

## From Mashed to Riches



**LEVEL:** Grades K-3

**SUBJECTS:** Language Arts, Science, History, Health, Life Skills, Art

**AZ ACADEMIC STANDARDS:** 5M-R1, 5M-R2, 6M-R1, 4M-R1, 4M-R2, RF-5C1,2,3

### MATERIALS

Several different varieties and sizes of potatoes, 4 potato peelers, one knife, tempera paints (several colors), clear plastic soda bottles for each child, toothpicks, labels, salt, pepper, medium cooking pot, tongs, paper towels, 2 cans of chicken broth, 3 cups of milk, paper soup bowls, soup spoons, food scale, large painting paper, potato journal.

**Optional:** Harvest video from internet

(idahopotato.com)

Spuddy Buddy Fan Club (idahopotato.com)

Microwave Cookbook (idahopotato.com)

Mr. or Mrs. Potato Head Game

### VOCABULARY

potato eyes, sweet potato, Shepoda, Ranger Russet, Norkotah, Russet Burbank, Yukon Yellow, mashed, boiled, hash browns, flakes, au gratin, frozen, french fries, potato chips, dehydrated, canned

### RELATED LESSONS

I'm Here, I'm There, I'm Everywhere-I'm Super Spud!

Mmmmm, I'm Good! But Am I Good For You? Arizona!!! How The Heck Did I End Up Here???

### SUPPORTING INFORMATION

The potato is native to South America. Most botanists agree that the area having the greatest diversity of wild varieties of a certain plant is probably the center of origin. Which is why we believe the potato is a native of South America. Specifically, the Andean region. Many species of tuberous plant can be found growing wild in Peru, Ecuador, and Chile. The name of the famous potato, the world's number one vegetable is probably a corruption of the Indian name for the plant—patata or papa. When explorers first encountered Peruvian Indians they found them preserving potatoes by drying them in the sun. Something they still do today and something apparently, they have been doing for a very, very, long time. Scientists believe the Peruvian Incas improved the wild potato of Peru, which is small and bitter, as it slowly gained importance in their diet. Prehistoric caches of dried potatoes have been found. The dried potatoes could be pounded into flour, or reconstituted whole. It must have made a fairly thick and nutritious soup. An important crop that could be preserved from year to year, the potato, along with maize, was the underpinning of the great Incan civilization. The white potato was unknown in Central or North America until after Pizarro conquered Peru and spread their potato culture via Spanish forts

### BRIEF DESCRIPTION

Students learn about the five food groups and the wide varieties of ways we can use and eat the potato.

### OBJECTIVES

- \*identify the five food groups.
- \*learn that the potato is in the vegetable group.
- \*create a picture using potato printing.
- \*compare different kinds of potatoes.
- \*learn to make potato soup, french fries and potato chips.
- \*plant and grow a potato plant.
- \*create a small potato plant book.
- \*learn potato games and chants.

### ESTIMATED TEACHING TIME

Three (3) 45 minute sessions

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**SUPPORTING INFORMATION (cont'd)**

and ships. Sweet potatoes were used in the West Indies and Central America and in the Southern part of North America. They were referenced in the journals of Columbus and Magellan. They were called "batatas." The potato was brought to Ireland, in 1565, according to one story. Another has it that Sir Walter Raleigh first grew it there in 1585. Either way, it soon became a mainstay in the Irish diet. The Irish introduced the potato to New England in 1719, when Irish immigrants settled at Londondary, New Hampshire. In Europe, a grain famine in 1770 caused the potato to become an important crop. A French leader, Parmentier, set up soup kitchens serving potato soup to the starving masses. Today, in France, potato soup bears his name. The potato helped change American history when in 1847-1848 a terrible famine struck Ireland due to the failure of the Irish potato crop due to a disease. It is estimated 1,500,000 Irish people died, while another 1,000,000 emigrated, chiefly to the United States of America. The new Irish-American citizens infused the growing industrialization of the North with cheap labor, and brought their music, culture and political ideologies with them. The Irish always stick up for the underdog. And it wasn't long before the new American citizens had a chance to do just that in a very important Presidential election. Between Lincoln and Douglas, Lincoln was considered the least likely to win. Douglas often made sneering disparaging remarks about Lincoln's poverty stricken background.

Something he shouldn't have done within hearing of the likewise-stricken Irish.

The large Irish vote was a deciding factor in electing President Lincoln who as President, brought the Civil War to its ultimate culmination. An American war many Irish immigrants fought and died in. It was also a war that changed forever the future of America's black citizens.

All due to a lowly tuberous vegetable growing wild, first found by prehistoric Indians living high in the Andean Mountains. The mysterious and amazing potato.

**Session 1****GETTING STARTED**

Purchase a variety of different potatoes (size, species, color etc.) Put them in a brown paper bag. You will use these potatoes for potato printing at the end of this lesson. You will need a peering knife to cut out different patterns for this procedure.

