A DIAGRAM AND ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.



> “Great addition to our 2nd grade study of deserts!
> - Stephanie DeLucia”

DIAGRAM STATION

READING PASSAGE



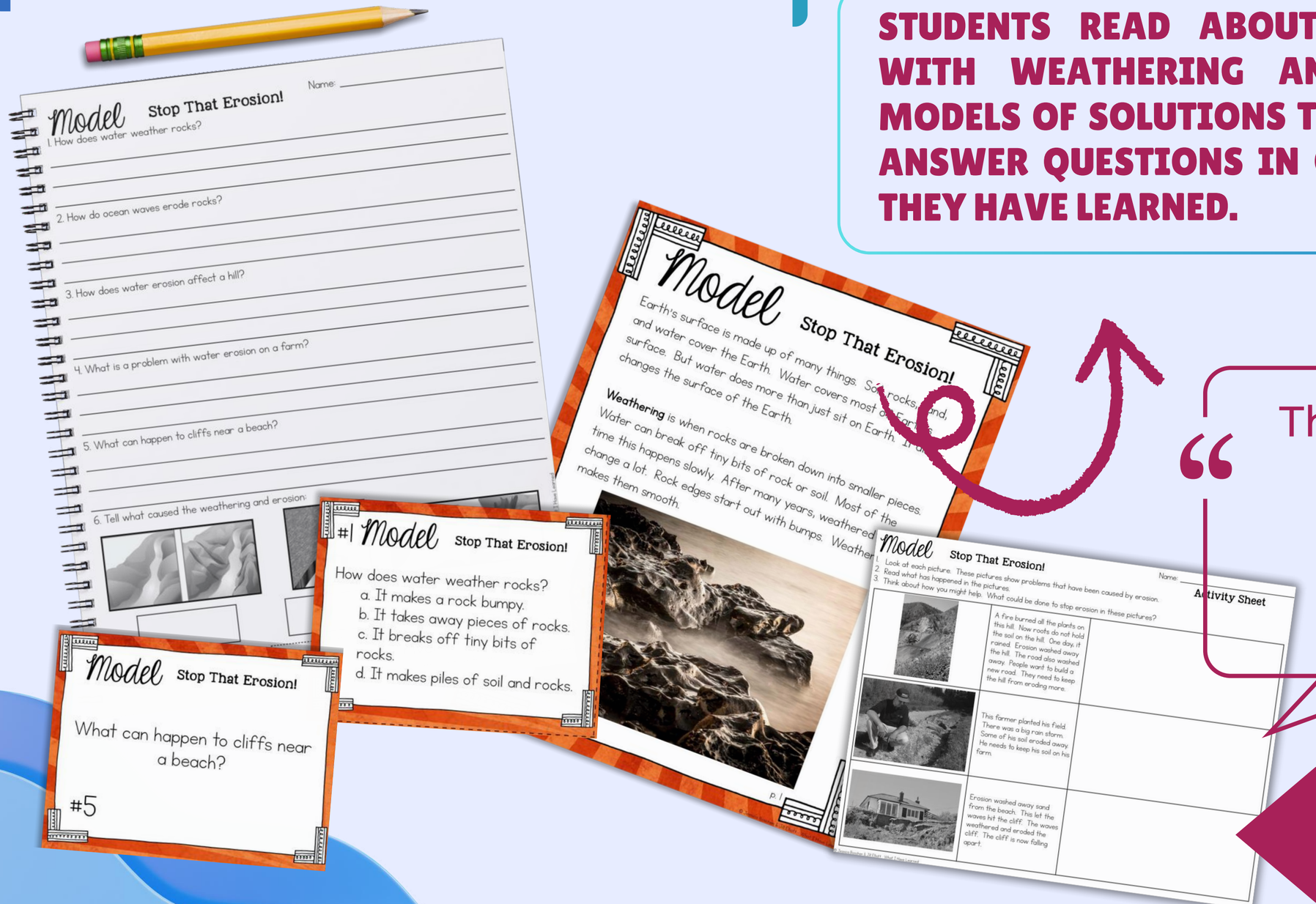
STUDENTS READ ABOUT HOW WEATHERING AND EROSION CHANGE LANDFORMS. THEY ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.

