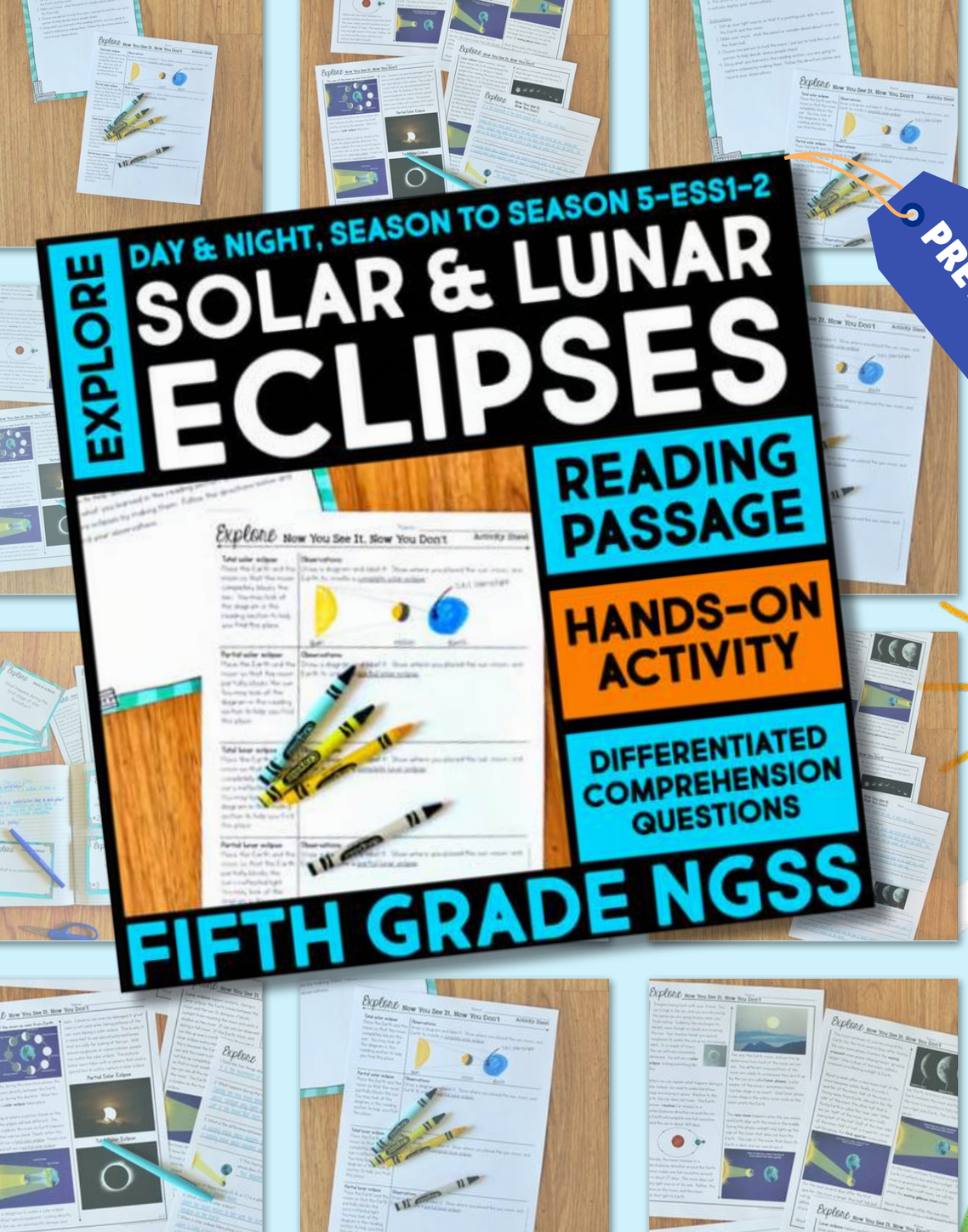


Eclipse Science Made Easy for 5th Grade!

