# **Unit 4: Earth's Place in the Universe**

Content Area: Science
Course(s): Earth Science
Time Period: Generic Time Period

Length: **5 weeks** Status: **Published** 

#### **Standards**

LA.1.SL.1.2	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
LA.1.SL.1.3	Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
LA.1.W.1.2	Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.
SCI.1-ESS1-2	Make observations at different times of year to relate the amount of daylight to the time of year.
LA.1.W.1.7	Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).
LA.1.W.1.8	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
LA.1.SL.1.1.A	Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
LA.1.SL.1.1.B	Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
LA.1.SL.1.1.C	Ask questions to clear up any confusion about the topics and texts under discussion.
LA.1.RL.1.1	Ask and answer questions about key details in a text.
SCI.1-ESS1-1	Use observations of the sun, moon, and stars to describe patterns that can be predicted.

### **Learning Objectives**

Use observations of the sun, moon, and stars to describe patterns that can be predicted.

Make observations at different times of year to relate the amount of daylight to the time of year

## **Essential Questions**

How can we become better readers and writers when learning about science?

What do you know about the solar system? What do you want to learn about the solar system?

What are the positions of the planets?

How is the Earth special? What are the layers of the Earth?

How is the moon special? What is the lunar cycle?

What are the four seasons?

What is special about spring?

What is special about summer?

What is special about fall?

What is special about winter?

How do the trees change during the seasons?

How can we observe how much light is shining during a particular day?

What did you learn about the solar system?

How can the sun help you if you are lost?

### **Learning Activities**

### MYSTERY SCIENCE #2 Spinning Sky

EQ: How can the sun help you if you are lost?

Exploration Video: (12 min)

Activity: Sun Finder (20 minutes)

Get supplies and prepare Sun Finder template.

For each student you'll need to:

- Print a Sun Finder template, prepared as described below
- Get a paper fastener

Get scissors

To prepare the Sun Finder templates for your students, fold them in half lengthwise. You can fold 5 at a time, if you like.

Put the folded edge in a 3-hole punch and punch the templates. You can work with multiple copies at a time — depending on what your 3-hole punch will accommodate.

It's okay if the hole in the rectangle with the sun on it doesn't quite match the circle printed on the page.

### Optional Extras (1 hour)

- Activity: <u>Vocabulary Cards</u> let students practice reading and writing skills while learning science vocabulary.
- Readings: <u>Two readings</u> about the sun for first grade.

These Common-Core-aligned readings are free with registration on ReadWorks. All readings include comprehension questions.

Read-aloud: In <u>The Sun is My Favorite Star</u>, by Frank Asch, a child notices how the sun touches her life from when she wakes up to when she goes to bed.

- Day to Night A child notices the position of the sun in the sky at different times of day. (Grade 1)
  - Sunrise, Sunset A reading about how the length of the day changes with the season of the year. (Grade 1)
- Activity: <u>Use your Sun Finder</u> to show where the sun is at different times of day.
- Encourage your students to notice where the sun is in the sky at different times of the day. Ask them to show you these times, using their Sun Finder.
  - Where is the sun at lunchtime?
  - Where is the sun when you wake up in the morning?
  - Where is the sun just before dinnertime?

#### Solar System:

Writing activity: Students will fill out K& W of KWL chart (leave "L" for at the end of the unit) about space in their science notebooks

- -Speaking and listening activity: Share K & W as a class and make a class KWL chart to display
- -talk about Earth and the different layers of Earth
- -show video on smartboard of cutting the Earth
- -Interactive notebook activity: Students will cut and paste the layers of Earth and label
- -Speaking and listening activity: Students partner up to give each other feedback
- -solar system brainpop
- -Interactive notebook activity: Students will cut and paste the planets in order from the sun
- -Speaking and listening activity: Students partner up to give each other feedback
- -talk about the moon & phases of the moon
- -show Phases of the moon rap on Smartboard
- -Interactive notebook activity: Students will cut and paste the phases of the moon & label
- -Speaking and listening activity: Students partner up to give each other feedback

