Lesson 4: Potatoes on *MyPlate*

Instructor Notes—

Before beginning "Lesson 4: Potatoes on *MyPlate*," the instructor should review the goal, objectives, and background information.

Goal: Participants will learn where potatoes fit as part of a healthy *MyPlate* meal and potato serving sizes.

Objectives: After completing this lesson, participants will be able to:

1) Identify the five *MyPlate* food groups and into which food group potatoes fall.
2) List three ways to determine potato serving size of fresh and frozen potatoes.
3) Use *MyPlate* to evaluate and plan meals.

Instructor Background Information

Lesson Content: The three main components of the lesson include:

1) The five food groups –fruits, vegetables, grains, protein, dairy- that comprise MyPlate.
2) Three ways to determine potato serving size by using: (a) the Nutrition Facts Label, (b) a scale to weigh or measure the potatoes, and (c) hands or eyes to estimate serving size.
3) Evaluate and plan meals using the food groups contained in *MyPlate*.

Approximate Time to Teach the Lesson: 60 minutes

Key Concepts:

- ***MyPlate*: What is *MyPlate*?** It is a nutrition-guide developed by the United States Department of Agriculture (USDA) to help individuals eat healthy. It illustrates the five food groups using a familiar setting, a place setting. The website, ChooseMyPlate.gov has many tips on how to follow a healthier diet. Some of the messages include: making half of your plate fruits and vegetables, make at least half of your grains, whole grains, switch to fat-free or low-fat (1%) milk, and avoid oversized portions.

http://www.choosemyplate.gov/downloads/GettingStartedWithMyPlate.pdf

- **Serving Sizes versus Portion Sizes.** Many people use the two terms interchangeably, but they are different. The Academy for Nutrition and Dietetics (AND) defines a "serving" as the amount of food recommended in consumer education materials such as *MyPlate*. A "portion" is the amount of a food you choose to eat at any one time—which may be more or less than a serving. http://www.eatright.org/Public/content.aspx?id=4294967941

- **Potato Serving Sizes.** The United States Food and Drug Administration (FDA) sets standards for potato serving sizes. It is based on data collected from national surveys

about the amount of food a person (> 4 years-old) would consume during an eating occasion (e.g. meal). Listed below is what is considered one serving of:

- French fries, hash browns, skins, or pancakes = 70 g prepared; 85 g for frozen unprepared French fries,
- Plain, fresh, canned, or frozen potatoes = 110 g for fresh or frozen; 125 g for vacuum packed; 160 g for canned in liquid,
- Potatoes mashed, candied, stuffed, or with sauce = 140 g.

http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=101.12
http://www.fda.gov/iceci/inspections/inspectionguides/ucm114097.htm

Evaluation Tools: During the lesson, students will complete:

- Three Activities:
  #1: Calculate the number of servings contained in a potato salad recipe.

  #2: Calculate the number of servings contained in a small serving and a large serving of French fries.

  #3: Evaluate two potato recipes—Caterpillar potato and Crash potatoes. Determine where they fit on *MyPlate* and how to include them as part of a complete *MyPlate* meal.

INSTRUCTOR NOTES—

Lesson 4: Potatoes on MyPlate

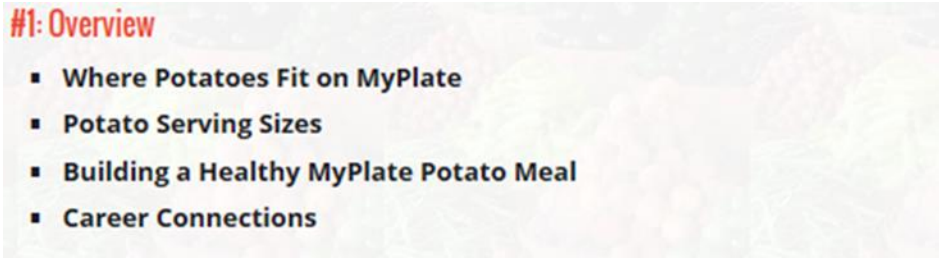
Please lead your students through this lesson and have them complete the activities throughout.