**PROCEDURES**

List and review your five food groups on the board. Let them know that today they will be studying the "potato."

Introduce the vocabulary for the potato. (You may want to have these words on large paper so all the children can refer to it). After explaining the vocabulary, start taking the potatoes from the paper bag one at a time. Talk about each kind of potato you pull from the paper bag. Have enough time to discuss the differences and similarities, color, shapes, and weight (use food scale). Let them try to identify what kind of potato each one is. Sequence them from large to small-then group by color.

Ask the question "What does a potato taste like?" Make a chart of their answers.

At the end of the lesson you will potato print.

**Directions:**

Cut potatoes in half. Cut out different patterns to show the children how you made these prints (you might want to have most of these cut before this lesson). Example: square, triangle, circle, star, letters, etc. In shallow plates place your different colors for this project. Have them dip the potato pattern in paint and then place the potato print end on a large white piece of construction paper to make the print. Repeat over and over until paper is full of different prints in different colors. Let dry overnight.

**Session 2****GETTING STARTED**

Gather a plastic soda bottle for each student, cut off the top third so you have a jar to put your sweet potato in, toothpicks, a label for child's name to be put on the bottle, one sweet potato for each student. (Look for sweet potatoes that have already started to sprout, even if the sprouts are no longer fresh.) Make a potato journal for each student for record keeping.

**PROCEDURES**

Start your lesson by playing "Hot Potato". Have children make a big circle. Let them know that you will play music as they pass the "hot potato" around to each other. Because the potato is "hot" they must pass it quickly. When the music stops, the person holding the potato is out of the game. Game continues until one person is left holding the "hot potato". You may play this game a few times as the children love it.

**Planting Techniques:**

Pierce the middle of the sweet potato with toothpicks and suspend it over the

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plastic jar. Fill the jar almost to the top with lukewarm water and set on a bright windowsill.

**Days to Sprouting:**

Within 7 to 14 days, the first thing you'll notice are little whiskery rootlets growing under the water. Be patient, in a week or two you should see some tiny red sprouts at the top, which will soon open into small red-veined green leaves. Then watch out! Your sweet potato will turn into a growing machine, churning out masses of ivy like foliage at a prodigious rate.

During this time your children should be entering data on a daily basis in their potato journals. Noting growth, (including length, height, width of leaves) water added, color change etc. Drawing is an important part of this journal. It should be a very enjoyable task for students to do. Keep your journal going until you send the plant home.

After your plants have grown, send them home with your students to enjoy with their family.

**Session 3**

**GETTING STARTED**

(Check with your school's policy to verify that you can conduct this activity.) Having some of your parents come in to assist is a great idea. You will need 4 potato peelers, 6 potatoes, large pot, celery bunch, salt, pepper, three cups of milk, two cans of chicken broth, 2 or 3 tablespoons of flour, soup bowls and soup spoons (crackers if desired).

6 medium potatoes cut into large pieces

3 cups milk

2 cans of chicken broth

2 sticks of celery-diced

½ teaspoon salt

1/4 teaspoon pepper

Heat chicken broth and potatoes to boiling in a large

pot over high heat. Reduce and simmer 15 minutes or until potatoes are fork-tender. Remove from heat, but don't drain. Stir in milk, salt, pepper, celery. Heat over medium heat stirring occasionally. If soup needs to thicken add a small amount of flour slowly to soup.

Serve to students and enjoy! While the soup is cooking you may introduce the game "One Potato". Have students get into a large circle. Each student puts their fists in front of them. The teacher starts the game by singing the song and lightly hitting each child's fists as she goes around the circle, if you land on a child's fist he/she must put it behind their back. Teacher continues to land on children's fists until there is only one student's fist left. Words: One potato, two potato, three potato, four, five potato, six potato, seven potato more. Every time you hit a fist on "more" that fist goes behind the back.

**EVALUATION OPTIONS**

1. Teacher made assessments can be developed according to the detail of your lessons.
2. Watching and listening to students is a method to evaluate their understanding of the lesson.
3. Participation is the key element. What a child understands about the potato is what is important.
4. You may also have an oral trivia game while the soup is cooking. Ask students questions about the potato that they have learned during the week.

**RESOURCES**

Additional potato materials available.

More Potatoes by Millicent Selsam

Professor Puffindorf's Secret Potatoes by Robin Tzannes

Home Lovely by Lynne Rae Perkins

Jack's Garden by Henry Cole  
Oliver's Vegetable by Vivian French

Black Potatoes: The Story of the Great Irish Famine by Susan Campbell

Luck with Potatoes by Helen Kettelman

**EDUCATORS' NOTES**

**CURRICULUM DESIGN**

Linda Aragon  
Title 1 Reading Teacher  
K-8  
Dateland Elementary  
School

*This Arizona Grown Specialty Crop Lesson Plan was paid for by a grant from the Arizona Department of Agriculture's Office of Marketing and Outreach.*

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Was  
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