



Are you smarter than a 5th
grader?

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The Healthy Idaho Potato Education Program



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Components of our Potato Education Program

- Targets 4th – 5th graders
- Interdisciplinary: history, geography, nutrition, health, math, science, technology
- Uses the Ipad
- Provides information in class and 'beyond' the classroom
- Possible careers





Lesson Schedule

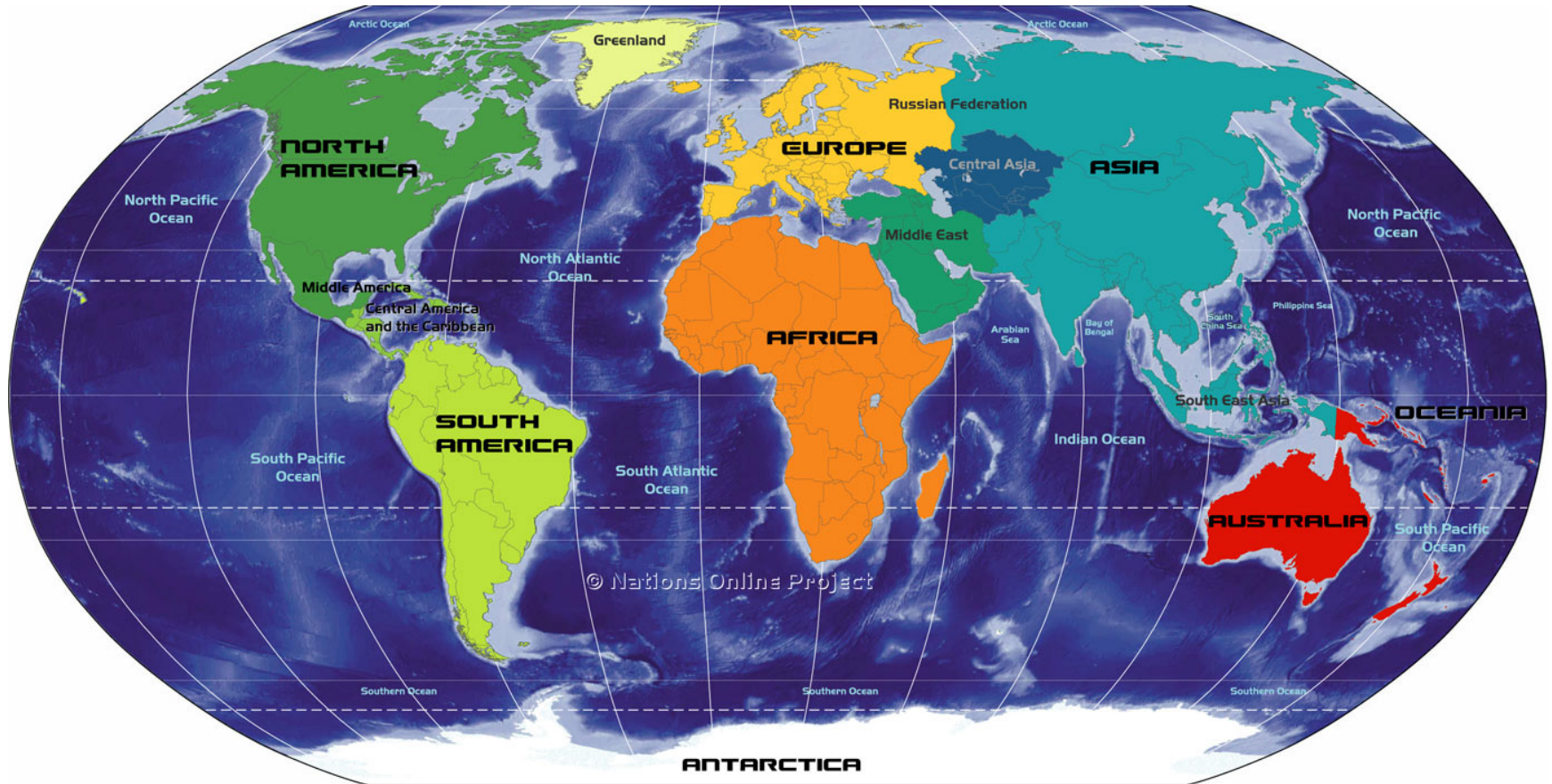
- #1: History of Potatoes
- #2: Types of Potatoes and Potato Products
- #3: Are Potatoes a Super food?
- #4: Potatoes on MyPlate



Lesson 1 Overview

- History of potatoes *
- Potatoes in Idaho
- From field to table

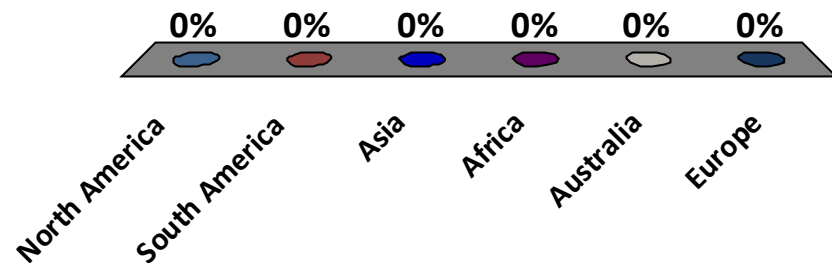
On which continent were potatoes first grown?