This lesson includes:

- Where Potatoes Fit on MyPlate
- Potato Serving Sizes
- Building a Healthy MyPlate Potato Meal
- Career Connections

Please have students complete this post survey after completing the e-potato lessons.

Instructions: Start at the website http://www.uidaho.edu/epotato; click on Lesson 4.



#1: Overview

Welcome to Lesson 4 of the e-Potato Curriculum. In this lesson, we will cover how potatoes fit on MyPlate.

- *Where potatoes fit on* MyPlate. *You will learn that* MyPlate *contains five food groups and identifies where potatoes fit on the plate.*
- *Potato Serving Sizes. You will learn how to determine the number of servings in two potato items—potato salad and French fries.*
- *Building a healthy* MyPlate *potato meal. You will rate several potato meals using MyPlate and develop your own* MyPlate *potato meal.*
- *Career Connections*

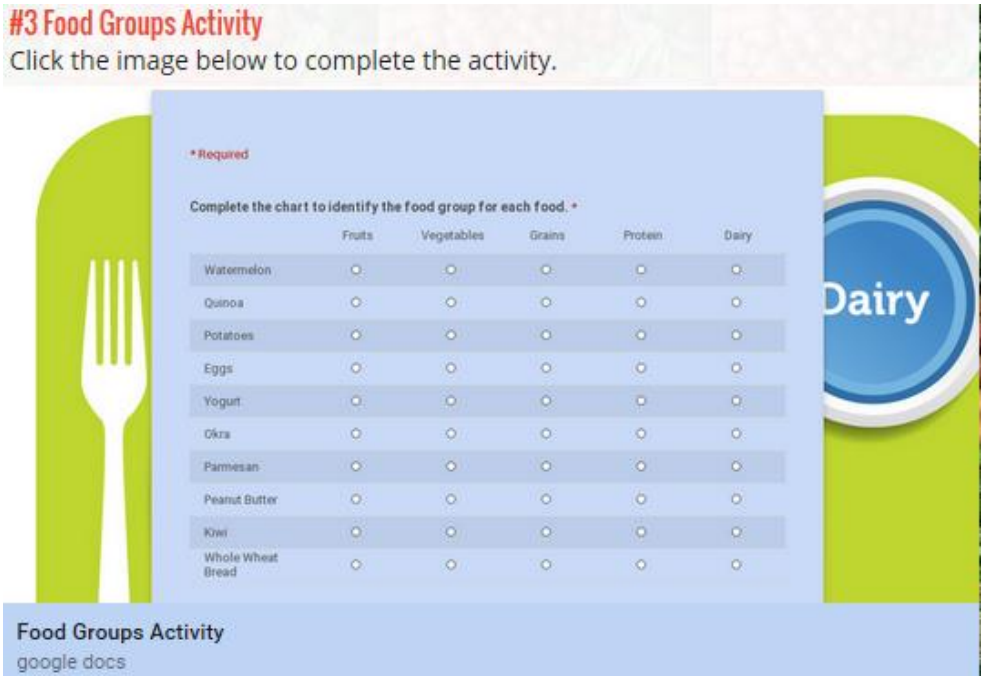
#2: Potatoes on *MyPlate*

- *How many of you are familiar with* MyPlate*? It is an icon chosen by the United States Department of Agriculture (USDA) to help individuals eat healthy. It illustrates the five food groups – fruits, vegetables, grains, protein, and dairy- using a familiar setting, a place setting.*

- *The website, ChooseMyPlate.gov, has many tips on how to follow a healthier diet. Some of the messages include: making half of your plate fruits and vegetables, make at least half of your grains, whole grains; switch to fat-free or low-fat (1%) milk; and avoid oversized portions.*

- *We have two* MyPlate *activities we want you to complete. The first is to click on the image on the Choose* MyPlate *icon, and then click on "View Original." This will take you to the* Welcome to the Five Food Groups *page. We want you to explore the five food groups and learn which foods fall into each of these food groups by clicking on the* ***"food gallery"*** *link…. Once you finish this, you can close the* Food Groups-Choose MyPlate *tab.*

The second activity is on the box entitled #3 Food Groups Activity (see below).