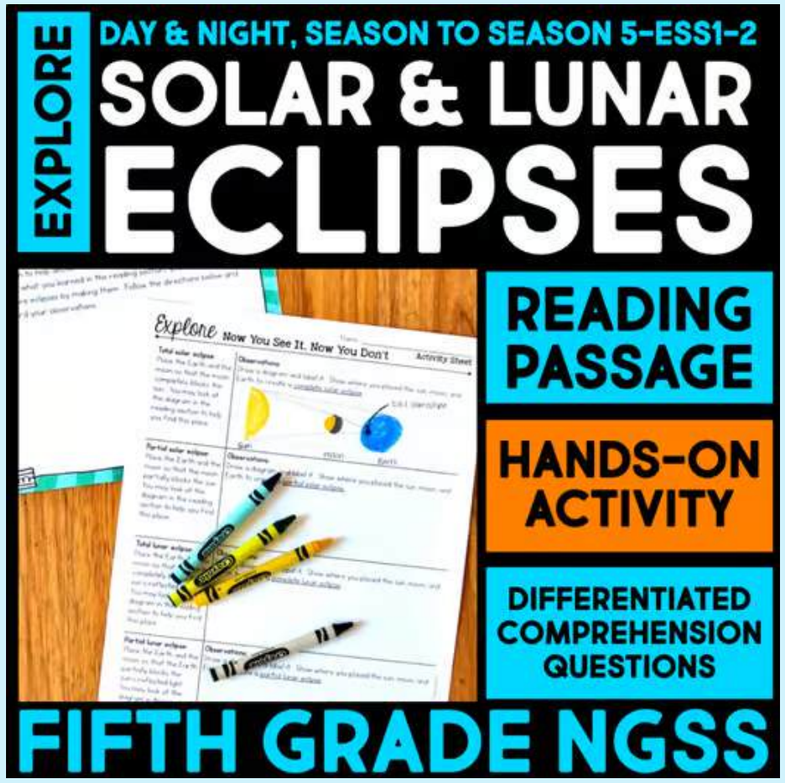
5TH GRADE

EXPLORE SOLAR & LUNAR ECLIPSES

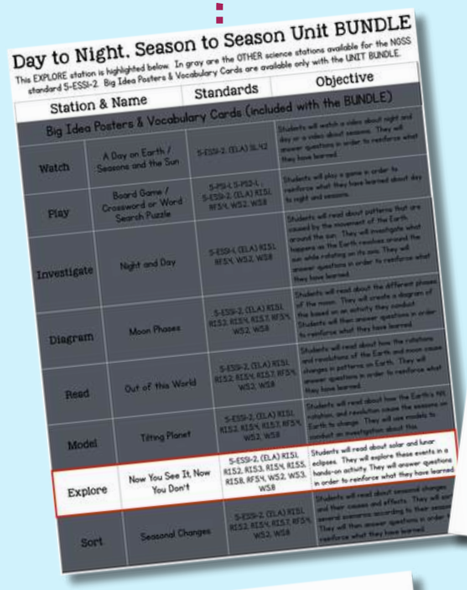
DAY & NIGHT

KEEP SCROLLING TO SEE WHAT'S INSIDE!

ACTIVITY OVERVIEW



- Students read a passage
- Students explore in a hands-on activity.
- Lastly, they answer questions based on their exploration activity.


Day to Night, Season to Season Unit BUNDLE

This EXPLORE station is highlighted below. In gray are the OTHER science stations available for the NGSS standard 5-ESS1-2. Big Idea Posters & Vocabulary Cards are available only with the UNIT BUNDLE.