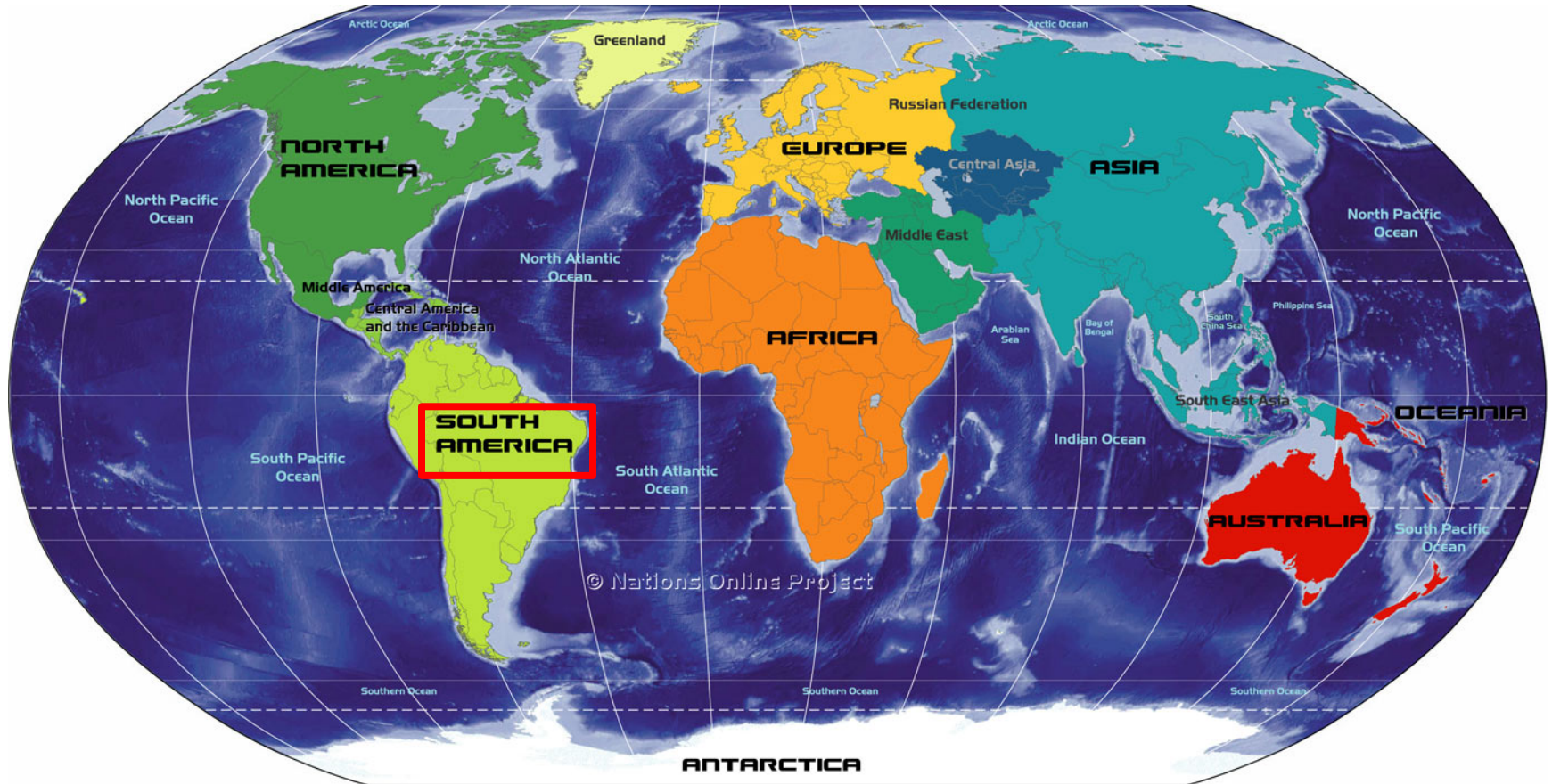


Question 1: On which continent were potatoes first grown?

- A. North America
- B. South America
- C. Asia
- D. Africa
- E. Australia
- F. Europe



If you said South America, you are correct!



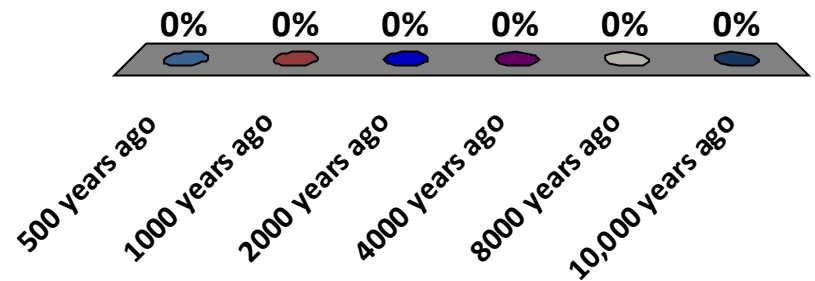
Potatoes were first grown in the beautiful Andes Mountains



