

2ND
GRADE

CYCLES OF WATER

WATER ON EARTH

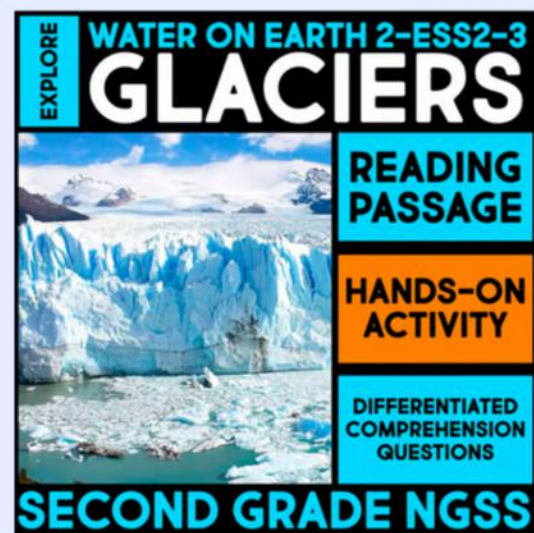
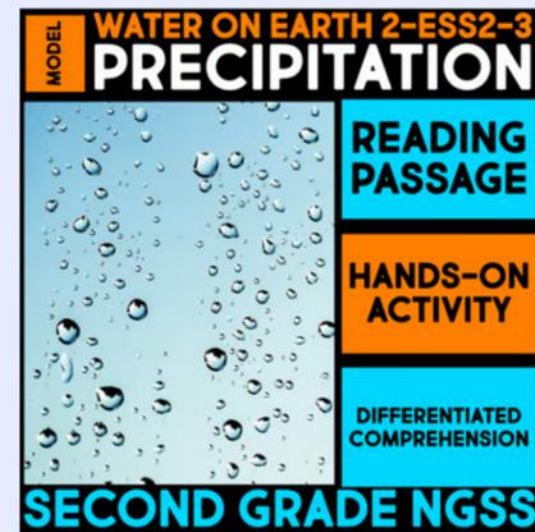
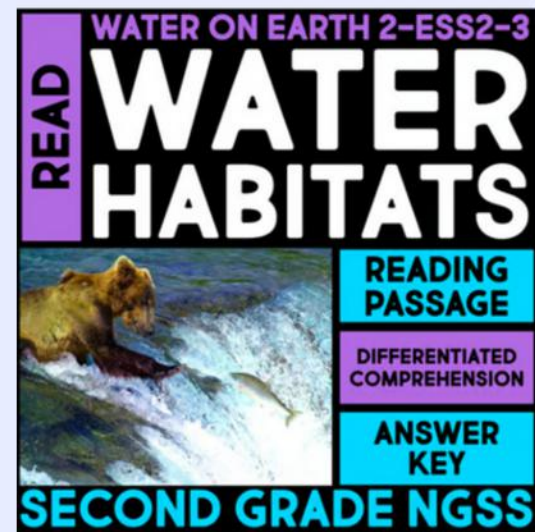
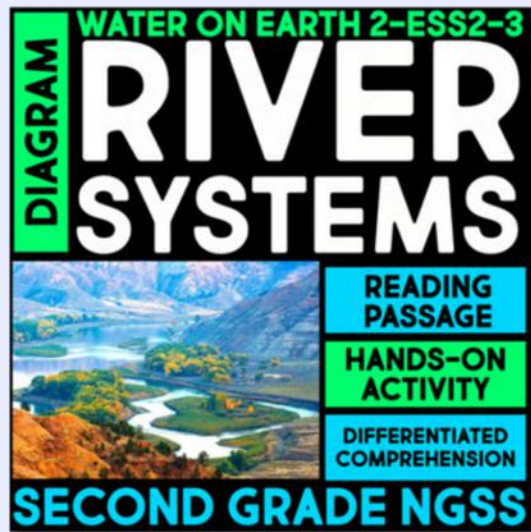
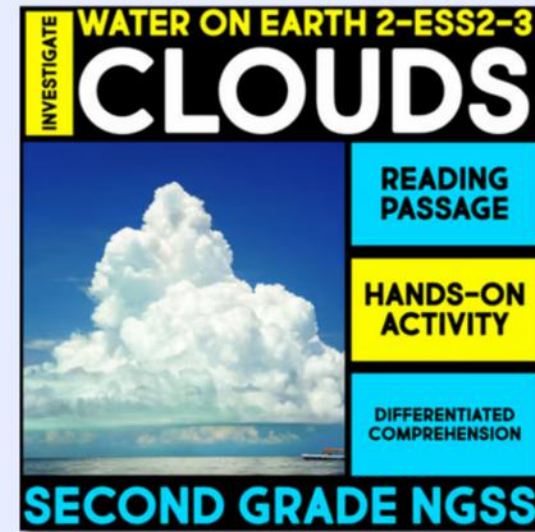
KEEP SCROLLING TO SEE
WHAT'S INSIDE!