> "Thank you for this. This was a great resource to use for science."
> - Christine Babashanian

READ STATION

MODEL EROSION

STUDENTS READ ABOUT PROBLEMS THAT HAPPEN WITH WEATHERING AND EROSION. THEY DRAW MODELS OF SOLUTIONS TO EROSION PROBLEMS. THEY ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.

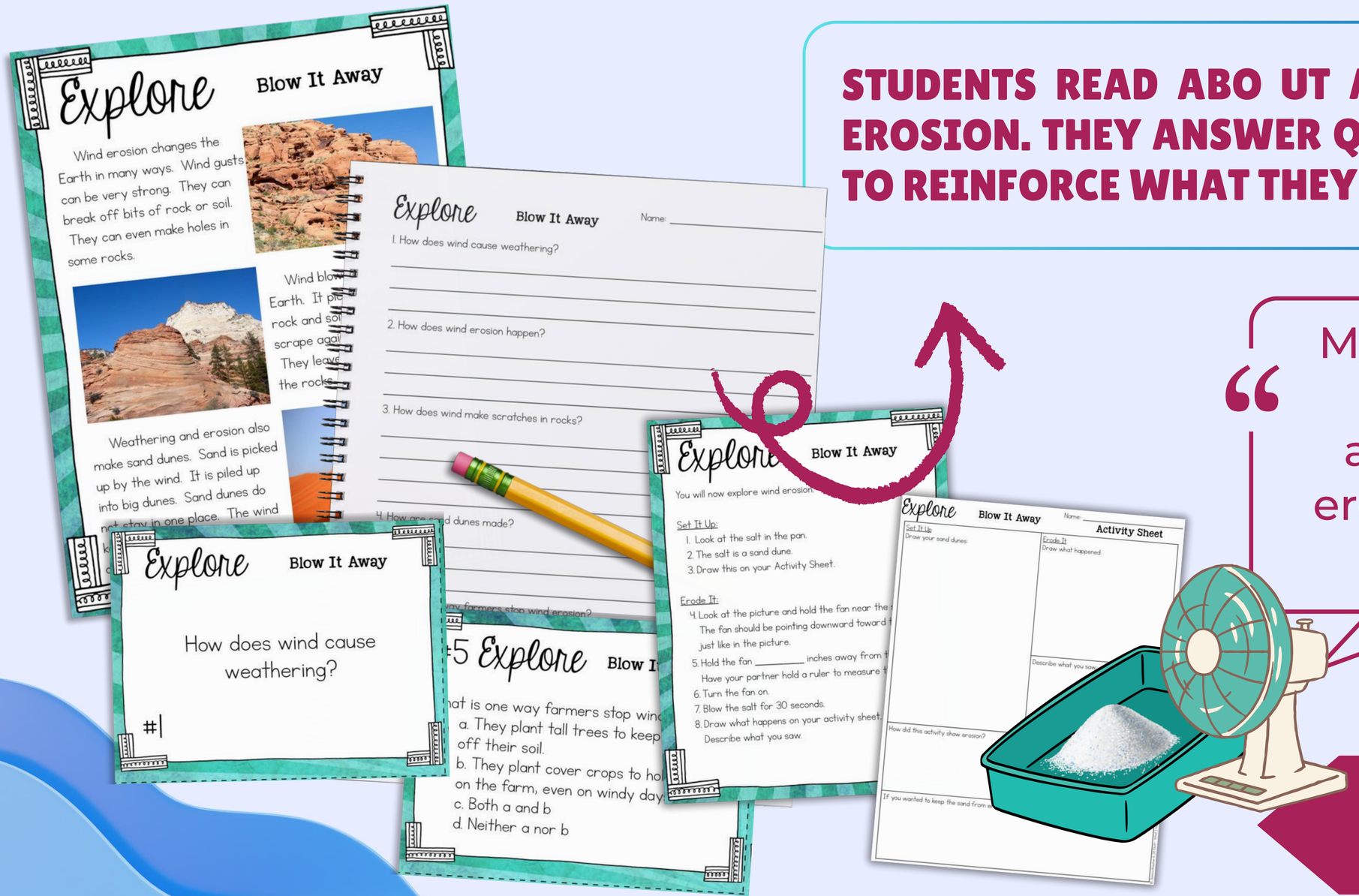


> "This resource was very helpful, engaging and simple to use."
> - Carolyn P.