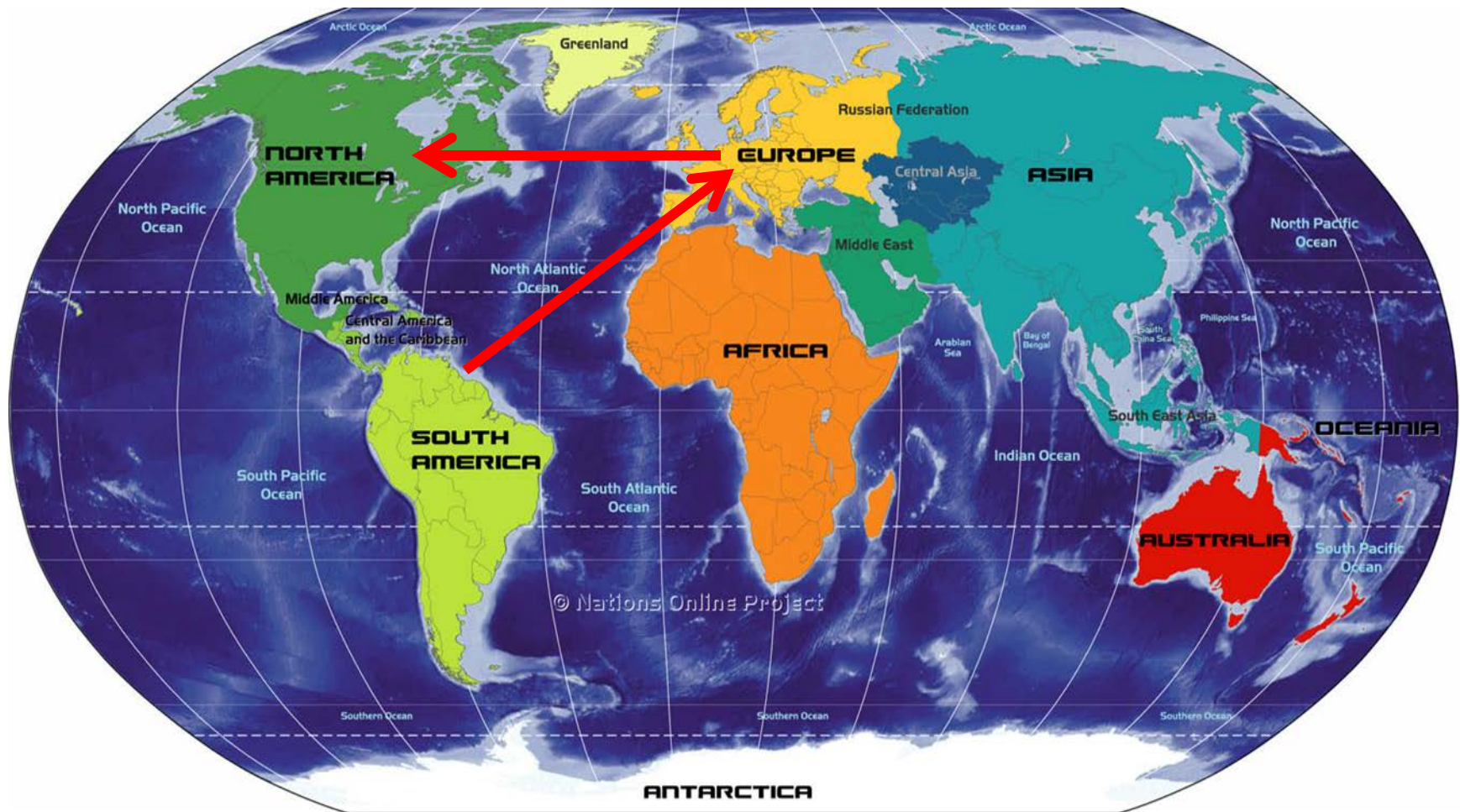


Question 2: When were potatoes first grown in the Andes Mountains?

- A. 500 years ago
- B. 1000 years ago
- C. 2000 years ago
- D. 4000 years ago
- E. 8000 years ago
- F. 10,000 years ago



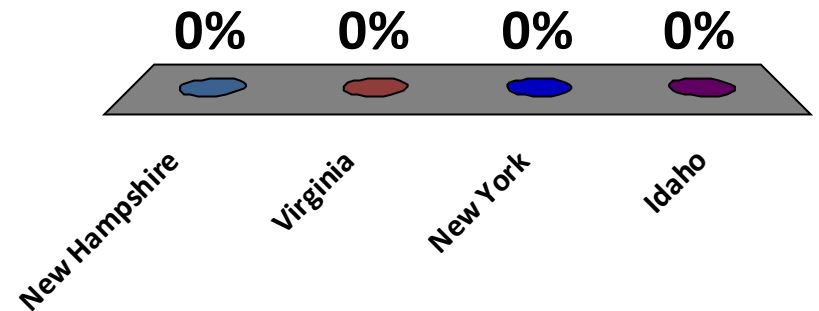
Follow the path of potatoes from
South America to the U.S.





Question 3: In which state were potatoes first grown in the U.S.?

- A. New Hampshire
- B. Virginia
- C. New York
- D. Idaho



How potatoes spread across the U.S.





Lesson 2 Overview

- Potatoes
 - Potato Color Groups
- Potato Products
 - Fresh, Frozen, Chips



Fruits and Vegetable Color Groups

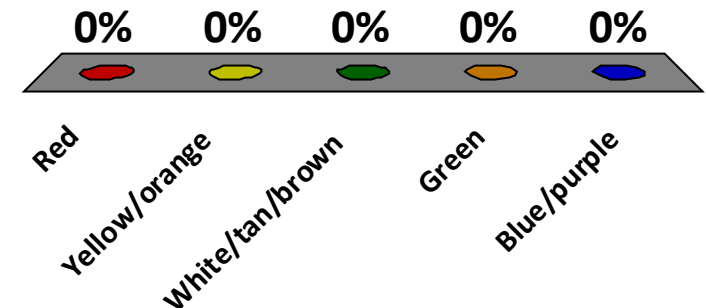
- Eat a rainbow of fruits and veggies : red, yellow/orange, green, white/tan/brown, blue/purple





Question 4: Which of the following color groups do not contain potatoes?

