

Arizona Grown Specialty Crop Lesson Plan

What to do with Malus-domestica, Cultivated Apples?



LEVEL: Grades 7-9

SUBJECTS: Language Arts, Technology, and Workplace Skills

AZ ACADEMIC STANDARDS: 3T-F1, 3T-F2, 3T-F3, 4T-F2, 5T-F1, 6T-F1, IWP-E1, IWP-E3, IWP-E6, IWP-E7, 3WP-E1, W-E1, W-E5, W-E6, W-E7, W-E8

MATERIALS

Purchase enough Arizona grown apples so each student can taste test at least 3 varieties.

Students will need access to computers that are connected to the Internet. (1 per student or group of students)

VOCABULARY

Use the handout, Vocabulary Categorizing, to show students knowledge of apple terminology.

This can be used as a pretest or an activity after lesson #1.

RELATED LESSONS

Apple: Kinds to Products
A is For Apple
Apple: Seed to Tree
Apple: Bare to Pick

SUPPORTING INFORMATION

Use resource sheet to get students started gathering information. Print one for each computer for quick reference.

Apple is one of the most important fruits that grow on trees. It is also one of the most popular of all fruits. Since prehistoric times, people have enjoyed the delicious flavor of apples.

There are hundreds of varieties of apples. Their

color ranges from various shades of red to green and yellow, and their flavor varies from tart to sweet.

Apple trees belong to the rose family. Their beautiful white flowers open in spring and look like tiny roses.

Apple growers throughout the world produce about 2 billion bushels of the fruit annually. China leads the world in apple production. The United States ranks second, followed by France, Italy, and Turkey.

In the United States, apple growing is an important industry in several regions, especially the Pacific Northwest. Washington produces more apples than any other state. The nation's apple crop totals about 260 million bushels each year, with a wholesale value of more than 1 1/4 billion dollars

In Canada, apples are the most important fruit crop. They are grown commercially in British Columbia, New Brunswick, Nova Scotia, Ontario, and Quebec. Canadian growers produce about 30 million bushels of apples yearly.

Over half the apples grown are eaten fresh. Apples also are baked into pies and many other dishes. Apples are used in making apple butter, apple juice,

BRIEF DESCRIPTION

This lesson introduces problem solving in a real life situation. Students will create a newsletter and oral presentation from an apple farmer's point of view. They will create a marketing strategy, sales promotion, and prototype, recipe or art idea to sell apples in a market when apple supply outweighs apple demand.

OBJECTIVES

1. Students will become proficient in AZ apple varieties and vocabulary associated with them.
2. Students will utilize technology-based research tools to locate and collect information.
3. Students will construct technology-enhanced models, prepare publications and produce other creative works.

ESTIMATED TEACHING TIME

1.5 weeks to 2 weeks

SUPPORTING INFORMATION (cont'd)

applesauce, and jelly and wine. Apple juice may be made into vinegar. Most apple products are canned or bottled, and others are dried or frozen.

Apples consist of about 85 percent water. They contain vitamins A and C, potassium, pectin, and fiber.

Through the ages, apples have appeared in legends, poems, and religious books. In the Swiss legend of William Tell, a tyrant arrests an archer but promises to free him if he shoots an apple off his son's head. Tell does so and later kills the tyrant with another arrow.

GETTING STARTED

1. Cut a small piece of apple for each student from different varieties of apples.
2. The instructor/teacher should make available copies of the following handouts:
Handout #1
Vocabulary Categorizing
Core of the Problem
6-Point Grading Scale
"Arizona Agriculture, Something You Should Know About"
"Conference Committee approves \$75 million in apple grower assistance"
"Asked to reconsider apple imports"
Resource List

PROCEDURES

Lesson one: (1-2 days)
Use Vocabulary Categorizing with a handout to provide students knowledge of apple terminology. This can be used as a pretest or an activity after lesson #1.

Students should read:
[Arizona Agriculture, Something You Should Know About](http://agriculture.state.az.us/Speeches/1april00.htm)
<http://agriculture.state.az.us/Speeches/1april00.htm>

Discuss the importance of agriculture in the state of Arizona.

Teacher prepares a variety of AZ grown apples cut into pieces for each student to taste and evaluate (see handout #1). This lesson will help students learn about apple varieties and their tastes.

Lesson two: (5-7 days)

Students will pretend they are an apple farmer in Arizona. Read together or paraphrase for students, "Conference Committee Approves \$75 Million in Apple Grower Assistance" and/or "Asked to reconsider apple imports".

Tell students because of apple imports into this country their family farm is having difficulty. They need to find new ways to sell or market their apples to make them more desirable to the public. All growers in this class will devise a marketing strategy, a sales promotion, prototype, recipe, or art idea to sell apples in a market when apple supply out weighs apple demand.

The instructor will need to handout and review assignment sheet (Core of the Problem) and grading scale.

Students should do an Apple in Arizona web search to find information to form the newsletter. See work cited page for additional sites.

The teacher should review with the students how to utilize information acquired from several sources and transfer information learned in one situation to another. The instructor should walk the room visiting with each student and helping students with computer or writing problems. Group students with needs together, for

example review header and footer with a group or clip art with another group.

Gifted students could give a cost breakdown of the cost incurred to market this product.

Lesson three: (1-2 days)
Presentation/Grading

Students will do an oral presentation and/or make a prototype using the newsletter as a guide.

The teacher will review with the students how to deliver a speech clearly, with expression and in an organized fashion, making eye contact with the audience, and convey the message through non-verbal communications. The teacher will also review with the students how to speak in a content area, using vocabulary of the subject accurately; locate and interpret information in documents such as manuals, graphs and schedules.

If you pick the presentation option your presentation should be from 3 to 5 minutes. Your voice should project to the back of the room. No yelling. Please use visual aids, costumes, jokes or food. Print handouts of your newsletter for each table. Make your presentation interesting. Try using humor.

See the assignment sheet, Core of the Problem, for criteria for the presentation. Use the grade scale for grading each presentation. You may want to tape the presentation and let the student assist in grading.

If you pick the prototype option you must make detailed sketches or models of a product, assemble and

present the product. Have your product available for a class display.

EVALUATION OPTIONS

1. Use the "6 Point Scale" rubric to grade the students.

RESOURCES

<http://agriculture.state.az.us/Speeches/1april00.htm>,

Arizona Agriculture,
Something You Should Know
About

http://www.usapples.org/newroom/nr_138millassist.html

"U.S. Apple Release October 2000: Congress Approves \$138 million in Assistance"
World Book Multimedia Encyclopedia 1999 World Book, Inc. 525 W. Monroe, Chicago, Il. 60661

Additional Student/Teacher Website Locations

<http://www.aztourist.com/articles/bounty.html>

<http://www.applejournal.com/az01.html>

<http://user.safeaccess.com/ol sen/njfkapples.html>

http://www.usapples.org/newroom/nr_138millassist.html

www.usapple.org

EDUCATORS' NOTES

CURRICULUM DESIGN

Tammy Demien Art/Life Skills Teacher Heritage Middle School Chino Valley School District

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