Station & Name	Standards	Objective
Big Idea Posters & Vocabulary Cards (included with the BUNDLE)		
Watch — A Day on Earth / Seasons and the Sun	5-ESS1-2, (ELA) SL.4.2	Students will watch a video about night and day or a video about seasons. They will answer questions in order to reinforce what they have learned.
Play — Board Game / Crossword or Word Search Puzzle	5-PS1-1, 5-PS2-1, 5-ESS1-2, (ELA) RI.5.4, RF.5.4, WS.2, WS.8	Students will play a game in order to reinforce what they have learned about day to night and seasons.
Investigate — Night and Day	5-ESS1-1, (ELA) RI.5.1, RF.5.4, WS.2, WS.8	Students will read about patterns that are caused by the movement of the Earth around the sun. They will investigate what happens as the Earth revolves around the sun while rotating on its axis. They will use answer questions in order to reinforce what they have learned.
Diagram — Moon Phases	5-ESS1-2, (ELA) RI.5.1, RI.5.3, RI.5.4, RI.5.7, RF.5.4, WS.2, WS.8	Students will read about the different phases of the moon. They will create a diagram of the moon on an activity they conduct. Students will then answer questions in order to reinforce what they have learned.
Read — Out of this World	5-ESS1-2, (ELA) RI.5.1, RI.5.2, RI.5.4, RI.5.7, RF.5.4, WS.2, WS.8	Students will read about how the rotations and revolutions of the Earth and moon cause changes in patterns on Earth. They will answer questions in order to reinforce what they have learned.
Model — Tilting Planet	5-ESS1-2, (ELA) RI.5.1, RI.5.3, RI.5.4, RI.5.7, RF.5.4, WS.2, WS.8	Students will read about how the Earth's tilt, rotation, and revolution cause the seasons on Earth to change. They will use models to conduct an investigation about this.
Explore — Now You See It, Now You Don't	5-ESS1-2, (ELA) RI.5.1, RI.5.2, RI.5.3, RI.5.4, RI.5.5, RI.5.8, RF.5.4, WS.2, WS.3, WS.8	Students will read about solar and lunar eclipses. They will explore these events in a hands-on activity. They will answer questions in order to reinforce what they have learned.
Sort — Seasonal Changes	5-ESS1-2, (ELA) RI.5.1, RI.5.3, RI.5.4, RI.5.7, RF.5.4, WS.2, WS.8	Students will read about seasonal changes and their causes and effects. They will sort several scenarios according to their seasons. They will then answer questions in order to reinforce what they have learned.


Science Stations Overview

This is a general overview of all science stations in each UNIT BUNDLE.

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

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

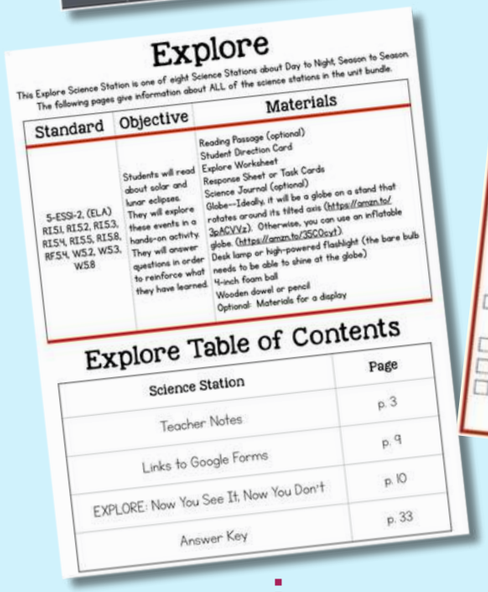
Create a Model
Students use materials to illustrate the science concept and answer questions. You have the option of using the included worksheet with the questions or using the task cards and having students respond in their science journals.

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.

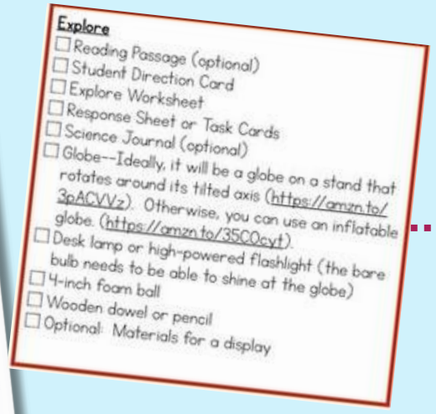

Explore

This Explore Science Station is one of eight Science Stations about Day to Night, Season to Season. The following pages give information about ALL of the science stations in the unit bundle.