- A. Red
- B. Yellow/orange
- C. White/tan/brown
- D. Green
- E. Blue/purple



Idaho potatoes are in four color groups

- #1= Red: Cal Red



- #2= Blue/Purple:
Purple Peruvian



- #3= White:
Russet Burbank

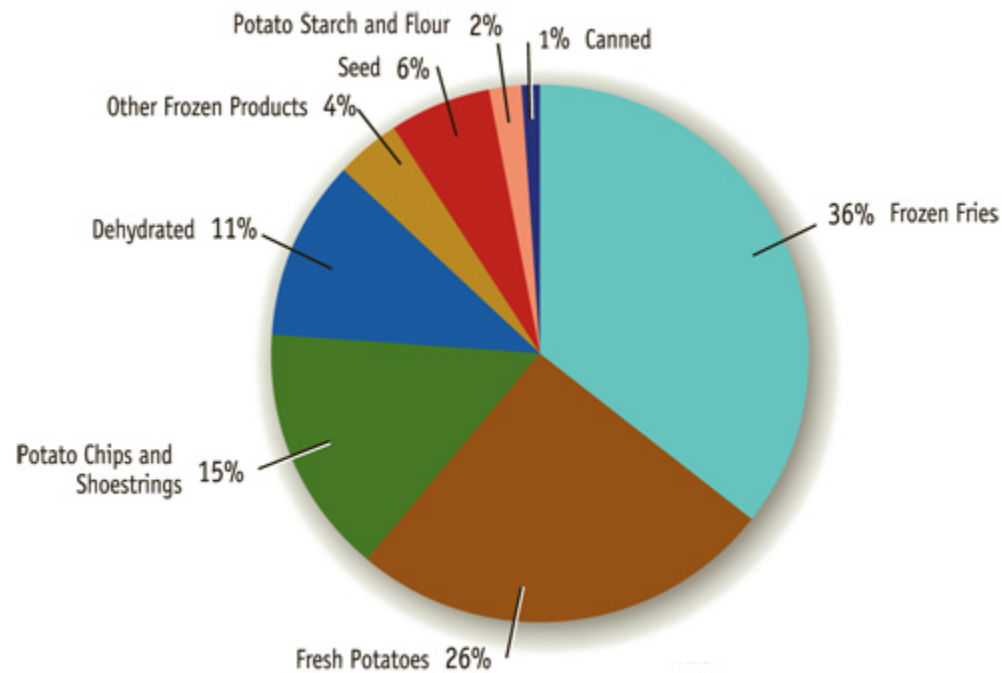


- #4 = Yellow:
Yukon Gold





Potato Products





Three Potato Products

- Frozen
- Potato Chips* and Shoestrings
- Dehydrated Potatoes*



Potato Chips



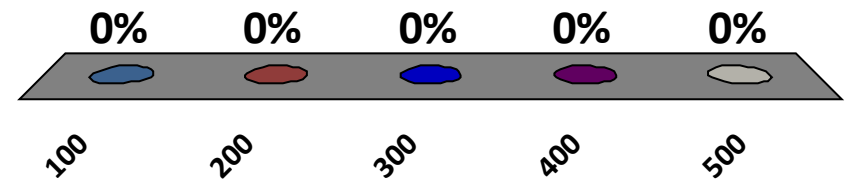
Potato Chips

- >150 years old
- #1 snack food in USA
- We eat 19 lbs/year
- Eaten World Wide



Q5: Approximately how many 1 ounce bags of potato chips do Americans eat annually?

- A. 100
- B. 200
- C. 300
- D. 400
- E. 500





Popular potato chip flavors around the world

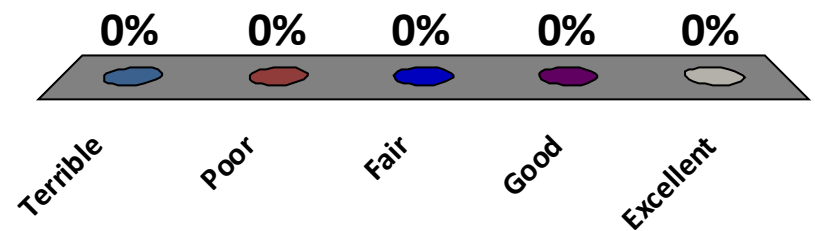
- USA: Sour cream, onion, barbeque
- Germany: Paprika
- India: Masala, Coriander and Red Chili
- Greece: Oregano
- Japan: Seaweed, Wasabi, and Soy Sauce





Q6: Taste and rate these potato chips made with South African seasoning

- A. Terrible
- B. Poor
- C. Fair
- D. Good
- E. Excellent



What are Dehydrated Potatoes?



Types of dehydrated potatoes

- Flakes
- Granules
- Flour
- Pieces
 - Slices
 - Dices
 - Shreds

Ingredient list activity (Handout)

- Find the dehydrated potato product (s) in this King's Hawaiian Bread



- ENRICHED FLOUR (WHEAT FLOUR, ENZYME, NIACIN, REDUCED IRON, THIAMINE MONONITRATE, RIBOFLAVIN, FOLIC ACID), WATER, SUGAR, LIQUID SUGAR (SUGAR, WATER), BUTTER (PASTEURIZED CREAM, SALT), EGGS, CONTAINS LESS THAN 2% OF EACH OF THE FOLLOWING: YEAST, POTATO FLOUR, WHEY, NONFAT MILK, SALT, DATEM, SOY FLOUR, YELLOW CORN FLOUR, SODIUM STEAROYL LACTYLATE, INACTIVE YEAST, WHEAT GLUTEN, SORBIC ACID PRESERVATIVE, MONOCALICUM PHOSPHATE, WHEAT FLOUR, CALCIUM SULFATE, SODIUM SILICOALUMINATE, AMMONIUM SULFATE, ASCORBIC ACID ADDED AS A DOUGH CONDITIONER, WHEAT STARCH, SORBITAN MONOSTEARATE, MONO- & DIGLYCERIDES, ENZYMES, CALCIUM SILICATE, MICROCRYSTALLINE CELLULOSE.
- CONTAINS: WHEAT, MILK, EGGS, SOY



Lesson 3 Overview

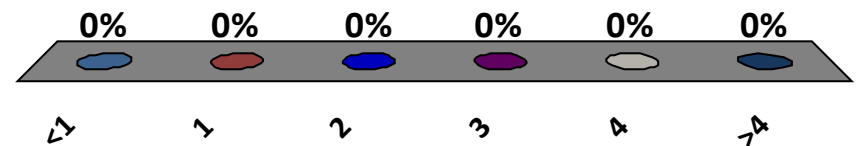
Are Potatoes a Super Food?

- Consumption of Potatoes*
- Nutritional Value*
- Health Benefits*



Q7: How many potatoes do 5th and 6th grade girls eat daily?