#### Seasons:

- -4 seasons song: https://www.youtube.com/watch?v=hSshYqDrKTo
- -Interactive notebook activity: Students will cut and paste the flaps for the 4 seasons & draw/write something they do in each season under the flaps
- -Writing activity: Students will use the sentence starter "My favorite season is \_\_\_\_\_\_

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-Speaking and listening activity: Volunteers share answers, students check their work as others are sharing

Spring song https://www.youtube.com/watch?v=zDxM1Lyywus

- -Interactive notebook activity: Students will cut and paste the flaps for the dates, temperature, and weather during spring
- -Writing activity: Students write about their favorite thing to do in spring using the sentence starter In spring I like to....
- -Speaking and listening activity: Volunteers share answers, students check their work as others are sharing
- -Summer song https://www.youtube.com/watch?v=u\_1Y3ogkPDg
- -Interactive notebook activity: Students will cut and paste the flaps for the dates, temperature, and weather during summer
- -Writing activity: Students write about their favorite thing to do in summer using the sentence starter In summer I like to....
- -Speaking and listening activity: Volunteers share answers, students check their work as others are sharing
- -Fall song https://www.youtube.com/watch?v=J2RsTle52RQ
- -Interactive notebook activity: Students will cut and paste the flaps for the dates, temperature, and weather during fall
- -Writing activity: Students write about their favorite thing to do in summer using the sentence starter In fall I like to....
- -Speaking and listening activity: Volunteers share answers, students check their work as others are sharing
- -Winter song https://www.youtube.com/watch?v=2SI2R2FiDRs
- -Interactive notebook activity: Students will cut and paste the flaps for the dates, temperature, and weather during winter
- -Writing activity: Students write about their favorite thing to do in summer using the sentence

starter In winter I like to ....

- -Speaking and listening activity: Volunteers share answers, students check their work as others are sharing
- -4 seasons video: https://www.youtube.com/watch?v=\_0zKV6j1MDg
- -Interactive notebook activity: Students will cut and paste the flaps for the trees during the seasons & draw pictures under the flaps
- -Writing activity: Students write using the sentence starter I really like the trees in the
- -Speaking and listening activity: Volunteers share answers, students check their work as others are sharing
- -Interactive notebook activity: Students will make a prediction for what the daylight will be like tomorrow (do various days throughout the year)
- -Writing activity: Students will go outside and use their senses to observe the weather and amount of daylight available; record it in their notebook using words such as "sunny, cloudly, majority sunny, and seasons"
- -Speaking and listening activity: Volunteers share answers, students check their work as others are sharing

#### **Materials & Resources**

www.mysteryscience.com

Smartboard with internet access

Science Smartboard files (W drive)

Interactive Science Notebook (www.NicoleAndEliceo.com)

scissors			
glue sticks			
pencils			
crayons			
optional: different items to sort for seasons (leaf, sunglasses, mini snowman, flower)			
Assessment			
Daily Interactive Science Notebook production			
Accommodations & Modifications			
Large print textbooks			
Additional time for assignments			
Review of directions			
Have student restate information			
Provision of notes or outlines			
Concrete examples			
Adaptive writing utensils			
Support auditory presentations with visuals			

Weekly home-school communication tools (notebook, daily log, phone calls or email messages)

Space for movement or breaks

Books on tape

Extra visual and verbal cues and prompts

- Graphic organizers
- Quiet corner or room to calm down and relax when anxious
- Preferential seating
- Alteration of the classroom arrangement
- Reduction of distractions
- Answers to be dictated
- Hands-on activities
- Use of Manipulatives
- Follow a routine/schedule
- Alternate quiet and active time
- Teach time management skills
- Rest breaks
- Verbal and visual cues regarding directions and staying on task
- Daily check-in special education teacher
- Visual daily schedule
- Varied reinforcement procedures
- Immediate feedback
- Personalized examples