Instructions: Click on *View Original* to get to the *Food Groups Activity Survey*. It lists 10 foods, you are asked to choose which food group into which they are included. Once you complete the quiz, click on "submit" and then "submit previous response" to learn the answers to the quiz and discuss the results.

Answers:

Watermelon = Fruits

Quinoa = Grains
Potatoes = Vegetables
Eggs = Protein
Yogurt = Dairy
Okra = Vegetables
Parmesan = Dairy
Peanut Butter = Protein
Kiwi = Fruit
Whole Wheat Bread = Grains

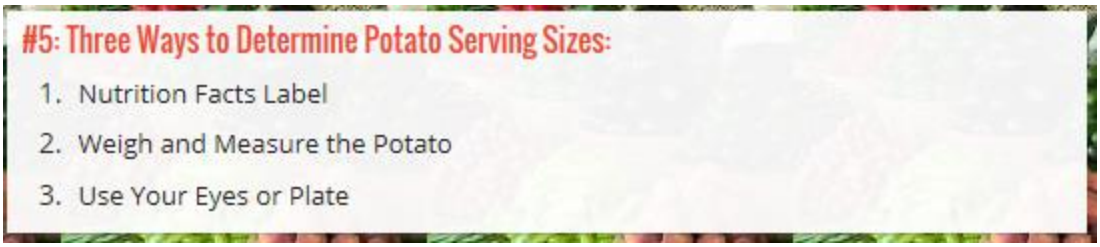
Instructions: Close tabs to get back to the Main page.

#4: Potato Serving Sizes. What is one serving of fresh potatoes and fried potatoes?

- *Now we know where potatoes fit on the plate, in the Vegetable Group. The next question is how do we determine—what is a serving size for potatoes? We are going to look at the serving size of fresh potatoes and fried potatoes because, as we learned in Lesson 2, these are the two types of potatoes that are eaten most frequently.*

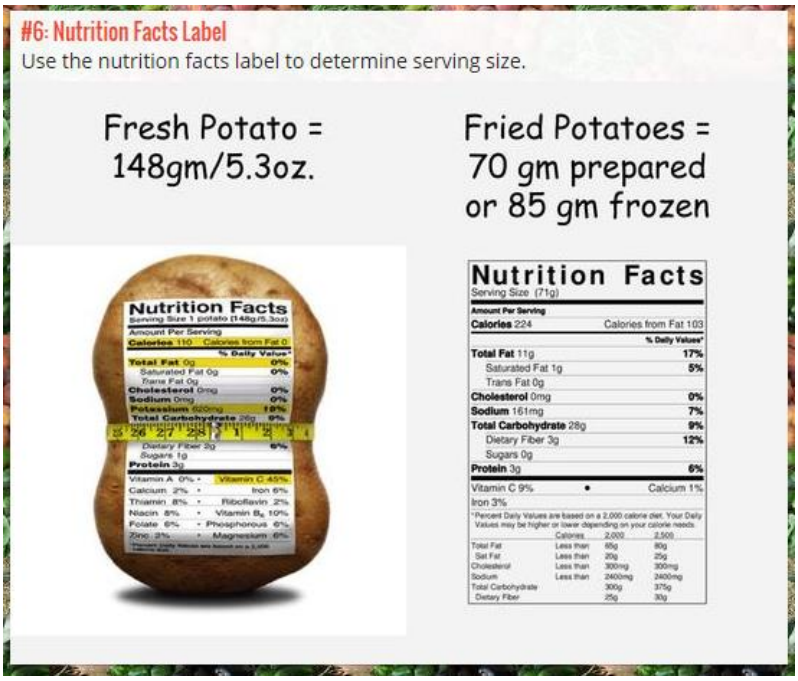
- *Fresh Potatoes*
  You can see that fresh potatoes come in all sizes and shapes. Is a serving one small red potato or one large russet potato?

