



Lesson Plan Summary

Magic Tree House #32: Winter of the Ice Wizard

A Reason for the Seasons

THIS EXTENTION WILL ENABLE EACH CHILD TO:

- Learn facts about the winter solstice and the cyclical nature of the seasons.
- Discover through literature how people around the world have celebrated the winter solstice throughout history and the effect those traditions have on today's celebrations.
- Use a graphic organizer to record information about the winter solstice.
- Write a paragraph based on information recorded on a graphic organizer.
- View a model demonstrating why we have winter and summer solstices.
- Create a model of the winter and summer solstices.
- Work with classmates to create a tapestry of winter activities.

COMMON CORE STANDARDS ADDRESSED:

READING:

- Comprehend Fiction
- Foundational Skills

WRITING:

- Text Types and Purposes
- Production and Distribution of Writing
- Research to Build and Present Knowledge

SCIENCE:

- Recognize the major components and patterns observed in the earth/moon/sun system

SOCIAL STUDIES:

- Recognize that all people have beliefs, religions, and traditions

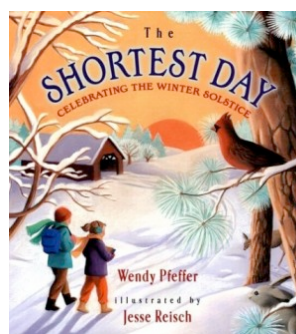
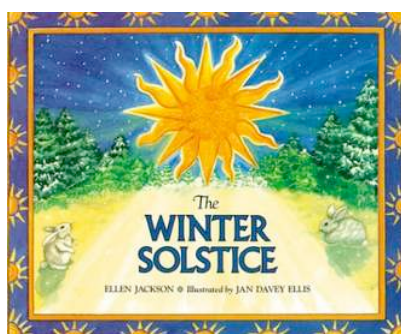
Lesson Plan

Magic Tree House #32: Winter of the Ice Wizard A Reason for the Seasons!

Many people think of the first day of spring as a new beginning. But the winter solstice is a new beginning, too! Longer days will return, bringing with them more sunshine and warmth! To complete all activities you will need:

- A copy of *The Winter Solstice* by Ellen Jackson and *The Shortest Day, Celebrating the Winter Solstice* by Wendy Pfeffer
- A copy of the Snowflake Graphic Organizer (provided) for each student
- A copy of the snow-themed writing paper for each student
- A copy of earth and sun patterns (provided)
- Star stickers – 2 per student
- 2 Pieces of white construction paper
- 1 large piece of bulletin board paper (preferably a dark color for class tapestry background)
- Glue sticks
- Scissors
- Colored pencils or markers