Standard	Objective	Materials
5-ESS1-2, (ELA) RI.5.1, RI.5.2, RI.5.3, RI.5.4, RI.5.5, RI.5.8, RF.5.4, WS.2, WS.3, WS.8	Students will read about solar and lunar eclipses. They will explore these events in a hands-on activity. They will answer questions in order to reinforce what they have learned.	Reading Passage (optional) Student Direction Card Explore Worksheet Response Sheet or Task Cards Science Journal (optional) Globe--Ideally, it will be a globe on a stand that rotates around its tilted axis (https://amzn.to/3pACVVz). Otherwise, you can use an inflatable globe. (https://amzn.to/35COcyt). Desk lamp or high-powered flashlight (the bare bulb needs to be able to shine at the globe) 4-inch foam ball Wooden dowel or pencil Optional: Materials for a display

Explore Table of Contents

Science Station	Page
Teacher Notes	p. 3
Links to Google Forms	p. 9
EXPLORE: Now You See It, Now You Don't	p. 10
Answer Key	p. 33


Explore

- ☐ Reading Passage (optional)
- ☐ Student Direction Card
- ☐ Explore Worksheet
- ☐ Response Sheet or Task Cards
- ☐ Science Journal (optional)
- ☐ Globe--Ideally, it will be a globe on a stand that rotates around its tilted axis (https://amzn.to/3pACVVz). Otherwise, you can use an inflatable globe. (https://amzn.to/35COcyt).
- ☐ Desk lamp or high-powered flashlight (the bare bulb needs to be able to shine at the globe)
- ☐ 4-inch foam ball
- ☐ Wooden dowel or pencil
- ☐ Optional: Materials for a display

Table of Contents

Science Station Overview

Materials Checklist

Table of Contents / Teacher's Notes

WHAT'S INCLUDED

EXPLORE SCIENCE STATION

- Teacher Notes
- **Student Text** in two formats
- Student **Instructions**
- **Activity Sheets** for observation
- Differentiated **Questions**
- Answer Key
- Google Form™
- Google Slides™