- *Fried Potatoes*
  How many of these French fries can you eat as one serving?



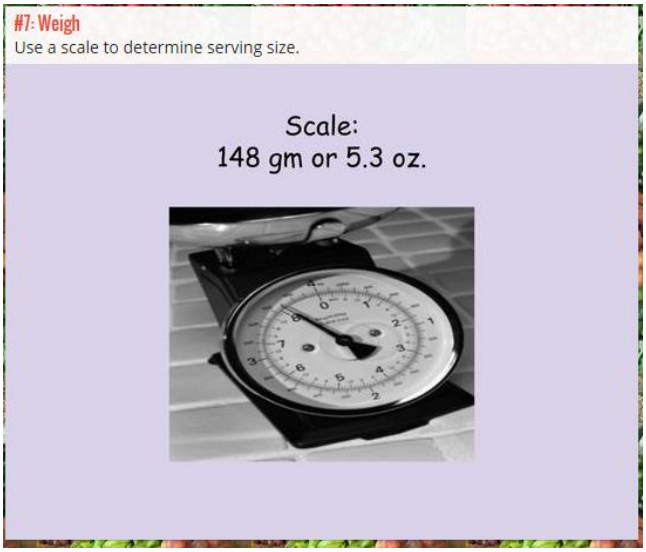
#5: Three ways to determine potato serving sizes:

1. *Nutrition Facts Label.*
2. *Weigh and measure the potato.*
3. *Use your eyes or plate.*



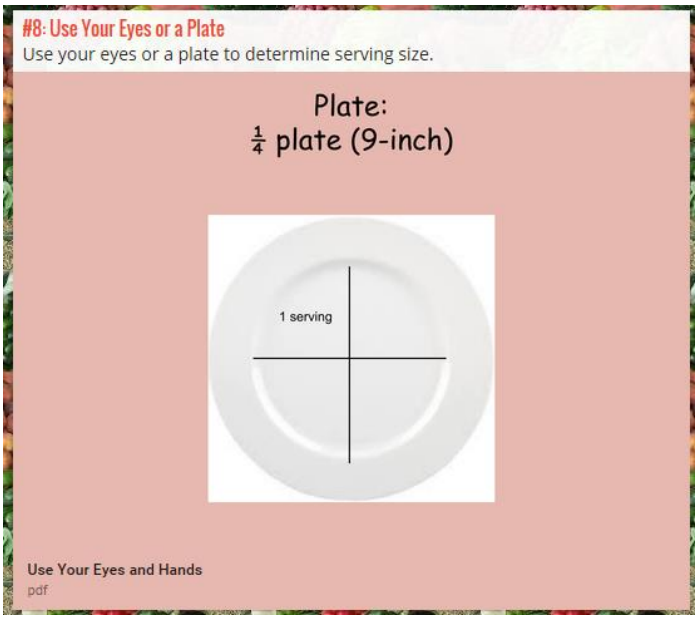
#6: Nutrition Facts Label

- *Here are two examples of the serving size for two potato products, a fresh potato and fried potatoes.*
- *The serving size information is found right under the Nutrition Facts title/heading. The Food and Drug Administration sets the serving size for both fresh potatoes and for fried potatoes.* (Source : http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=101.12).
- *For the fresh potato, one serving is 148 grams or 5.3 ounces.*
- *For fried potatoes, one serving is 70 grams for prepared fries (e.g,. fries that have been cooked or fried) and 85 grams for frozen, unprepared French fries.*