- A. <1
- B. 1
- C. 2
- D. 3
- E. 4
- F. >4



Amount of potatoes consumed daily

1 potato



0.7 potato



0.6 potato



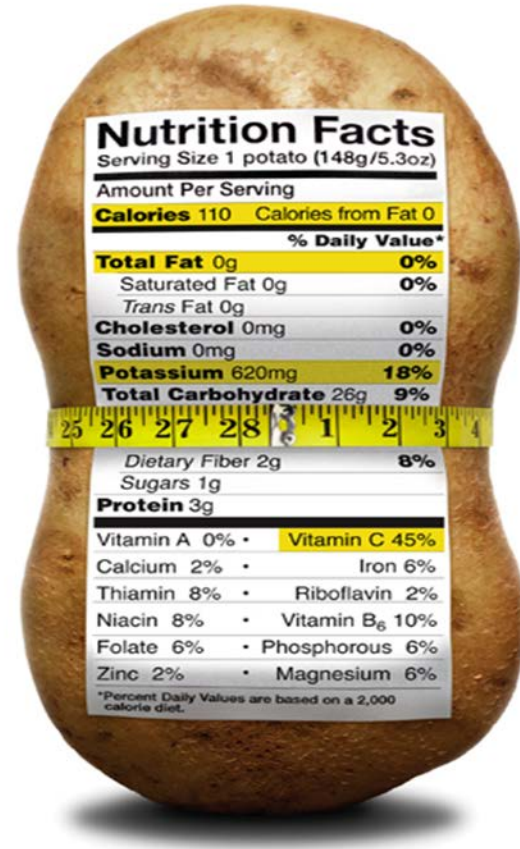
Boys age 2-19

Girls age 2-19

Sources: Food intakes converted to retail commodities databases (ARS) and National Health and Nutrition Examination Survey (CDC), 1999-2012.

Nutritional Value – Use the Nutrition Facts label (handout) to answer questions

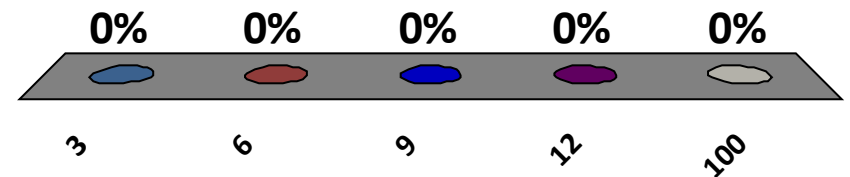
- Calories
- Carbohydrates, Protein, Fat, Fiber
- Vitamins * and Minerals





Q8: How many vitamins are found in potatoes?

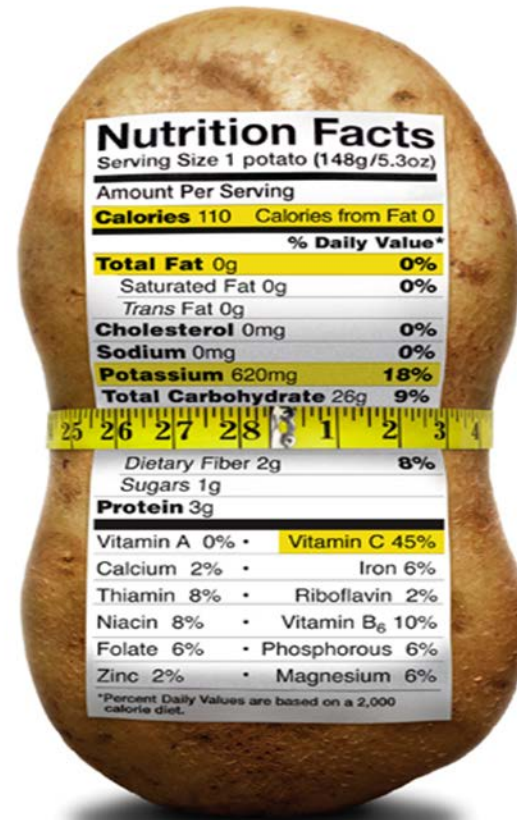
- A. 3
- B. 6
- C. 9
- D. 12
- E. 100





Six vitamins in potatoes

- Vitamin C
- Vitamin B6
- Folate
- Thiamin
- Niacin
- Riboflavin



How does your body use these nutrients to stay healthy?

