



# Circling the Seasons

## Purpose

Students will gain an awareness and understanding of the seasons and how they affect agriculture.

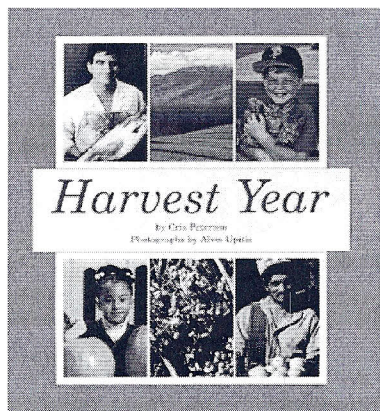
**Time:** 30 minutes—1 hour

**Grade Level:** Elementary

## Materials

### Activity 1

- ☐ List of students' birthdays
- ☐ Four different colored skeins of yarn: blue for winter, green for spring, yellow for summer, and red for fall
- ☐ Scissors
- ☐ Season Cards



## Background

There is a long-standing joke in northern Utah that there are only three seasons: almost winter, winter, and road construction. Despite what we observe outside our windows, there are officially four seasons: winter, spring, summer, and fall. Seasons are a result of Earth's revolution around the sun and Earth's tilt on its axis. Each season has its own characteristics.

Winter formally starts on the winter solstice; usually on or around December 21. Winter is the coldest season of the year. The days are shorter than the nights but begin to lengthen as the season progresses. In many parts of the world it snows. Plants die or lie dormant (asleep). Some animals, like bears, hibernate, and farm animals have to seek shelter and be fed by farmers. Because winter is so cold, people dress in heavy, warm clothing like coats and sweaters.

Spring starts on the spring equinox; on or around March 21. Spring marks the time of new life with the return of warmth and growth. The number of daylight hours increase, the snow melts, you start to see birds, and the soil temperature becomes warmer. Farmers and gardeners plant their plots, trees grow leaves, and flowers bloom. Hibernating animals wake up hungry and baby animals are born. As the spring brings warmth, people wear lightweight, warm weather cloths like short sleeve shirts and light jackets.

Summer begins with the summer solstice; usually around June 21. Summer is the warmest season of the year and has the longest number of daylight hours. Crops grow in the fields and flowers bloom. Animals enjoying the abundant food supply. Summer can also dry out the earth and can be a cause for concern due to droughts and wild fires. People dress in light layers of clothing to stay cool and use sunscreen and insect repellent.

Autumn is often referred to as fall because it is the time that the leaves of deciduous trees change color and drop off as they prepare for winter dormancy. Fall sets in at the autumnal equinox; about September 21st. The daylight hours are shortening and the nights are cool. Farmers and gardeners harvest the last of their crops. Migratory birds leave for a warmer climate as it grows colder. Animals and people gather and store food to sustain them during the winter. Animals fur thickens and people start to dress more warmly as it rains or begins to snow in regions around the world.

Different regions of the world manifest significant seasonal differences. Lengths of the seasons may differ; and seasons occurs at different times of the year based on the Earth's tilt. For example when it is winter in the Northern hemisphere it is Summer in the Southern hemisphere. Some regions of the world, like the tropics, experience minimal seasonal temperature changes because they are located at the equator.

## Activity Procedures

### Activity 1: Season Circle

1. Cut out the Season Cards (attached) and punch two holes in each. Tie a string of yarn to each to make a necklace.

2. Using their birthdays as criteria, ask the students to arrange themselves into a single file line. January 1—or whoever is closest to that—date will start the line and December 31—or the closest date—will end the line.
3. Have the students curve their line into a circle by having the last December birthday student stand next to the first January birthday. Ask the students to sit on the ground in their “seasons” circle.
4. Ask students how many months are in a year. Help the students name the months in order.
5. Ask students what a season is, how many seasons there are in a year, and if they can name the seasons. Help students to name the seasons in order.
6. Ask students when winter officially starts. Take the Winter Season Card to the student whose birthday is close to December 21<sup>st</sup>. Ask that student to wear the season necklace. Repeat with spring, summer, and autumn season necklace.
7. Give the end of the blue yarn to the student whose birthday is close to December 21<sup>st</sup> and go around the circle, having the students grab onto the blue yarn until you get to the student who is wearing the spring season necklace. Cut the blue yarn and help the “spring” student tie the green yarn to the blue yarn. Continue around the circle, having the students grab onto the green yarn until you get to the student who is wearing the summer season necklace. Cut the green yarn and help the “summer” student tie the yellow yarn to the green yarn. Continue around the circle, having the students grab onto the yellow yarn until you get to the student who is wearing the autumn season necklace. Cut the yellow yarn and help the “autumn” student tie the red yarn to the yellow yarn. Continue around the circle, having the students grab onto the red yarn until you get to the student who is wearing the winter season necklace. Cut the red yarn and help the “winter” student tie the red yarn to the blue yarn.
8. Now that your students are segregated into their seasons group in the seasons circle, consider the *Suggested Activities* as a guide about how to use the season circle. You can either leave the students in the season’s circle or separate them into their season group.

### **Suggested Activities**

#### *Kindergarten*

Ask students to:

- Describe the weather during each season
- Explain what happens to plants and animals during each season
- Describe what people’s clothing looks like during each season
- Use their five senses to describe each season
- Identify holidays that occur during each season and foods that are often associated with those holidays
- Draw a picture that represents their season

#### *Grade 1*

Ask students to:

- Identify characteristics of seasons of the year
- Describe the weather during each season
- Have students compare and contrast seasonal weather changes
- Have students compare and contrast what farmers do in response to the weather during each season; examples may include: farmers feed animals

during the winter, farmers plant crops in the spring, farmers irrigate in the summer, and farmers harvest in the fall

- In their seasons group go to the library and find a book that either describes or takes place during their season
- Write a story that describes or takes place during their season.

#### *Grade 4*

Ask students to:

- Identify characteristics of seasons of the year
- Describe what the weather is during each season
- Describe how weather and forecasts affect people's lives
- Describe how weather and forecasts affect agriculture
- In their seasons group go to the library and find a book that either describes or takes place during their season
- Write a story that describes or takes place during their season.

#### *Grade 6:*

Ask students to:

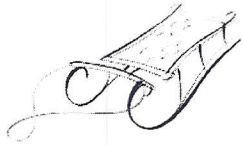
- Describe the relationship between the tilt of Earth's axis and its yearly orbit around the sun
- Explain that Earth's axis is tilted relative to its yearly orbit around the sun
- Explain how the relationship between the tilt of Earth's axis and its yearly orbit around the sun produces the seasons
- Compare Earth's position in relationship to the sun during each season
- Relate the seasons to the production of different fabric fibers for example: cotton is planted in the spring and harvested in the fall and sheep are sheared in the spring
- Create a multimedia presentation using precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events during their season

#### *Grade 9:*

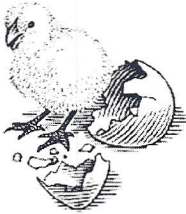
Ask students to:

- Analyze the characteristics, distribution, and migration of human populations on the earth's surface in relation to weather and the seasons
- Analyze how the climate in the northern and southern hemispheres is reversed due to the Earth's tilt on its axis and how that affects growing seasons
- Find and analyze a primary source that describes or takes place during their season

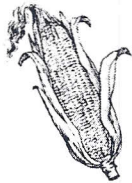
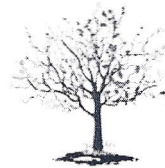




**Winter**



**Spring**



**Summer**



**Autumn**