ADD TO CART

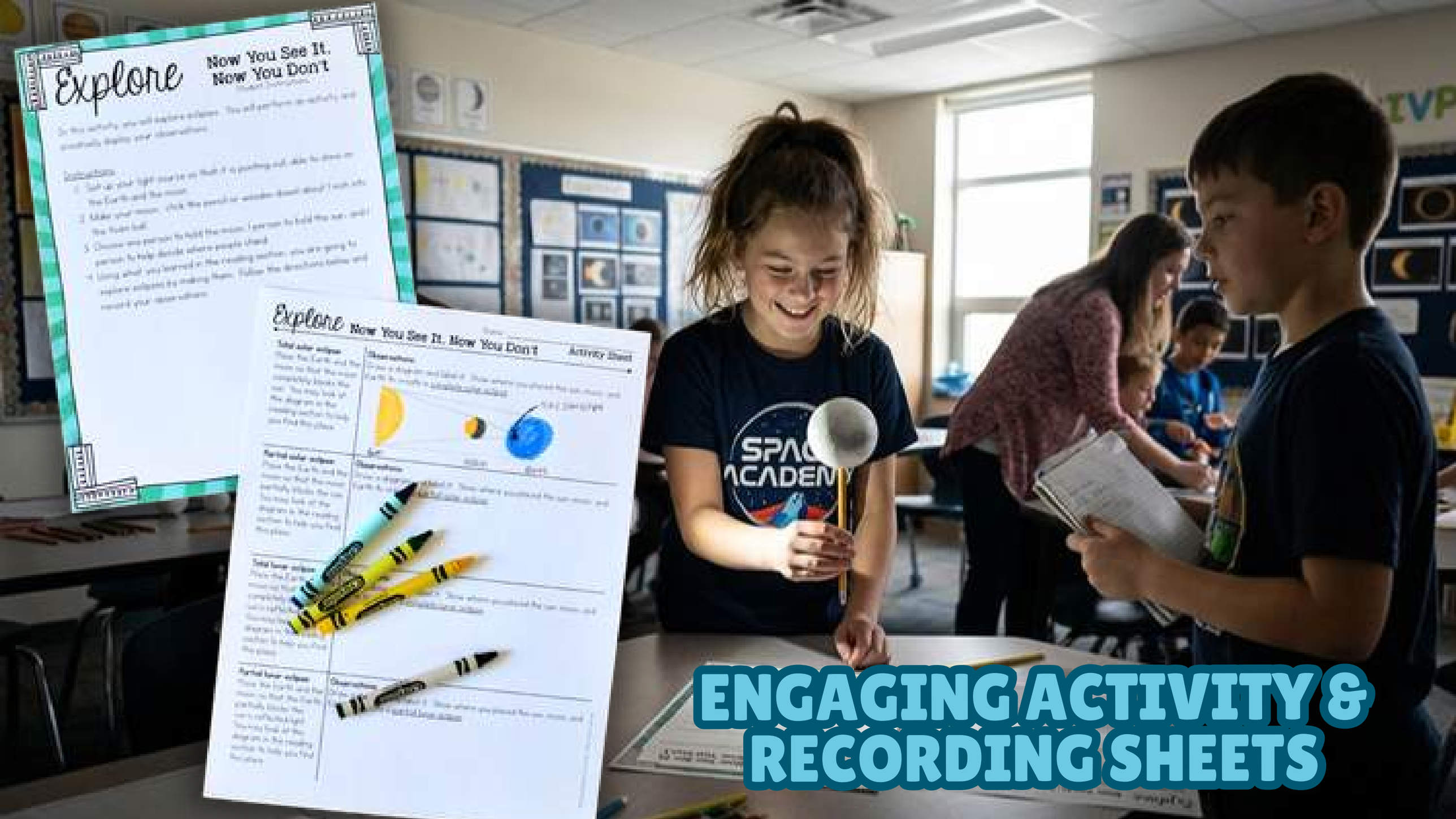


EXPLORE: READING PASSAGE



READING PASSAGE IN TWO FORMATS

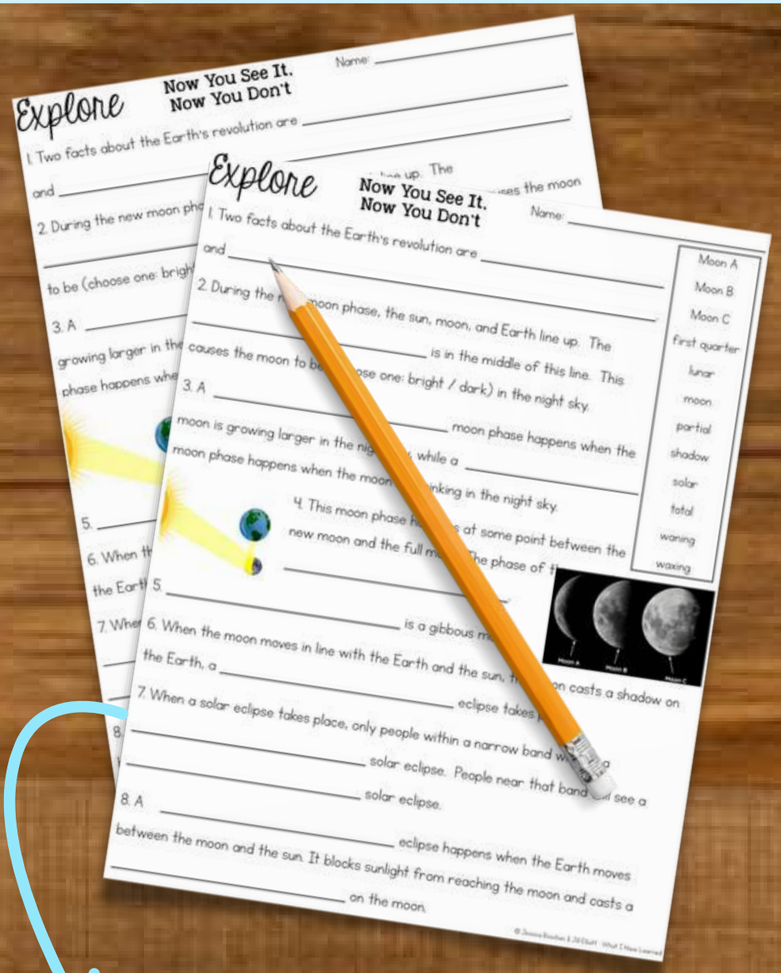

ENGAGING ACTIVITY &
RECORDING SHEETS


Explore
Now You See It, Now You Don't
Explore
Now You See It, Now You Don't
Activity Sheet
ENGAGING ACTIVITY &
RECORDING SHEETS

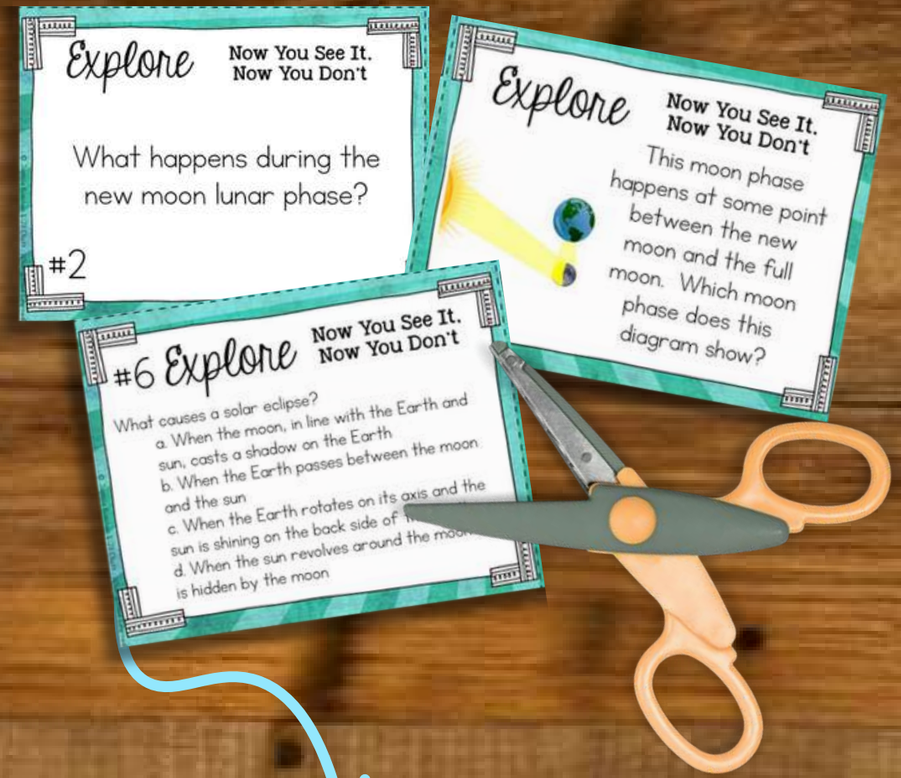
DIFFERENTIATED QUESTIONS



SHORT ANSWER



FILL-IN-THE BLANK

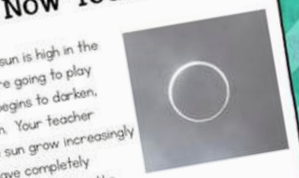


TASK CARDS: SHORT ANSWER & MULTIPLE CHOICE

Explore

Now You See It. Now You Don't

Imagine having lunch with your friend. The sun is high in the sky, and you are discussing the game you are going to play when you finish eating. Suddenly, the sky begins to darken, even though no clouds are covering the sun. Your teacher hands you special sunglasses to watch the sun grow increasingly dark. In a couple of hours, the sun will have completely darkened. You will see a **solar eclipse**, looking something like this.