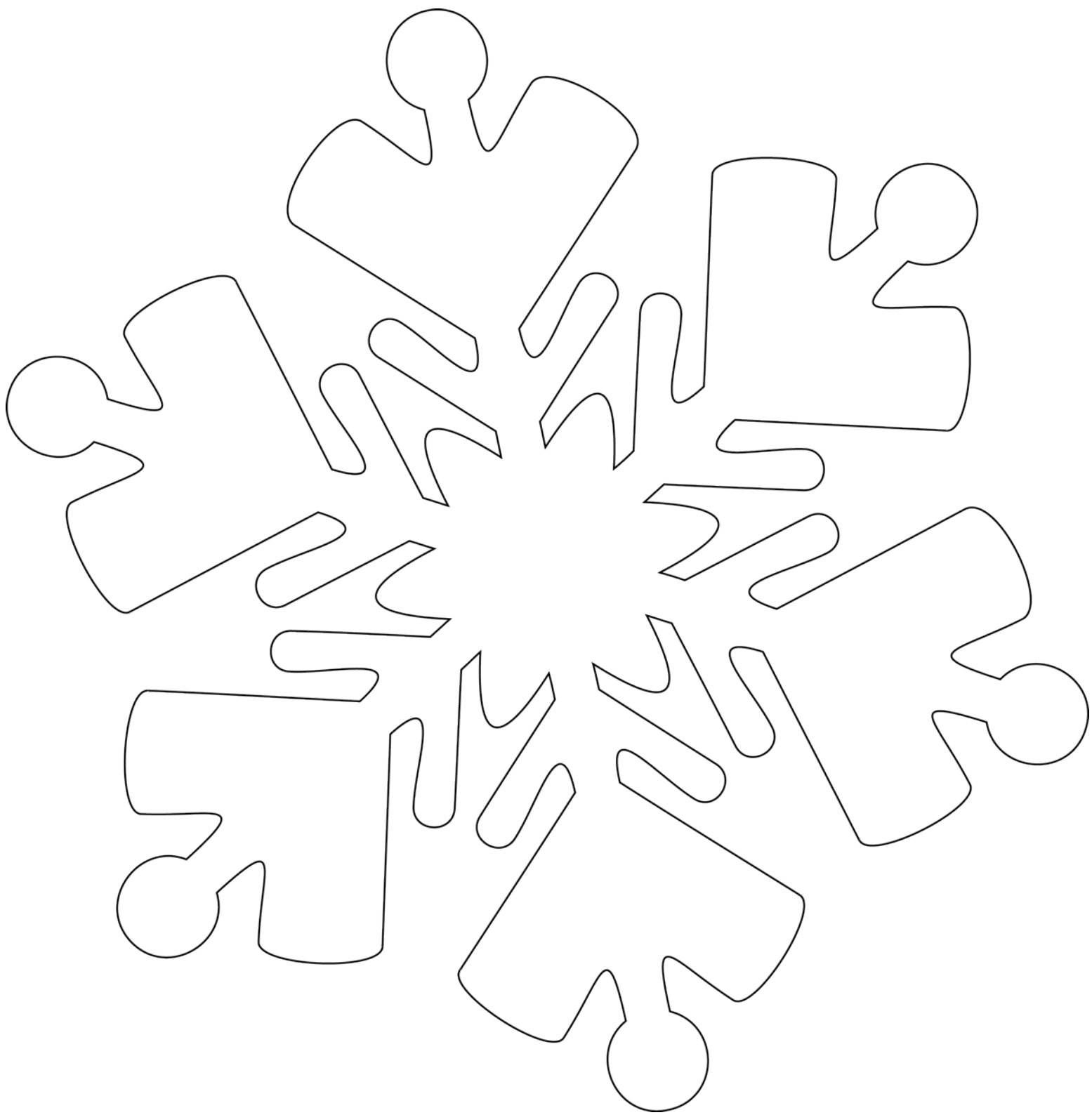
1. Begin by discussing that the winter solstice in the book, *Winter of the Ice Wizard* is the time of year the story takes place. Reread page one and the first two paragraphs of page two to the class. Jack and Annie are reminded by their mother that it is the first day of winter (which is the winter solstice) and therefore the shortest day of the year. They knew they would have very limited daylight in which to play outside in the snow. They hurried outside and soon saw Kathleen and Teddy trudging through the snow in Frog Creek Woods on their way to the tree house! Next, they find out that they must travel to the Land-Behind-the-Clouds on the winter solstice to retrieve Merlin's Staff of Strength! Investigate with your students why the winter solstice occurs. Lead them on a mission to discover new facts about the natural cycle of the seasons.
2. Read *The Winter Solstice* by Ellen Jackson and *The Shortest Day, Celebrating the Winter Solstice* by Wendy Pfeffer to your class to gain more knowledge and find more facts about the winter solstice. Students will gain an understanding for the scientific reason for the shortest day of the year, as well as how people of many cultures throughout history have responded to the darkness of winter and celebrated the return of longer periods of sunlight.