CYCLES OF WATER
WATER ON
EARTH

8 STATIONS
POSTERS
LABS
PASSAGES
DIFFERENTIATED
VIDEOS & GAMES
SECOND GRADE NGSS 2-ESS2-3

PREVIEW

WHAT'S INCLUDED IN THE BUNDLE?



- ✓ 8 Science Stations aligned with the NGSS for 2nd 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

CYCLES OF WATER WATER ON EARTH

8 STATIONS

POSTERS

LABS

PASSAGES

DIFFERENTIATED

VIDEOS & GAMES



SECOND GRADE NGSS 2-ESS2-3

Science Station	Standard	Objective	Materials	Page
Big Idea Posters & Vocabulary Cards				10
Watch The Water Cycle / The Basics of Freshwater	2-ESS2.A, 2-ESS2.C, (ELA) SL.2.2	Students watch a video in order to learn about the Water Cycle or about water on Earth. They answer questions in order to reinforce what they have learned.	Computer / Device Student Sheets Science Journal	39
Play Water Cycle / Geyser Surprise	2-PSA, 2-ESS2.A, 2-ESS2.C, (ELA) SL.2.2	Students play a game in order to learn about the water cycle or about water in geysers. They answer questions in order to reinforce what they have learned.	Computer Student Sheets Science Journal	71
Investigate Cloud in a Jar	2-PSA, 2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) K1.2.1, K1.2.3, K1.2.4, K1.2.5, K1.2.7, K1.2.9	Students read about the water cycle. They investigate this by observing the water cycle in action. They answer questions in order to reinforce what they have learned.	See Materials List or Activity Directions Page	97
Diagram Life of a River	2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) K1.2.1, K1.2.3, K1.2.4, K1.2.5, K1.2.7, K1.2.9	Students read about river systems. They put together a diagram and answer questions in order to reinforce what they have learned.	Student Sheets Colored Pencils	149
Read Water Homes	2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) K1.2.1, K1.2.3, K1.2.4, K1.2.5, K1.2.7, K1.2.9	Students read about the habitats found in different places and forms of water on Earth. They answer questions in order to reinforce what they have learned.	Student Sheets Science Journal	182
Model Precipitation	2-PSA, 2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) K1.2.1, K1.2.3, K1.2.4, K1.2.5, K1.2.7, K1.2.9	Students read about types of precipitation. They make a model of this aspect of the water cycle. They answer questions in order to reinforce what they have learned.	Student Sheets Colored Pencils	227
Explore Making Glaciers	2-PSA, 2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) K1.2.1, K1.2.3, K1.2.4, K1.2.5, K1.2.7, K1.2.9	Students read about glaciers and explore how they are made. They answer questions in order to reinforce what they have learned.	See Materials List or Activity Directions Page	259
Sort Types of Water Habitats	2-PSA, 2-ESS2.A, 2-ESS2.C, ETS1.C, (ELA) K1.2.1, K1.2.3, K1.2.4, K1.2.5, K1.2.7, K1.2.9	Students read about water on Earth. They sort water bodies into habitats in salt water or fresh water. They then answer questions in order to reinforce what they have learned.	Student Sheets Scissors Glue	287
Answer Key				326

Water on Earth *Science Stations*

Next Generation Science Standards are written to be "Three Dimensional." The following section explains how this set of science stations addresses the three dimensions of Performance Expectation, Disciplinary Core Idea, and Science and Engineering Practices/Crosscutting Concepts.