**HELP RELEASE ENERGY FROM
FOOD**

Thiamin, Niacin, Riboflavin

IMMUNE SYSTEM

Zinc, Vitamin C

HEART

**Sodium, Potassium,
Magnesium**

BLOOD

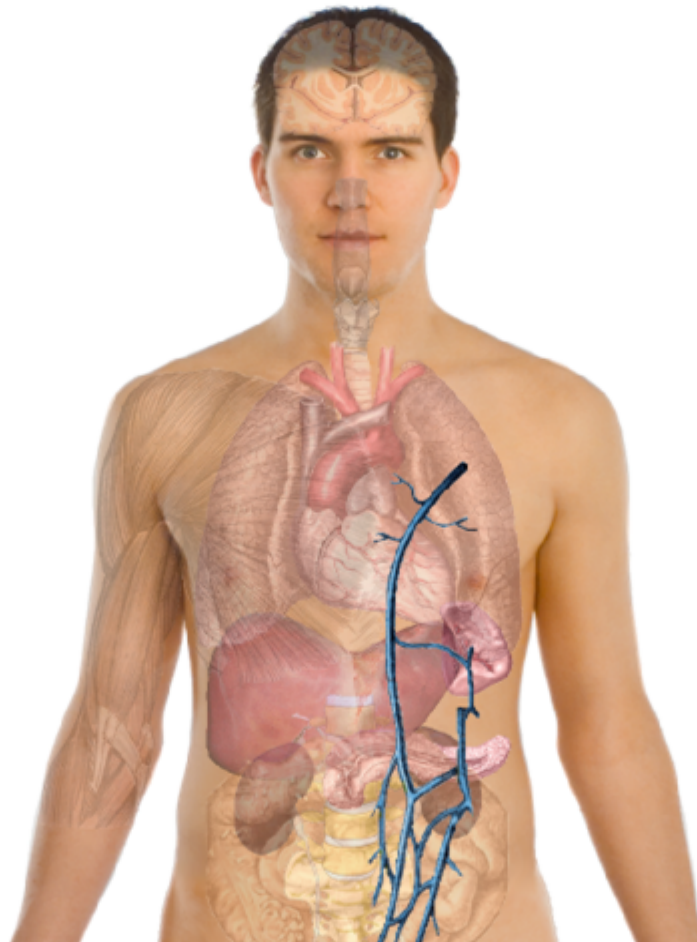
Iron, Folate

MUSCLES

Potassium, Vitamin B6,

SKELETON

Calcium, Phosphorus





Lesson 4 Overview

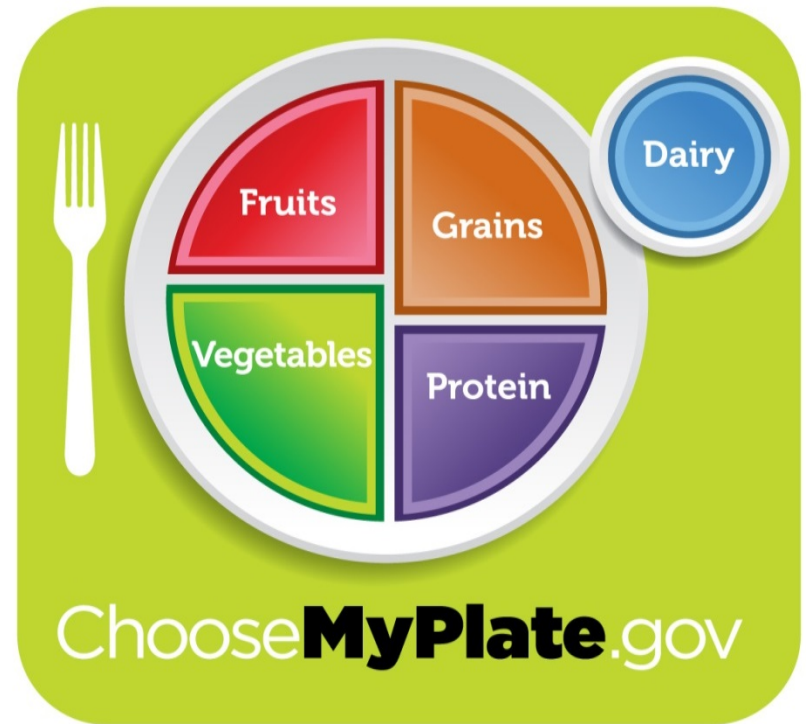
Potatoes on MyPlate

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



Potatoes on MyPlate

- Healthy MyPlate Meals contain foods from the 5 food groups
- Which food group do potatoes fall into?
 - Fruits
 - Vegetables
 - Grains
 - Protein
 - Dairy



Potato Serving Sizes: What is one serving of:

- Fresh potatoes
- Fried potatoes





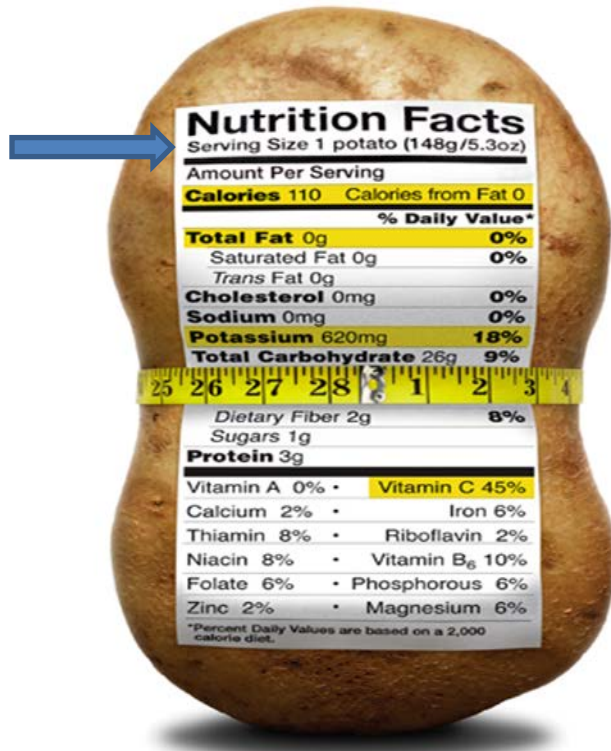
Three ways to determine potato serving sizes:

1. Nutrition Facts Label
2. Scale: Weigh the potato
3. Use a plate

#1: Nutrition Facts Label

Fresh potato = 148 gm/5.3 oz.

- Fried potatoes = 70 gm prepared or 85 gm frozen



Nutrition Facts

Serving Size 1 potato (148g/5.3oz)

Amount Per Serving

Calories 110 **Calories from Fat** 0

% Daily Value*

Total Fat 0g **0%**

Saturated Fat 0g **0%**

Trans Fat 0g

Cholesterol 0mg **0%**

Sodium 0mg **0%**

Potassium 620mg **18%**

Total Carbohydrate 26g **9%**

Dietary Fiber 2g **8%**

Sugars 1g

Protein 3g

Vitamin A 0% • **Vitamin C 45%**

Calcium 2% • Iron 6%

Thiamin 8% • Riboflavin 2%

Niacin 8% • Vitamin B₆ 10%

Folate 6% • Phosphorous 6%

Zinc 2% • Magnesium 6%

*Percent Daily Values are based on a 2,000 calorie diet.



