Reasons for the Seasons WebQuest Worksheet

Misconceptions About the Reasons for the Seasons

What are misconceptions? A misconception is an incorrect idea about something. Your task is to find some common misconceptions about the reasons for the seasons. Record them in the table below. You will be using this information to make your first poster.

1.
2.
3.
4.

Using these misconceptions, make a poster identifying common misconceptions.

Tilt of the Earth

How does the Earth's tilt affect the seasons? Research your websites. Write your information below. In the box below, draw a picture showing how the title of the Earth affects the seasons. Draw a picture of the Earth, showing its tilt, at each season.

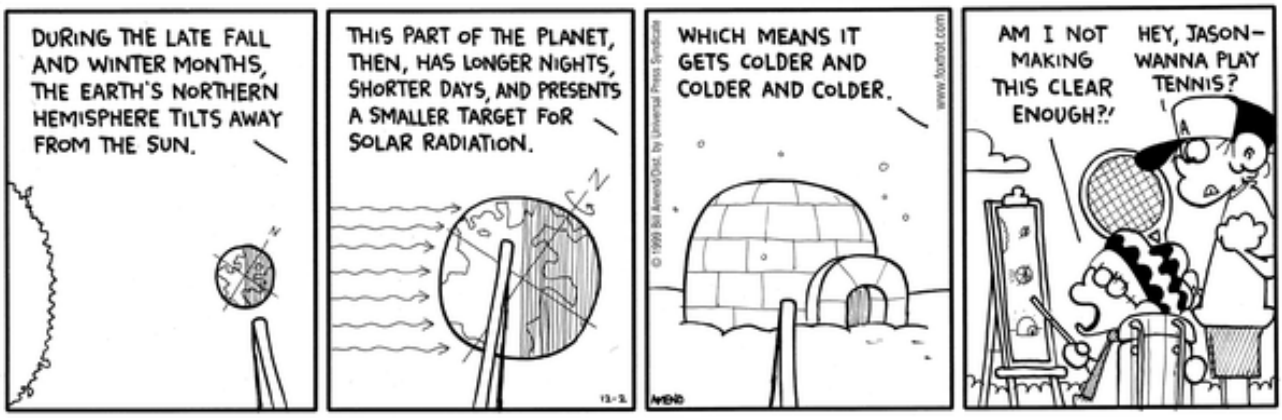
Winter	Spring
Summer	Fall/Autumn

Use this information to make your second poster poster about the tilt of the Earth.

Earth Location and Seasons

The Earth is at four different points in its orbit around the Sun when we have each season. Where is the Earth when it is summer (or winter, fall, and spring)? Does the Earth tilt towards or away from the Sun? Research your websites. Draw a picture of the Earth revolving around the Sun through the year. Show the Earth at its location during Winter, Spring, Summer, and Fall/Autumn.

Use the information to make your third poster about the tilt of the Earth.



What's Your Angle?

How does the angle of the sunlight that hits the Earth affect the seasons? Research your websites. Draw pictures showing how the angle of sunlight determines whether the season is warm or cold.

Winter	Spring
Summer	Fall/Autumn

Use the information to make your fourth poster about the angle of sunlight that hits the Earth.

Making the Reason for the Seasons Posters

Your WebQuest task is to make four posters. The posters will explain:

1. *Misconceptions About the Reasons for the Seasons*
2. *Tilt of the Earth*
3. *Earth Location and Seasons*
4. *How the angle of heat energy from the Sun hitting the earth affects heat during the seasons.*

Your posters will explain these important concepts.

Poster requirements:

- ☑ Posters will be drawn on an 11"x17" sheet of paper.
- ☑ Diagrams and drawings will be used on ***every poster*** to help illustrate the concepts.
- ☑ Colored pencil and/or crayons (no markers) will be used for illustrations.
- ☑ The explanations written on the poster will be written with a #2 pencil.
- ☑ The poster will be neat and all information will be easily found.

Use your time in the computer lab to research the required information for the four posters. When we return to class, take your time, and produce neat and accurate posters explaining the reasons for the seasons.

Poster Rubric

Purpose of assignment: Have students research the reasons for the seasons and produce posters to demonstrate what they have learned.

This Rubric addresses the following 6th Grade Science Standards:

STANDARD II: Students will understand how Earth's tilt on its axis changes the length of daylight and creates the seasons.

Objective 1: Describe the relationship between the tilt of Earth's axis and its yearly orbit around the sun.

a. Describe the yearly revolution (orbit) of Earth around the sun.
b. Explain that Earth's axis is tilted relative to its yearly orbit around the sun.

Objective 2: Explain how the relationship between the tilt of Earth's axis and its yearly orbit around the sun produces the seasons.

a. Compare Earth's position in relationship to the sun during each season.
d. Use a drawing and/or model to explain that changes in the angle at which light from the sun strikes Earth, and the length of daylight, determine seasonal differences in the amount of energy received.

Category	4	3	2	1
Required Elements	The poster includes all required elements as well as additional information.	All required elements are included on the poster.	About ½ of required elements are included on the poster.	Less than ½ of required elements were missing.
Knowledge Gained	Student can accurately answer all questions related to facts in the poster and processes used to create the poster.	Student can accurately answer most questions related to facts in the poster and processes used to create the poster.	Student can accurately answer about 75% of questions related to facts in the poster and processes used to create the poster.	Student appears to have insufficient knowledge about the facts or processes used in the poster.
Content - Accuracy	All facts displayed on the poster are accurate.	Most facts displayed on the poster are accurate.	About ½ of the facts displayed on the poster are accurate.	Few facts displayed on the poster are accurate.