In Second Grade, students are expected to demonstrate understanding in the following area:

- 2-ESS2-3. Obtain information to identify where water is found on Earth and that it can be solid or liquid.

This correlates with the DCI 2-ESS2.C, which states:

- Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form.

All stations in this set meet the DCI, helping students gain an understanding of wind and water as natural forces that are used via weathering and erosion to change the shape of the land.

The Investigate, Model, and Explore stations correlate with the Engineering Design DCI ETS1.C, which states:

- Because there is always more than one possible solution to a problem, it is useful to compare and test designs. (K-2-ETS1-3)

The Investigate, Diagram, Model, and Explore stations meet the Science and Engineering Practices:

- Developing and Using Models: Modeling in K-2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions.
 - Develop a model to represent patterns in the natural world. (2-ESS2-2)
 - The Investigate, Diagram, Model, and Explore Stations use models to show where water is found on Earth. These models also show the states of matter in which water is found.
 - Constructing Explanations and Designing Solutions: Constructing explanations and designing solutions in K-2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions.
 - Compare multiple solutions to a problem. (2-ESS2-1)
 - The Investigate, Model, and Explore Stations allow students to come up with a solution to a problem. They can compare solutions between groups.
 - Obtaining, Evaluating, and Communicating Information: Obtaining, evaluating, and communicating information in K-2 builds on prior experiences and uses observations and texts to communicate new information.
 - Obtain information using various texts, text features (e.g., headings, tables of contents, glossaries, electronic menus, icons), and other media that will be useful in answering a scientific question. (2-ESS2-3)
 - Every Station in this set provides students with information about water on Earth. Moreover, the Investigate, Model, and Explore Stations allow students to gain information via direct observation of the water cycle and glaciation simulations.

Teacher Notes

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.

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.

Investigate

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

Draw a Diagram

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

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.

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.

Explore

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

Sort

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

Materials Checklist Water on Earth

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
- ☐ 1 Qt mason-type jar with screw-on lid
 - label this jar: "HOT! DO NOT TOUCH"
- ☐ Boiling water to fill jar halfway
- ☐ Ice cubes
- ☐ Large, kid-friendly tweezers (like <http://www.to7eTBuID>)
- ☐ Tray (to contain the mess)
- ☐ Paper towels

Draw a Diagram

- ☐ Student Instructions
- ☐ Response Sheet
- ☐ Task Cards
- ☐ Science Journal
- ☐ Colored Pencils

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
- ☐ 20-30 pea-sized balls of modeling clay or play-doh (Per group--These will all get used up during the activity.)
- ☐ 2 plastic plates (They need to be able to nest closely together.)

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

Water on Earth is

solid, liquid or gas



When water is gas it is called



water vapor.

Liquid water is found in



oceans, lakes, & rivers.

Solid water is found in



snow, hail & glaciers.

BIG IDEA POSTERS THAT EXPLAIN THE KEY CONCEPTS.

BIG IDEA POSTERS



condensation

when a gas
turns into a
liquid or solid



evaporation

when a liquid
turns into a
gas



evaporation

when a liquid
turns into a
gas



habitat

a place
where plants
and animals
make their
home

WATCH STATION

STUDENTS WATCH A VIDEO IN ORDER TO LEARN ABOUT THE WATER CYCLE OR ABOUT WATER ON EARTH. THEY ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.