#7: Weigh and Measure

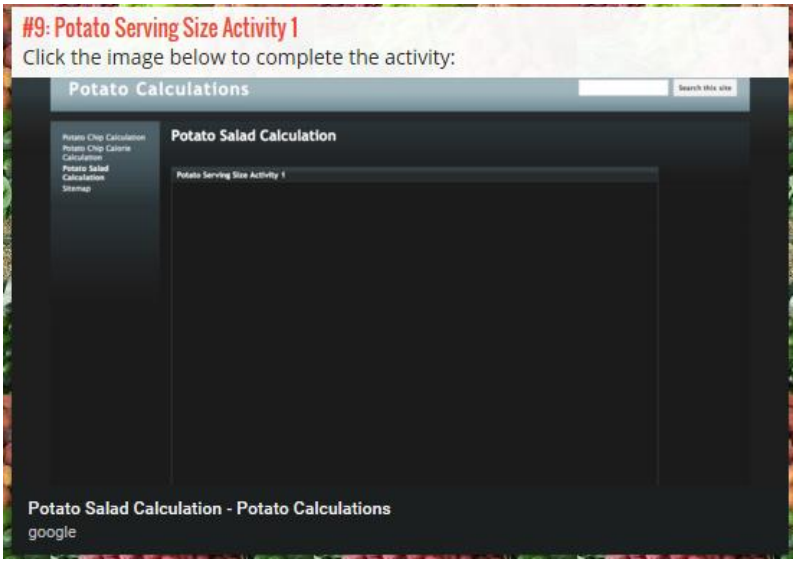
A second way of determining potato serving size is to weigh the potatoes by using a scale. Weigh the potato, one serving of potato is a small potato that weighs about 148 grams.



#8: Use Your Eyes or a Plate

Instructions: Click on the image and "View Original".

Use Your Eyes or a Plate: By using a 9-inch plate, you can see that one potato serving should cover approximately 1/4th of the plate.



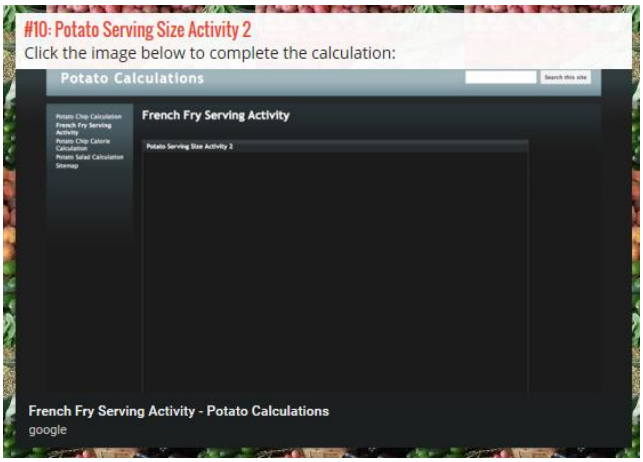
#9: Potato Serving Size Activity 1

Instructions: Click on the image, then "View Original" to complete the activity.

This activity shows how to calculate the number of potato servings are in this red, white, and blue patriotic potato salad recipe.

Instructions: Have students read through the ingredient list (on the left) and use the information needed to complete this calculation (on the right). Students will use the calculator to determine the answer and then "click here" to select their answer.

Answer: the number of potato servings in this potato salad recipe is 675/148 = 4.5 servings.