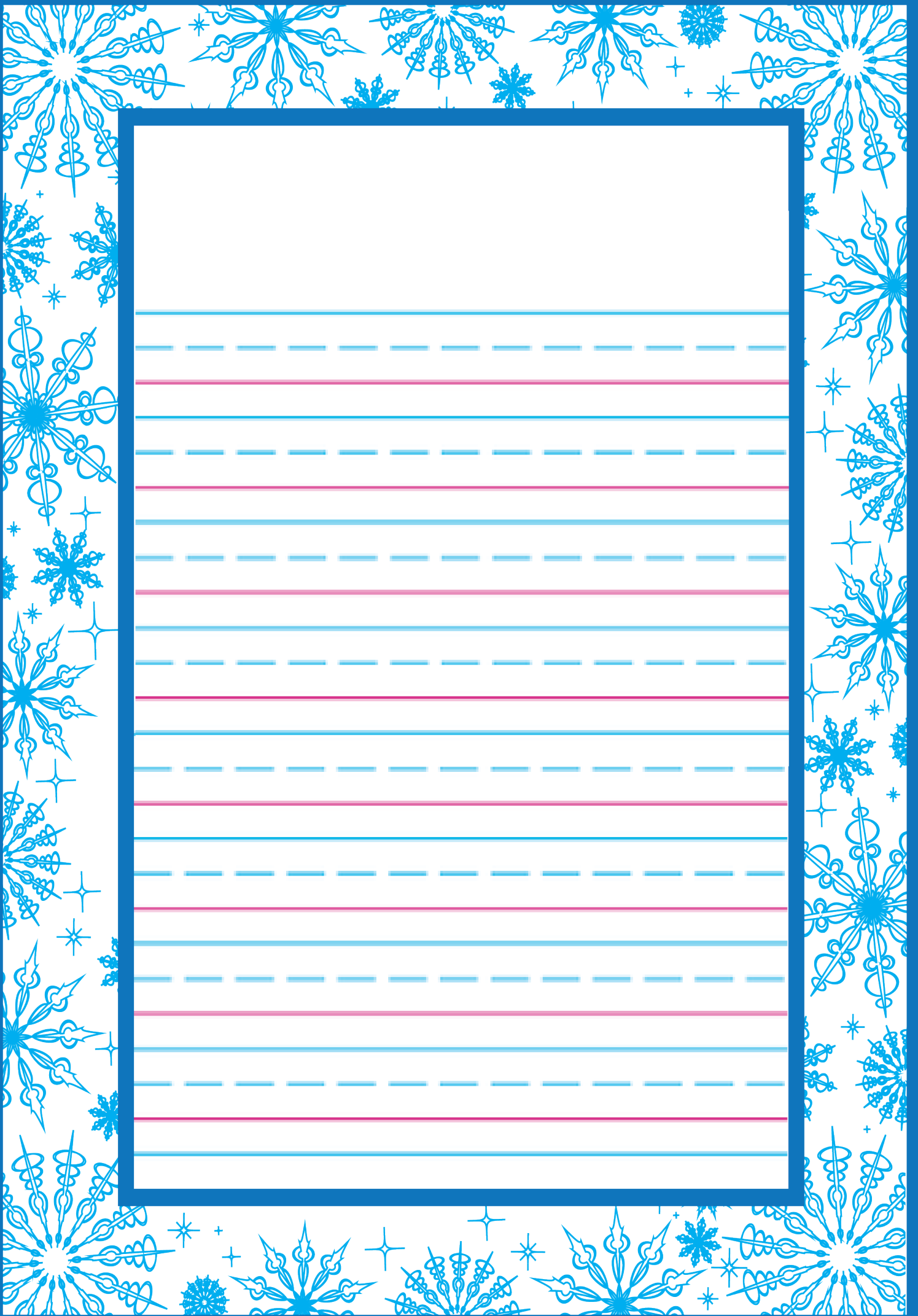


3. After sharing the books with your class and/or researching the winter solstice on the Internet print a copy of the snowflake graphic organizer (provided) for each child and ask them to print the topic (Winter Solstice) in the center. Next, they should write six facts learned about the winter solstice on the points of the snowflake.

After learning facts about the winter solstice, write the topic in the center of the snowflake and record six interesting facts on the points of the snowflake. Use the organizer to write a paragraph about the winter solstice on the snow-themed writing paper.