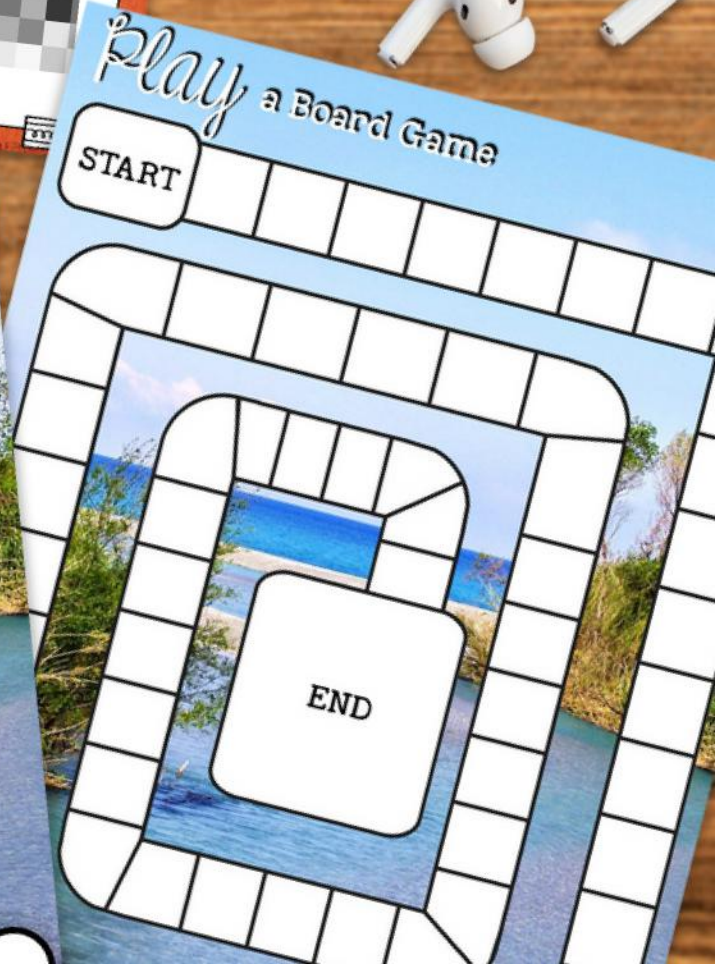
“To the point and easy to use.
Thank you!
- Lindsea B.”



PLAY STATION

STUDENTS PLAY A VIDEO GAME, A BOARD GAME, A CROSSWORD PUZZLE, OR WORD SEARCH AND LEARN ABOUT WATER ON EARTH. STUDENTS ANSWER QUESTIONS TO REINFORCE NEW LEARNING.

You always come up
“with the most clever
products. Keep
them coming!”
- The Glitter Tree



INVESTIGATE STATION

STUDENTS LEARN ABOUT THE WATER CYCLE BY OBSERVING IT IN ACTION AND ANSWERING QUESTIONS TO REINFORCE THEIR UNDERSTANDING.

“ Great science lesson!
- Heather Eccard ”



DIAGRAM STATION

STUDENTS READ ABOUT RIVER SYSTEMS. THEY PUT TOGETHER A DIAGRAM AND ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.

“ This was great to teach vocabulary words! Thank you!
- Meaghan P ”



READ STATION

STUDENTS LEARN ABOUT HABITATS AND WATER FORMS ON EARTH AND ANSWER QUESTIONS TO REINFORCE THEIR UNDERSTANDING.

“ This is such a great resource! Thank you so much!!
- alex S. ”



MODEL STATION

STUDENTS READ ABOUT TYPES OF PRECIPITATION. THEY MAKE A MODEL OF THIS ASPECT OF THE WATER CYCLE. THEY ANSWER QUESTIONS IN ORDER TO REINFORCE WHAT THEY HAVE LEARNED.

