

Meaning of Spring

Adapted from: Denver Urban Gardens “Signs of Spring”

http://dug.org/storage/school-garden-curriculum/Signs_of_Spring.pdf

Overview: Students will learn about the cycle of seasons and how each season has unique weather characteristics that impact growth in the garden. Students will also learn why spring is important and will observe the changes that are happening all around the garden in the spring season.

Subject area: Science

Grade level: K-1st

Next Generation Science Standards:

K-ESS2 Earth’s Systems

- **K-ESS2-1.** Use and share observations of local weather conditions to describe patterns over time.

1-ESS1 Earth’s Place in the Universe

- **1-ESS1-2.** Make observations at different times of the year to relate the amount of daylight to the time of year.

English Language Acquisition Common Core Standards:

- **SL.1.1 ELA.** Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
- **S1.1.3 ELA.** Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
- **1.L.5.c ELA.** Identify real-life connections between words and their use.

Objectives: Students will be able to compare and contrast the differences between the four seasons and identify the major signs of spring in the garden.

Background Information for Teacher: The first official day of spring occurs on March 20th, the spring (or vernal) equinox, which is one of two days in the year (the other being the autumnal equinox in the fall) when we have equal hours of day and night. The term equinox comes from the Latin words *aequus* meaning equal and *nox* meaning night.

After the spring equinox, the days continue to get longer and the sun rises higher in the sky, until the summer solstice (date varies between June 20-22; in Oregon, it’s June 21st). This is important for the garden for two reasons: First, some plants have sensors, which determine when to bloom based on the day length (photoperiodism). Second, longer days heat the air and make it warm enough for many of our plants to grow well.

Prep time: 30 minutes

Lesson time: 40 minutes

Materials needed:

- White Board
- Spring Signs Cards (one set per group)

Space needed: School Garden

Staff needed: 1

Preparation steps: Create one Spring Signs card per group (the text for the cards is attached in both English and Spanish). If necessary, recruit extra volunteers to lead small groups.

Presentation steps:

1. Ask the students: What are the four seasons? What are characteristics of spring in the garden? Of summer? Of fall? Of winter? What foods are ready to harvest from the garden in each season?
2. Write each season on the board and list the characteristics of each as the students brainstorm them. Guide them in this process to think about plants growing, the weather, etc.
3. Discussion: We are currently in the spring season. It began on March 20th! The summer season will officially begin on June 21st. What does it mean to be in spring? Provide a brief explanation of spring bringing more hours of sunlight and warmer sunlight, meaning more plant growth! Spring is a time of beginning and regrowth, so all of our plants that couldn't live during the cold winter months, or that were dormant (sleeping), begin to grow again.
4. Activity: Split class into 4-5 groups (depending on number of adult volunteers). Explain that today we will be exploring the garden to observe signs of the spring season. With their group leader, they will observe specific items in the garden, as instructed by the tasks on their cards. Read off the tasks to the students in the classroom *before* they are split into a group so they are prepared for the activity.
5. Have students work in groups to observe the signs of spring using their cards as a guide for approximately 20 minutes, or as time allows.

Conclusion: Bring the class back together and ask for a volunteer to answer the questions on each of the cards. What was the most interesting sign of spring? How does the weather now, in spring, compare to last winter? How does our spring temperature compare to summer temperature?

Spring Signs Cards

1. Find three examples of spring growth in the garden.
2. Looking in the air, on the ground, under leaves and rocks, and on flowers, can you find three different types of garden bugs? What are they doing?
3. What plants are growing and are ready to be harvested from the garden this spring? What plants are growing now but aren't ready to eat until summer?
4. Look around and find three signs that we are close to the summer season! What are they?

1. Busca tres ejemplos de crecimiento de vegetación de primavera en el jardín.
2. Mirando al aire, en la tierra, debajo de hojas y piedras, y en flores, ¿puedes encontrar tres diferentes insectos del jardín? ¿Qué están haciendo?
3. ¿Cuáles plantas están creciendo y están listas para ser cosechadas esta primavera? ¿Cuáles plantas están creciendo pero no se podrán comer hasta el verano?
4. Busca a tu alrededor y identifica tres cosas que señalan que estamos cerca del verano! ¿Cuáles son?