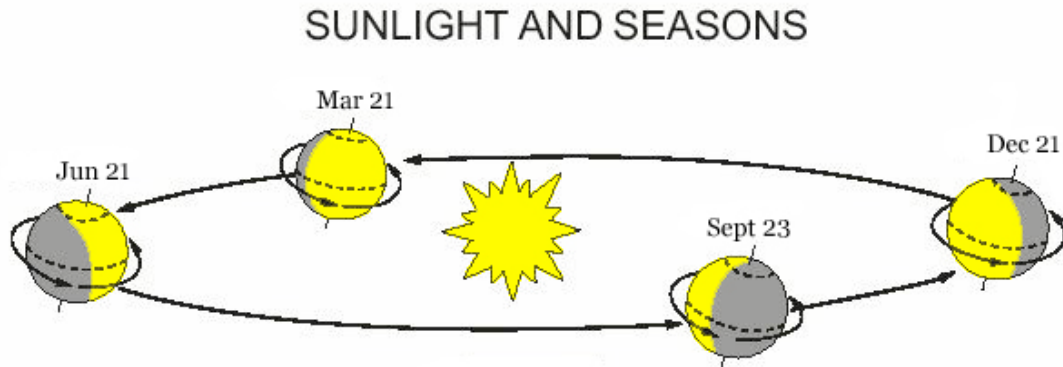






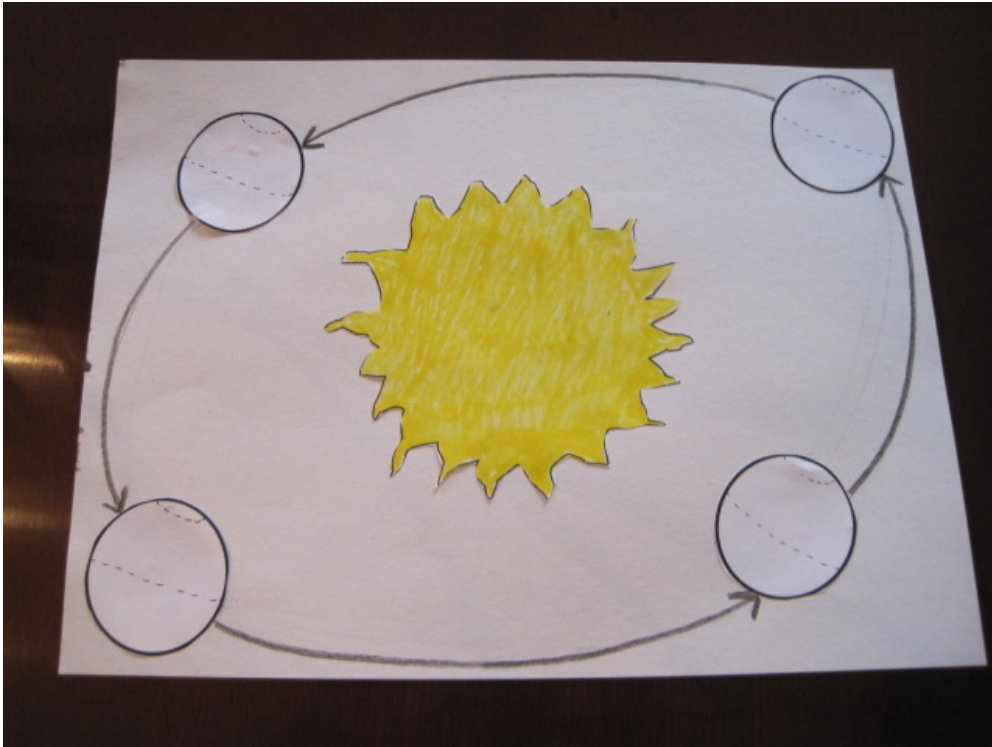
4. Earth is slightly tilted on its axis. As it revolves around the sun, the Earth's Northern Hemisphere is tilted toward the sun for part of the orbit and away from the sun for another part of the orbit. When the tilt is toward the sun, the days are longer and the Northern Hemisphere experiences summer. When the tilt is away from the sun, the days are shorter and nights are longer and we experience winter. Extreme northern parts of the world have little or no sunlight in winter. The winter solstice results when the sun reaches its southern most point in relation to the Earth creating the shortest day of the year.

Create the following display on your dry erase board or chalkboard as a demonstration.