Before we can explain what happens during a solar eclipse, we need to understand how things are moving in space. Relative to the Earth, the sun does not move. The Earth, however, **revolves** (or moves) in a counterclockwise direction around the sun. The Earth will complete one full revolution around the sun in about 365 days.



Additionally, the moon revolves in a counterclockwise direction around the Earth. The moon makes one full revolution around Earth in about 27 days. The moon does not have any light source of its own. Rather, the sun shines on the moon, and the moon reflects that light to Earth.

Explore

Now You See It. Now You Don't

The way the Earth, moon, and sun line up determines how much of the moon we can see. The different ways portions of the moon are visible to us because they are lit up by the sun are called **lunar phases**. Lunar means "of the moon," and phase means "certain stage in an event." Each lunar phase is one stage in the entire moon cycle as the moon orbits the Earth.

The **new moon** happens when the sun, moon, and Earth align with the moon in the middle. During this phase, sunlight only lights up the side of the moon that does not face the Earth. The side of the moon that faces the Earth is dark and we cannot see it.



Explore

Now You See It. Now You Don't

Name: _____

1. Two facts about the Earth's revolution are _____ and Choose two: It is the movement of the Earth around the sun, it takes 365 days, it happens in a counterclockwise direction.
2. During the new moon phase, the sun, moon, and Earth line up. The moon is in the middle of this line. This causes the moon to be (choose one: bright / dark) in the night sky.
3. A waxing moon phase happens when the moon is growing larger in the night sky, while a waning moon phase happens when the moon is shrinking in the night
4. This moon phase happens at s... and the full moon. The phase of ... first quarter
5. Moon C ... is a gibb...
6. When the moon moves in line wit... the Earth, a ... th ar...
7. When a solar eclipse takes p... total partial
8. A lunar ... between the moon and the s... shadow

Explore

Now You See It. Now You Don't

This moon phase happens at some point between the new moon and the full moon. Which moon phase does this diagram show?

#4

Explore

Now You See It. Now You Don't

Which of these moons is a gibbous moon?



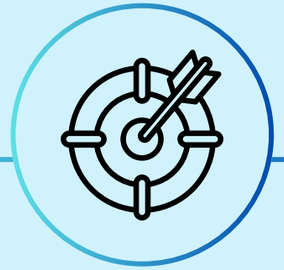
#5

YOU WILL LOVE THIS BECAUSE



Combines Literacy & Science Skills

Integrates reading comprehension with scientific inquiry, supporting cross-curricular learning while strengthening content-area vocabulary and understanding.



Supports Inquiry-Based Learning

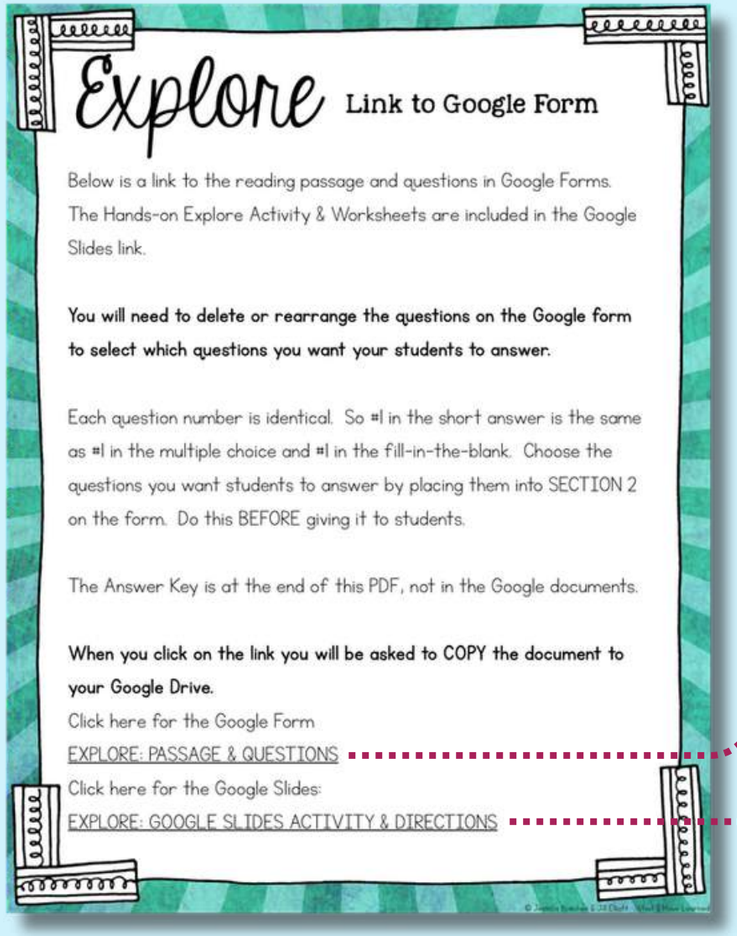
The activity encourages students to observe, test, and record results, helping them develop important scientific investigation skills.