MODEL STATION

EXPLORE WIND EROSION

STUDENTS READ ABO UT AND EXPLORE WIND EROSION. THEY ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.



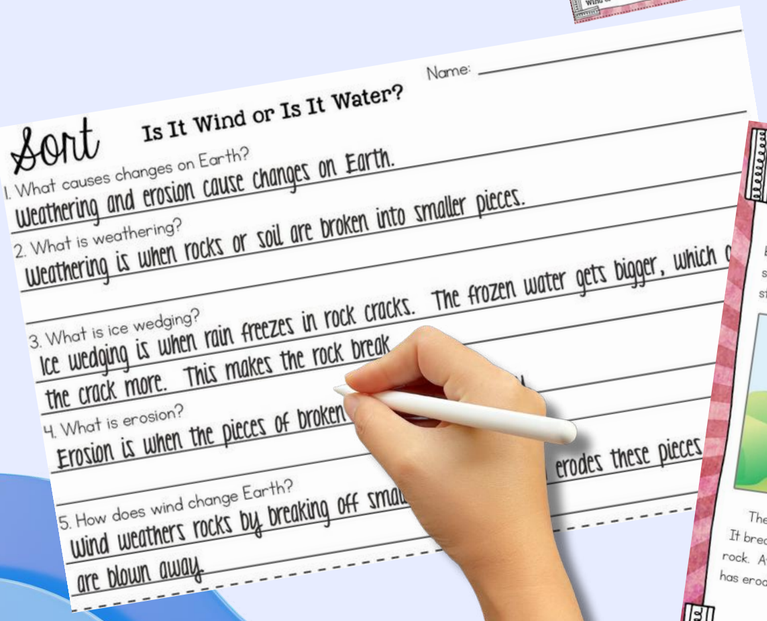
> "My students loved the hands on activity for wind erosion. Thank you - Tricia T."

EXPLORE STATION

A SAMPLE OF SOME OF THE PAGES IN EACH SECTION



STUDENTS READ ABOUT WIN D AND WATER EROSION. THEY SORT PICTURES OF EXAMPLES INTO CATEGORIES OF WIND EROSION OR WATER EROSION. THEY THEN ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.





"My students loved this interactive matching activity!!
- Kelly H."

SORT STATION



All activities have the same basic components:

★ Student Directions
★ Short Answer Worksheet
★ Fill-in-the-Blank Worksheet
★ Cut & Paste Worksheet
★ Short Answer Task Cards
★ Multiple Choice Task Cards

Some activities have more reading to build background knowledge and additional worksheets or activity sheets to help organize the new information.

NOT ALL VERSIONS OF THE PAGES ARE DISPLAYED ON THE FOLLOWING PAGES, BUT ALL ARE IN EACH RESOURCE

DIGITAL VERSIONS

- ✔ Google Forms and/or
- ✔ Google Slides for every station
- ✔ Videos
- ✔ Video Games
- ✔ Digital Crossword Puzzles & Word Searches

Answer keys provided

YOU WILL LOVE THIS BECAUSE



Hands-On and Interactive Learning

With interactive activities including videos, games, design challenges, diagrams, and experiments, students engage actively, making complex concepts accessible and memorable.



Aligned with NGSS

Every station meets 2-ESS2.A and 2-ESS2-1, helping teachers confidently cover required science standards through active learning.



Flexible Classroom Implementation

Multiple response formats and activity choices allow teachers to tailor instruction to diverse learners, supporting independent, group, and distance learning environments.

WATCH • PLAY • INVESTIGATE • DIAGRAM • READ • MODEL • EXPLORE • SORT

INFORMATION PROCESSING STATION ACTIVITIES

SUGGESTED USES

Learning Stations

Use all eight stations or just a few as learning stations that students complete at their own pace.

Science Centers

Set up a rotation where students visit each center to complete the activities.

Whole Class

Use the activities in a whole class format.

Small Group

Use the activities with a small group who need extra help.

TEACHERS LOVE IT!

This was great material. I purchased it to supplement our curriculum material. It aligned very well and my students loved it.

Shanda Ashby



So many resources in this bundle to provide continuous review of concepts in an engaging format. I appreciated the ability to differentiate instruction while providing the opportunity for students to work at their own pace.

Heidi Y.



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.



teach MATH | teach SCIENCE | teach READING | teach WRITING

What I have LEARNED