#10 Potato Serving Size Activity 2

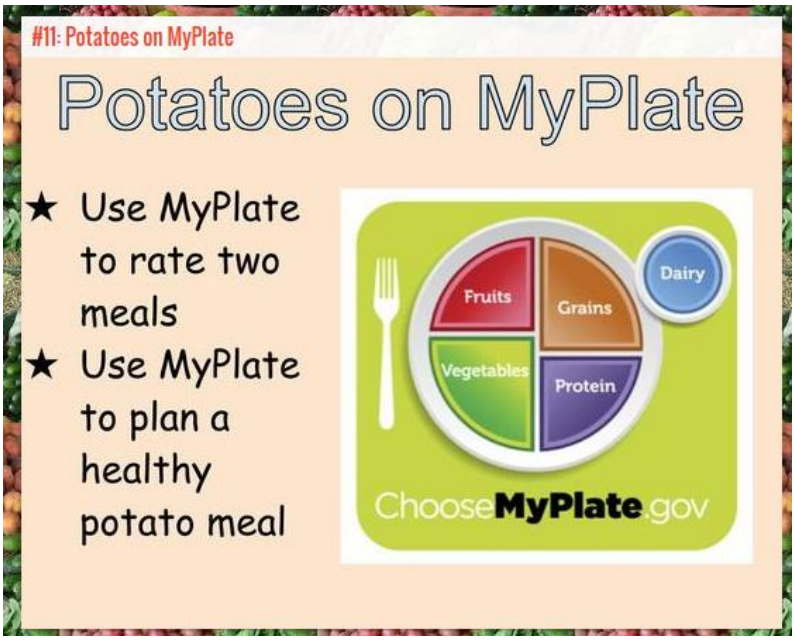
Instructions: Click on the image and "View Original" to complete the French Fry Serving Activity.

Instructions: Have students calculate the number of servings of French fries in a large order of fries and then "click here" to select their answer.

Answer: 168 grams/70 grams/serving = 2.4 servings

Share with them the difference in calories between a small order (220 calories) of French fries, medium order (340 calories) and a large order (510 calories) of French fries.

Ask them, what size of French fries do they usually order?



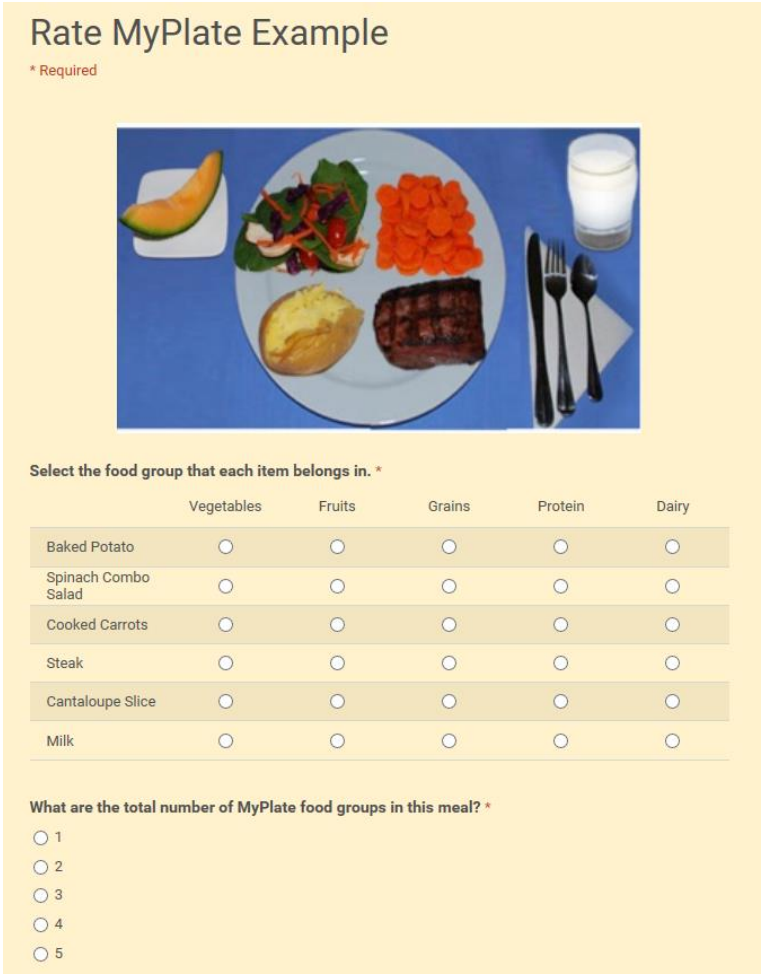
#11: Potatoes on *MyPlate*

We will use MyPlate *to rate potato meals and to plan a healthy potato meal.*

This will be done by seeing how many food groups are contained in the potato meal. Remember that meals should contain foods from the five food groups—vegetable, fruit, grain, protein, and dairy—as often as possible.