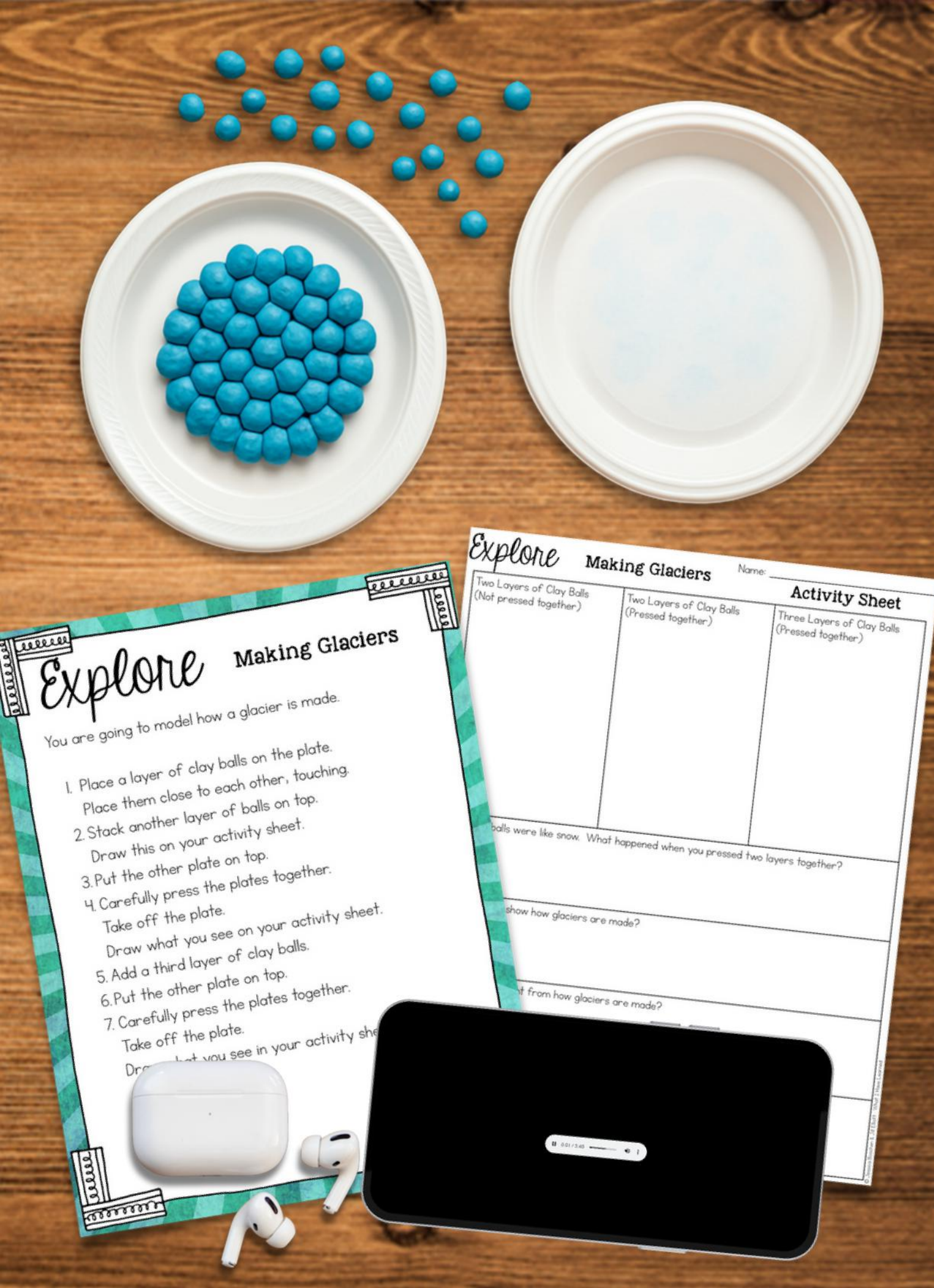
“Great Resource!
Thank you!
- Phase 3
Teaching”



EXPLORE STATION

**STUDENTS READ ABOUT GLACIERS
AND EXPLORE HOW THEY ARE
MADE. THEY ANSWER QUESTIONS
IN ORDER TO REINFORCE WHAT
THEY HAVE LEARNED.**

“This was an awesome
addition to my unit
on Landforms. I
highly recommend it.”
- Amanda S.



SORT STATION

STUDENTS LEARN ABOUT EARTH'S WATER, SORTING WATER BODIES INTO SALTWATER OR FRESHWATER HABITATS, AND THEN ANSWER QUESTIONS TO REINFORCE THEIR UNDERSTANDING.

“ This correlated perfectly with our landform study! Awesome resource. ”
- Meredith G.