Nutrition Facts

Serving Size (71g)

Amount Per Serving

Calories 224 **Calories from Fat** 103

% Daily Values*

Total Fat 11g **17%**

Saturated Fat 1g **5%**

Trans Fat 0g

Cholesterol 0mg **0%**

Sodium 161mg **7%**

Total Carbohydrate 28g **9%**

Dietary Fiber 3g **12%**

Sugars 0g

Protein 3g **6%**

Vitamin C 9% • Calcium 1%

Iron 3%

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

		Calories 2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

#2: Weigh and #3: Plate

Weigh

- Fresh: ~150 gm or 5.3 ounces
- Fried: 70 gm prepared or 85 gm frozen



Plate:

- ¼ plate (9-inch)



(Handout or Plate)



Serving Size Activity

	Fresh potato Red	Fresh potato Russet Burbank	French Fries (prepared)
Weight of one serving	148 gm	148 gm	70 grams
Weight (gm)			
How many servings is this potato? < 1, 1, >1			
Plate: how much of the plate is covered: < ¼, ¼, ½, ¾, 1			
Do the weight and plate servings match?			



Potatoes on MyPlate

- Use MyPlate to rate one meal

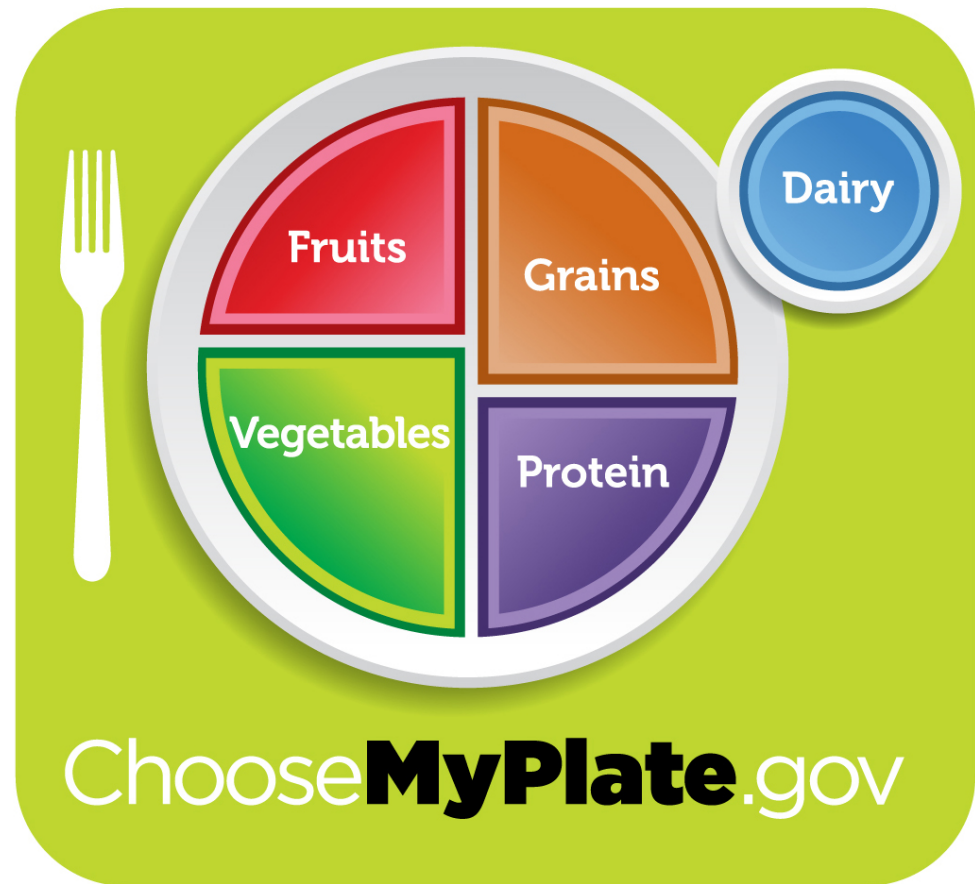
1 star = 1 food group

2 stars = 2 food groups

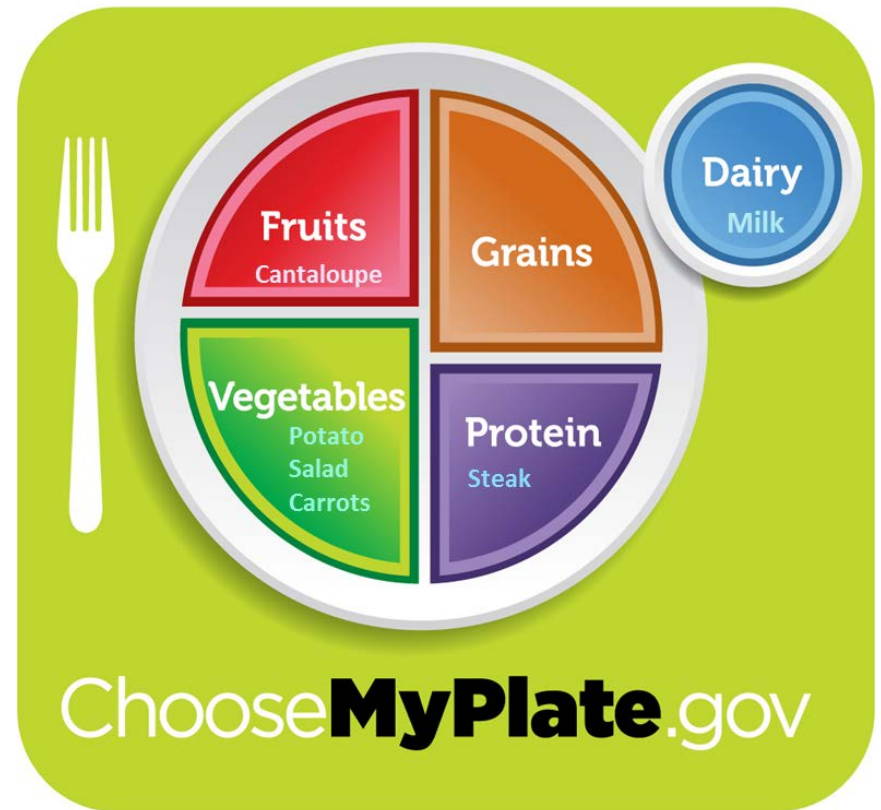
3 stars = 3 food groups

4 stars = 4 food groups

5 stars = 5 food groups



How many stars (food groups) are in this meal?





