

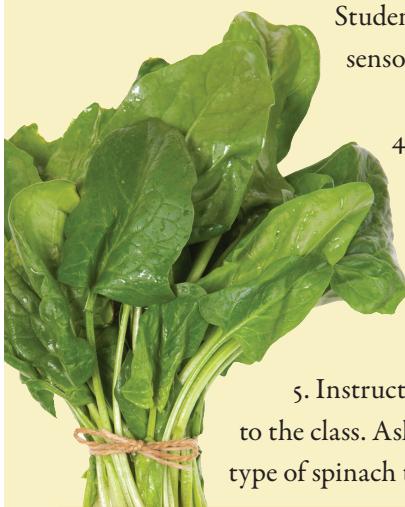


Frozen, Canned or Fresh?

Cook three different kinds of spinach. The fresh spinach should be well washed, drained and cooked. Give each student group an equal share of frozen, canned and fresh spinach.

1. Show students a package of frozen spinach, a can of spinach and a bunch of fresh spinach. Discuss the nutritional value of spinach. Explain that each group will design an experiment that will examine the visual appearance, taste, texture and smell of all three types of spinach.
2. Brainstorm with the class possible methods of observing and recording the different features of the spinach. Set clear objectives for the experiments, such as experimental design, time restraints and data organization. Allow students time to develop their plan.
3. Have students present their plan to you (and/or the class) for approval. Provide feedback for each group and allow students to revise their plan.

Students shall wash their hands, conduct their sensory experiments and record observations.



4. Ask students what conclusions they can make based on the information they gathered. Discuss with the class different ways to present the information. Students create graphs and charts to represent their findings.

5. Instruct groups to present their findings to the class. Ask students to explain which type of spinach they liked best and why.

Objective:

Students will design an experiment to compare the flavors and textures of spinach, interpreting their findings with charts and graphs.

California Standards

Grade 4: ELA CC: SL.4.4, 5
Math CC: 4.MD.4

Grade 5: ELA CC: SL.5.4, 5
Math CC: 5.MD.2
NGSS: 5-PS1-2, 3, 4

Grade 6: ELA: SL.6.4, 5
NGSS: MS-PS1-4



TASTING AND TESTING THE HARVEST

Materials:

- 3 frozen packages of spinach
- 3 cans of spinach
- 3 bunches fresh spinach
- 3 medium-sized pots
- Hot plate
- Water
- Forks
- Plates
- Napkins

Vocabulary:

Encourage students to use these words when making observations.

Aftertaste: the persistence of a sensation of flavors when food is no longer present.

Mouthfeel: food's physical and chemical interaction in the mouth, used often in the testing and evaluating of foodstuffs.

Pungent: having a strong odor that stings the nose, especially in acidic or spicy substances.

Vibrant: of bright color.

This lesson has been adapted from California Department of Education curriculum by California Foundation for Agriculture in the Classroom.