Asparagus

Encourage students to explore asparagus production in California.

Activity

Asparagus is one of the few perennial vegetables grown in California. As a perennial, asparagus plants will produce spears year after year. Asparagus has a short 90-day growing season and is primarily grown in California’s Central Valley, Salinas Valley, and the Delta. California asparagus can be purchased at grocery stores, farmers markets, and produce stands in different sizes based on diameter: very small (less than \( \frac{5}{16} \) in.), small (\( \frac{5}{16} \) to \( \frac{8}{16} \) in.), medium (\( \frac{8}{16} \) to \( \frac{11}{16} \) in.), large (\( \frac{11}{16} \) to \( \frac{14}{16} \) in.), and very large (\( \frac{14}{16} \) in. and larger). The asparagus plant produces all sizes all season long. Contrary to popular belief, the thicker spears are more tender. Tenderness also relates to color—the more green, the more tender. The following activity will introduce students to the size scale used to sort asparagus prior to shipping it in the grocery store.

Measuring Asparagus

1. Have students research the origin of asparagus and identify its growing region on a map of California.

2. When harvested, asparagus is measured one inch above the bottom of the stem. Collect various sizes of fresh asparagus, or download and print copies of the measuring worksheet.

3. Measure the asparagus both in standard and metric systems. Practice converting between larger and smaller units.

4. Determine the diameter, circumference, radius and estimate the volume of each asparagus spear. Identify if the size is very small, small, medium, large, or very large.

5. Have students create an infographic to represent their findings.

Classroom Activities

Science

- Compare and contrast the appearance, growing methods, and market for white and green asparagus. Display the information in a graphic organizer.

English Language Arts

- Learn about the history of asparagus production, investigating where it was first cultivated and how it arrived in California. Use online tools to create a digital timeline. Share your timeline in an oral presentation.
- Identify and learn more about the costs and benefits of asparagus production. Write a market report that include predictions for future production and value. Cite evidence to support your predictions.

California Standards

Grade 4
ELA CC: RI.4.3; SL.4.4, 5
Math CC: 4.MD.1, 4

Grade 5
ELA CC: RI.5.3; SL.5.4, 5
Math CC: 5.MD.1, 2, 5

Grade 6
ELA CC: RI.6.1; SL.6.4, 5
Math CC: 6.G.1, 2

Materials

- California-grown asparagus in various sizes or measuring worksheet from LearnAboutAg.org/agbites
- California map
- Ruler

Tip

Ask a local produce specialist to be a guest speaker and talk to the students about asparagus.