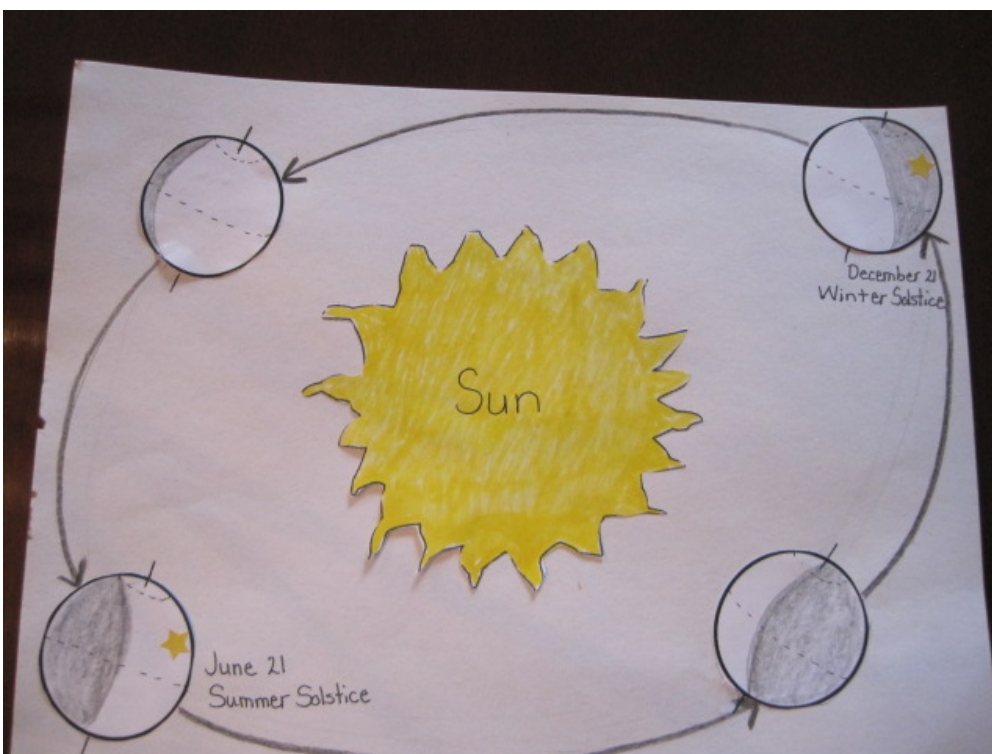


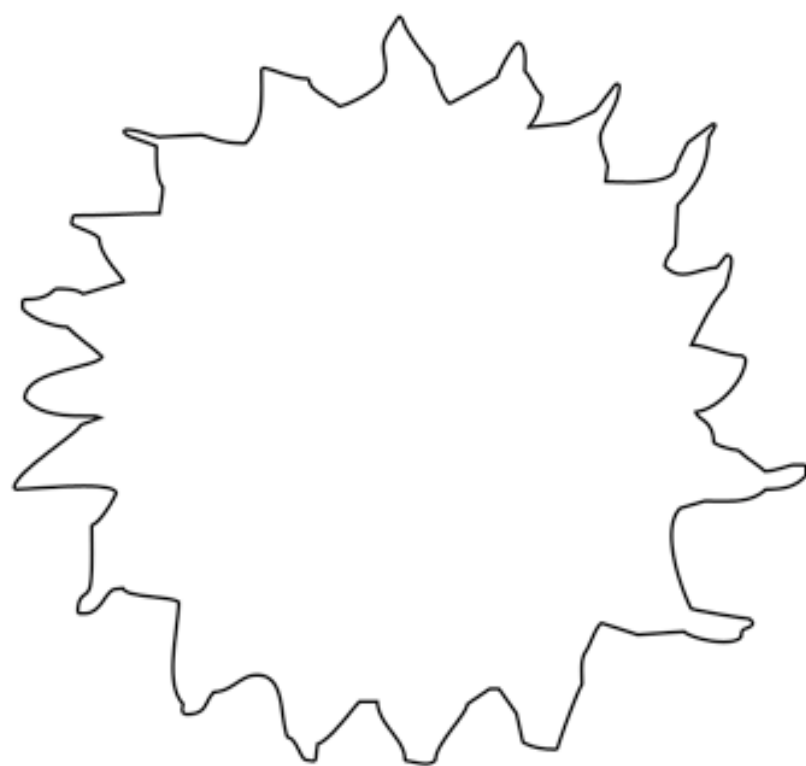
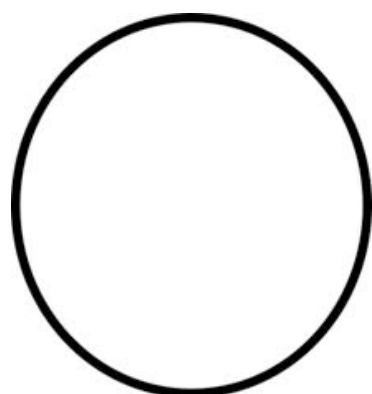
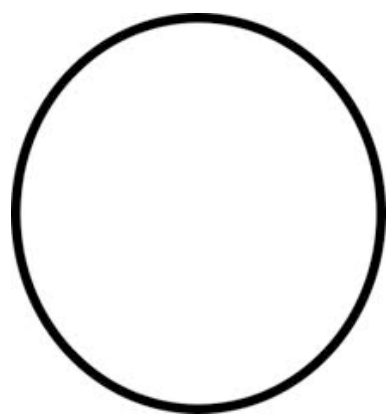
You may also wish to demonstrate by creating a model of the Earth on its axis by inserting a Styrofoam ball with a wooden skewer (the type used for kabobs on the grill) or an orange with toothpicks at the top and bottom. After dimming the lights, tilt the “Earth” slightly and use a light source (flashlight or spotlight) for the sun as you revolve and rotate your Earth model around the “sun” making certain to keep the axis tilted slightly. You will need to designate a student helper to hold the flashlight. If you use a fixed light source you will not need assistance. Students will gain a better understanding of the “reason for the seasons” after witnessing this 3-D demonstration.