#12: Rate *MyPlate* Example

Instructions: Click on the image and "View Original" to complete the table by selecting the food group.



Rate MyPlate Example

* Required

Select the food group that each item belongs in. *

	Vegetables	Fruits	Grains	Protein	Dairy
Baked Potato	○	○	○	○	○
Spinach Combo Salad	○	○	○	○	○
Cooked Carrots	○	○	○	○	○
Steak	○	○	○	○	○
Cantaloupe Slice	○	○	○	○	○
Milk	○	○	○	○	○

What are the total number of MyPlate food groups in this meal? *

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

Instructions: Students will answer two questions.

The first activity is: select the food group into which each item falls.

Answers:

Baked potato = Vegetable
Spinach combo salad (spinach, mushroom, carrot, tomato) = Vegetable
Cooked carrots = Vegetable
Steak = Protein
Cantaloupe = Fruit
Milk = Dairy

The second question: total the number of *MyPlate* food groups contained in the meal.

Answer: 4 (vegetable, protein, fruit, and dairy).
Ask the students: What do you think of this meal? Is this how you eat at home?

#13: How many stars should this meal receive?

Let's rate meals by giving them one star for each food group it contains.

1 star = 1 food group
2 stars = 2 food groups
3 stars = 3 food groups
4 stars = 4 food groups
5 stars = 5 food groups

Look at the completed *MyPlate* graphic, which shows how many food groups are in the meal.

How many stars should this meal receive?

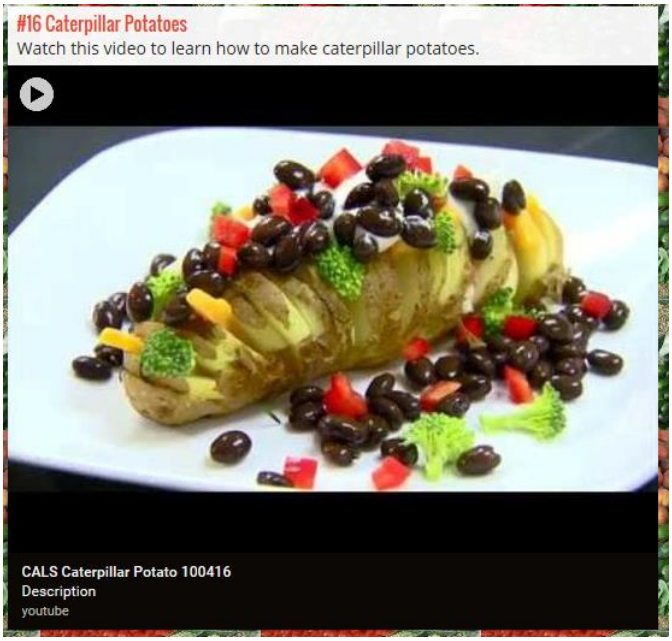
What grain could you add to this meal so all the food groups are represented?

#14: e-Potato Kitchen Safety

Instructions: Before we watch two potato recipe video clips—*Caterpillar* and *Crash Potato* Recipes—there are two video clips about cooking and food safety that will help us get ready to cook. The first one is on *Kitchen Safety: Don't get Distracted….be Alert!*

#15: Precooking

Instructions: Watch this video clip to learn how to prepare potatoes for cooking.



Instructions: Click on the image and watch the video to learn how to prepare Caterpillar Potatoes.

#17: Analyze the Caterpillar Potato Recipe.

