

Setup:

Wash the tables and desks and cover with bulletin board paper to make clean up easy.

Wash harvested greens from the garden and place in a bowl.

On a central table, set out liquids and bowls of fruit and greens.

If the bananas are fresh, place the bananas next to a cutting board and a plastic knife.

Have measuring cups available for each group or on the central table.

Make sure students can easily access all items.

Set up a blending station that will be controlled by the teacher or adult helper.

Each student group will need their own blender cup.

Grade Level: 4

Subject Area: Science / Health

Time Frame: 1-2 class periods

Materials:

Website: <http://kidshealth.org/en/teens/vitamins-minerals.html>

Basic smoothie recipe

Smart Smoothie recipe template

Nutrient cards

Color Me Healthy handout

What's in a ½ cup of fruit/vegetables handout

Dole Nutrition Handbook (optional)

Blender base

Blender cups (1 per group)

Greens harvested from the garden (kale, spinach)

A variety of fresh or frozen fruits (frozen creates a thicker, slushier smoothie)

Fresh or frozen bananas

A variety of liquids: almond milk, coconut water, 100% juice (no sugar added)

Plastic mixing bowls

Serving spoons

Measuring cups

Cutting board

Plastic knife

Tasting cups

Standards:

4.L.2.2

Activity:

Prior to starting their smoothies, have each student go to the following website and read about vitamins and minerals to complete the Vitamins & Minerals Worksheet.

<http://kidshealth.org/en/teens/vitamins-minerals.html>

1. Divide the class into 4-6 groups. Make sure each group has one copy of each of the resources listed above. Each group will be responsible for creating their own Smart Smoothie recipe.

2. Give each group at least one nutrient card.
3. Using the Basic Smoothie Recipe and Smart Smoothie Template, and additional resources, each group will create a recipe for a Smart Smoothie. The recipe must incorporate the nutrient listed on the group's nutrient card. The students will list all vitamins, minerals and health benefits/disease prevention attributes contained in their smoothie.
4. The students will make a 30-second commercial (live or videotaped) advertising their Smart Smoothie.
5. The students will use the blender cup and fresh ingredients to make their smoothie, bringing the cup with ingredients to the blending station to blend and pour a sample for each person in the class. Students should wash their hands before making their smoothie.
6. Each group will present their commercial and provide samples for the class to taste.
7. After each group has presented their commercials and tasted each smoothie, have the class graph their favorite smoothie using sticky notes on the board or using large graph paper.
8. Make copies of each group's recipe for all students or create a mini Smart Smoothie recipe book for each student to take home.

Your Notes & Ideas:

Vitamins & Minerals Worksheet

Use the following website to answer the questions below:

<http://kidshealth.org/en/teens/vitamins-minerals.html>

1. Explain the two categories of vitamins and give examples of each.
2. Why do you need a fresh supply of Vitamin C every day?
3. What are two ways vitamins and minerals can help your body?
4. Where do vitamins come from?
5. Where do minerals come from?

Nutrient	Sources	Health Benefits
Vitamin A		
Vitamin C		
Vitamin E		
Vitamin K		
Calcium		
Iron		
Potassium		

Basic Smoothie Recipe

Ingredients:

½ - 1 banana (adds natural sweetness and creaminess)

1 handful (approximately ½ cup) greens from the garden

1 - 1 ½ cup fresh or frozen fruit (frozen makes better smoothies)

¾ - 1 cup liquid (almond milk, coconut water, 100% juice)

½ cup plain, fat free yogurt (optional)

Directions:

Combine all ingredients in a small blender and blend until smooth.

Smart Smoothie

Recipe Title: _____

Ingredients:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Directions:

Vitamins: _____

Minerals: _____

Health Benefits: _____

Disease Prevention: _____