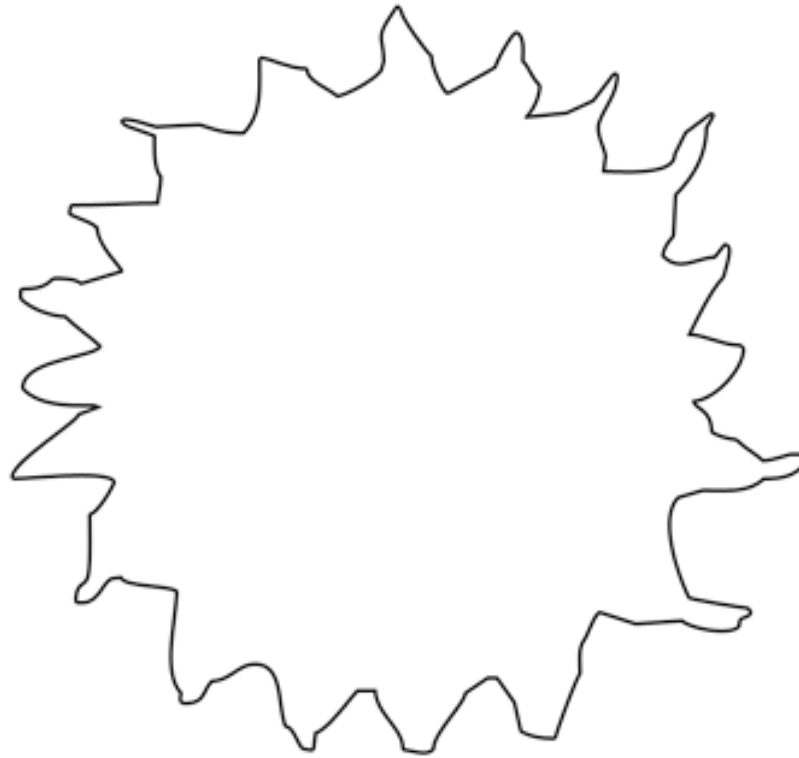
5. Next allow students to create their own model on paper to explain the reason for the winter and summer solstices. Print a copy of the four circles (provided) to represent the earth as it rotates and revolves around the sun. Print one sun pattern (provided) per child on yellow construction paper (or on white and instruct them to color it). Students should create an elliptical orbit of the Earth around the sun. Instruct students to draw a dotted line around the center of the Earth on each circle to represent the equator and a circle at the top of each circle to represent the North Pole. Then draw the elliptical orbit.



6. Next, shade the parts of the Earth to match the display made on the board or to replicate what they learned from the 3-D demonstration showing an understanding of the cyclical nature of the seasons. Ask them to label the sun and winter and summer solstices. Give students two star stickers to place their location on Earth during the winter and summer solstices. If you wish, students may also label the autumn and spring equinoxes.







Let's Celebrate!

Students will discover after reading *The Winter Solstice* and *The Shortest Day, Celebrating the Winter Solstice* that historically, people all over the world have celebrated the winter solstice. The shortest day of the year brings with it a promise that the days will once again progressively grow longer and more sunlight will prevail. Allow your class to celebrate winter by sharing favorite winter activities with classmates!

In *Winter of the Ice Wizard*, Jack and Annie travel to the house of the Norns in an effort to bring back the Ice Wizard's eye. There they find three Sisters of Fate weaving a tapestry. Legend has it that their weaving determines the fate of all who live in the Land-Behind-the-Clouds.

In celebration of winter, allow your students to "weave" their own tapestry of favorite ways that their families celebrate this time of year. Give each child a piece of white construction paper and ask them to draw their favorite winter activity. Tell them that these creations will be "woven" into a classroom display entitled:

Mrs. _____'s Class Celebrates Winter"

Mount on a large sheet of bulletin board paper.