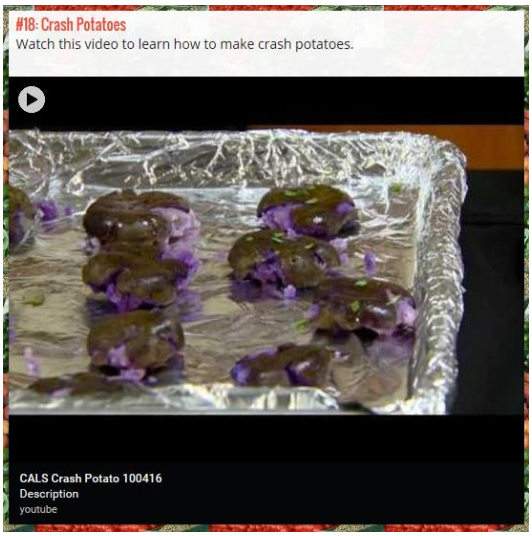
Instructions: Click on the "Analyze Caterpillar Potato Recipe Question" and "View Original" to answer the question.

Answers:

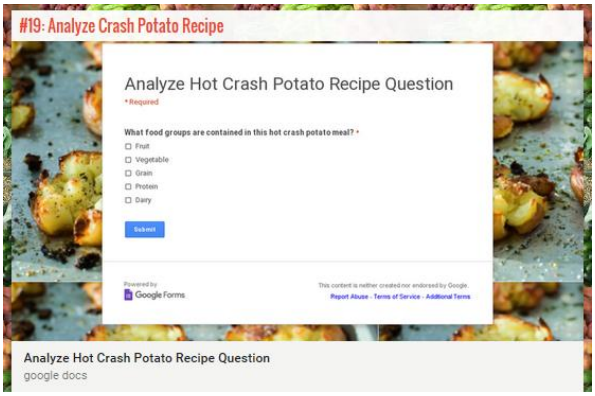
Potato = Vegetable
Black Bean = Meat/Protein
Broccoli = Vegetable
Tomato = Vegetable
Cheese = Dairy

Ask students, "how many stars should the Caterpillar meal receive?"

What fruit and grain could you add to make this a five-star meal?



#18: Watch this video to learn how to make Purple Crash Potatoes.



#19: Analyze Crash Potato Recipe

Instructions: Click on the "Analyze Hot Crash Potato Recipe Question" and "View Original" to answer the question.

Answer:
Potato = Vegetable

Ask students how many stars should the Crash Potato meal receive?

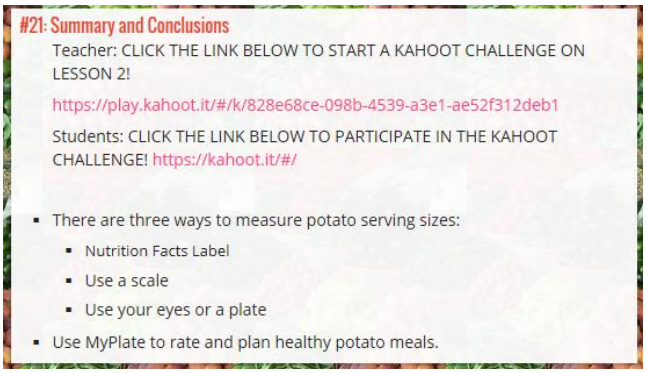
Answer: 1 star, because it contains one food group, vegetable.

What protein, fruit, grain, and dairy could you add to make this a five-star meal?

#20: Career Connections

- Registered Dietitian
- Culinary Professional

Two possible careers for which you could use the information covered in this class would be Registered Dietitian, Nutritional (previously covered) and a Culinary Professional, such as a Chef.



Slide #21: Summary and Conclusions

Instructions: Teacher and students—click on your link to participate in the Kahoot Challenge for Lesson 4!

Summary and Conclusions

- *There are three ways to measure potato serving sizes:*
  (1) Nutrition Facts Label,
  (2) Use a scale,
  (3) Use your eyes or a plate.

- *Use MyPlate to rate and plan healthy potato meals.*

Post-Survey

Instructions: After finishing Lesson 4, please have the students complete the post-survey that is at the e-Potato home page.