WATER ON EARTH 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

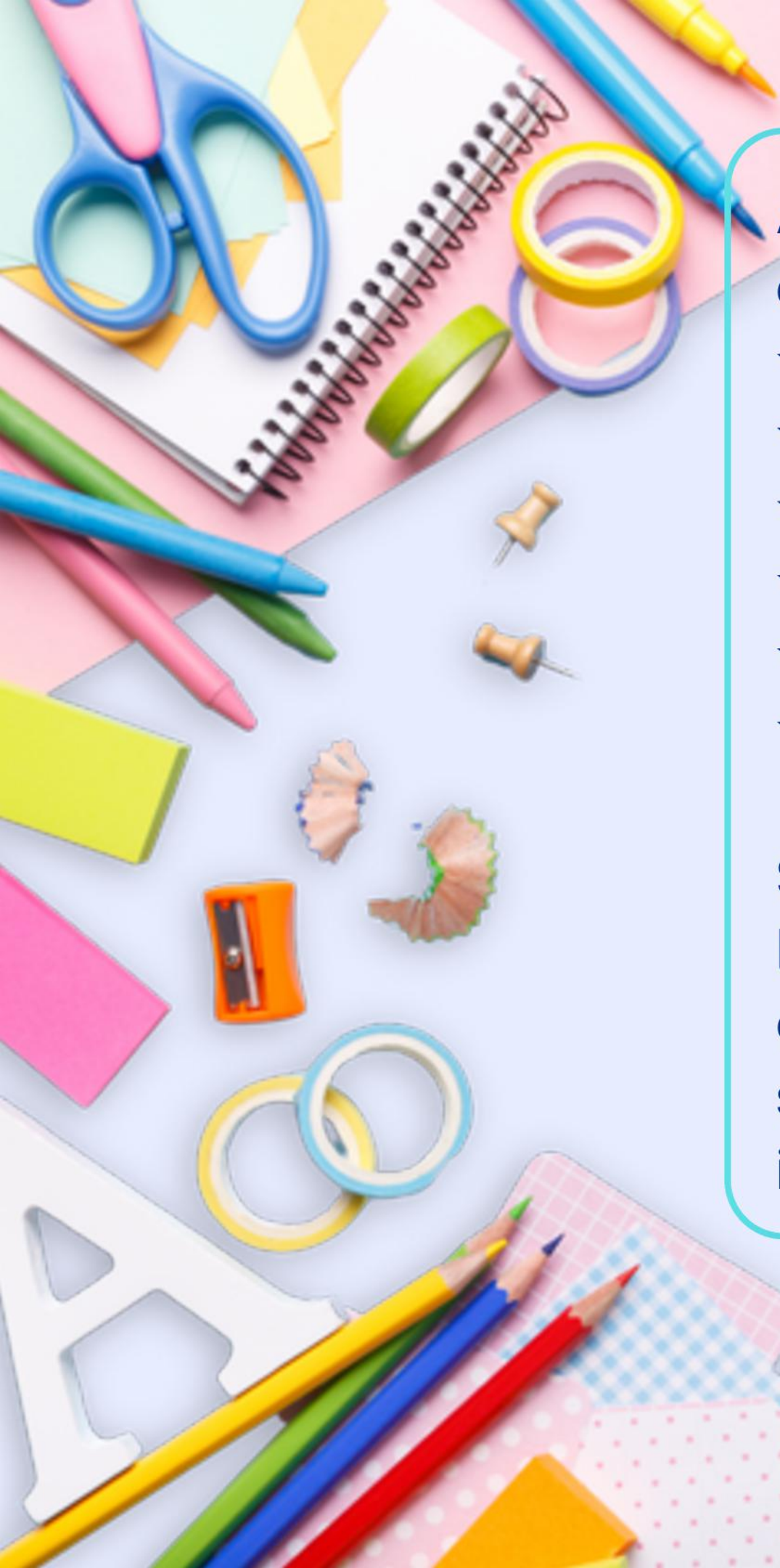
Set up a rotation where students visit each center to complete the activities.

Whole Class

Use the activities in a whole class format.

Small Group

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



DIGITAL VERSIONS

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**

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

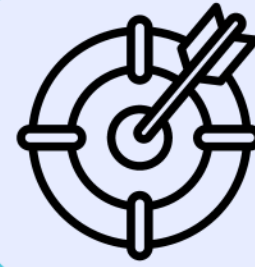
Answer keys provided

YOU WILL LOVE THIS BECAUSE



Hands–On Science That Sticks

Students explore glaciers, make water cycle models, and diagram rivers—bringing concepts to life through active learning.



Aligns with NGSS Standards

Meets NGSS 2–ESS2–3 and 2–ESS2.C while integrating engineering practices from ETS1.C.



Engages All Learning Styles

Hands–on, visual, auditory, and reading activities meet diverse classroom needs and keep students interested.

TEACHERS LOVE IT!



This is a wonderful addition to my science class that provides continued practice for my students as we learn science concepts!

Heidi Y.



Such a well detailed resource that I used to supplement my lesson during my unit on the States of Matter and the Water Cycle.

Samera W.



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**