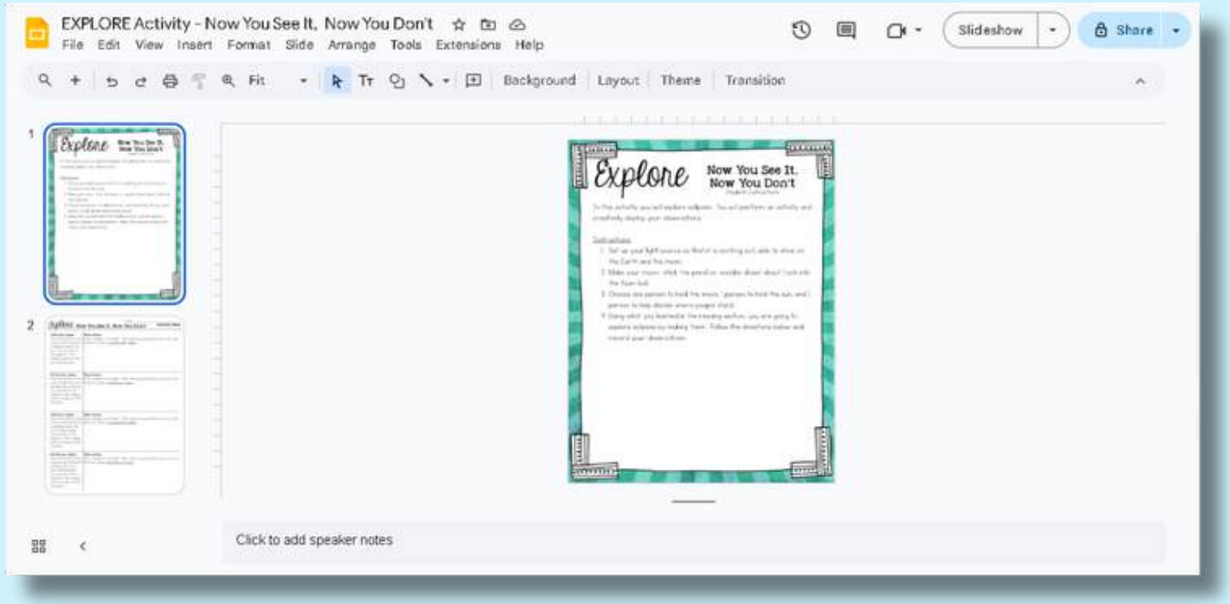
Print and Digital Flexibility

Teachers can use printable worksheets for hands-on learning or assign the Google Forms™ and Google Slides™ versions for digital classrooms.

DIGITAL VERSIONS







DIGITAL VERSIONS

- ✔ Google Sheet with Activity & Directions
- ✔ Google Form with Reading & Questions

Answer keys provided

TEACHERS LOVE IT!

I use this resource every year with my students to help them understand the concepts better.

Math Meets Matter

Wonderful, new-to-middle-school age appropriate. Adds fun to the already fun subject of Earth and Space science!

Stephanie Sanders





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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