Rate this meal

How many stars should this meal receive?

1 star = 1 food group

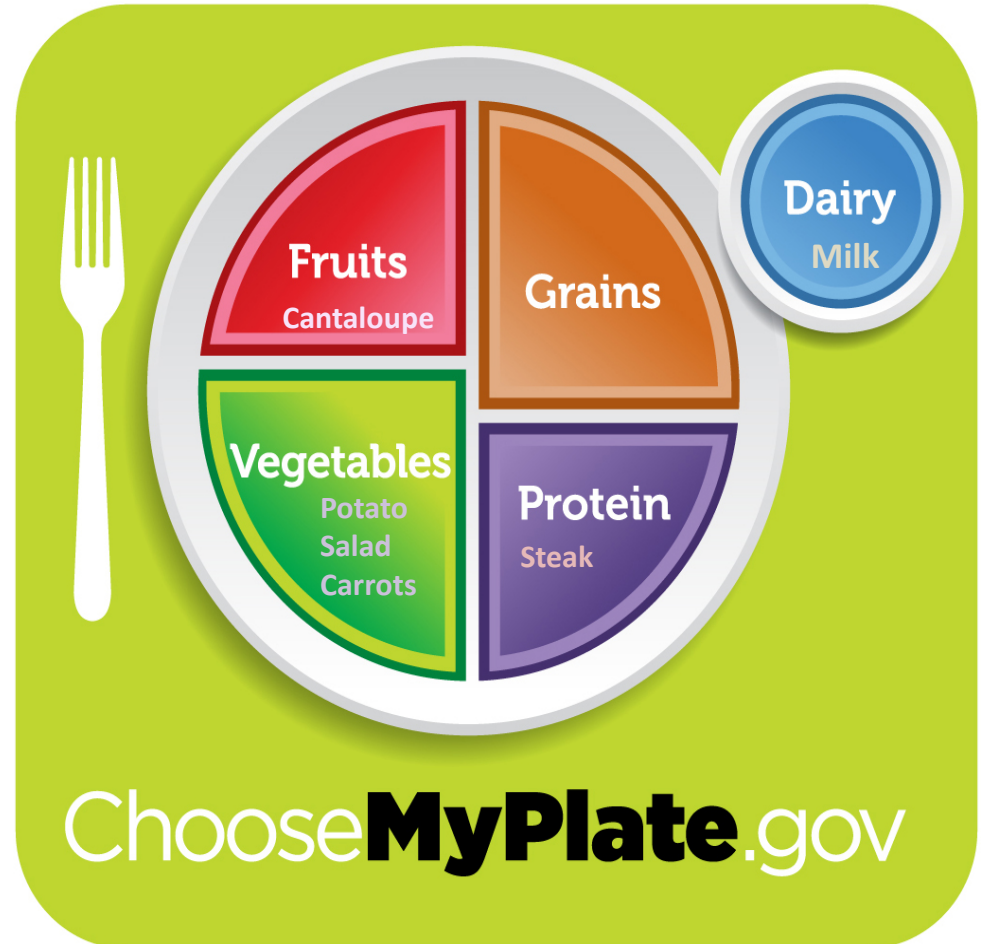
2 stars = 2 food groups

3 stars = 3 food groups

4 stars = 4 food groups

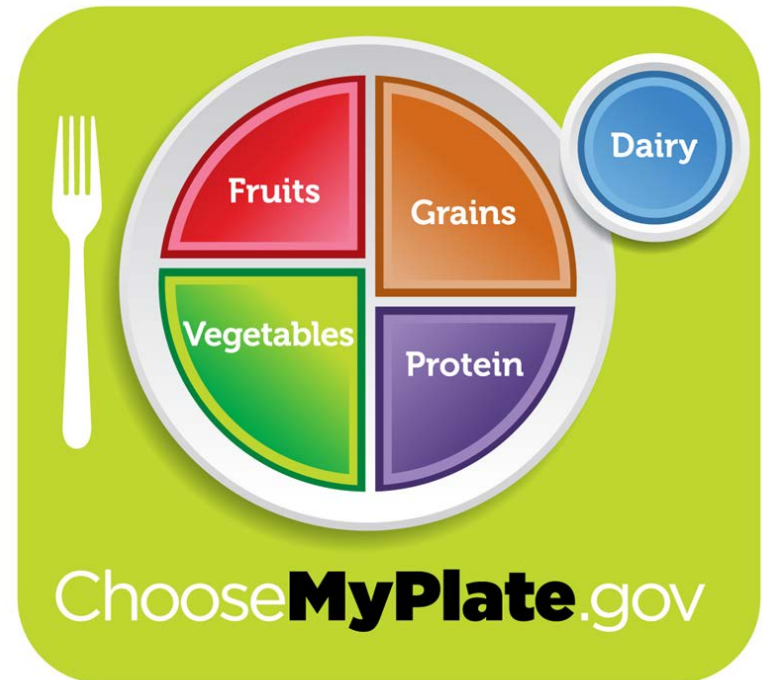
5 stars = 5 food groups

What grain would you add to complete this meal?



How many stars (food groups) are in this meal?

- Bacon wrapped turkey with mashed potatoes and green beans
- MyPlate



- Photo, courtesy of IPC



Summary

- Potatoes have a long and illustrious history
- Potatoes come in all sizes, shapes, and colors
- Potatoes can keep your body healthy
- One serving of potatoes = $\frac{1}{4}$ plate
- Try to include all food groups at meal time