January POM Lesson Plan Grades 4 or 5

Introduction

- Introduce yourself.
- Introduce the Produce of the Month.

Supplies Needed

- PRE-tests for each student
- Pencils for each student

OPTIONAL: Administer PRE-test.

Ask students to write in classroom ID and then read directions out loud while they follow along. Classroom ID is a four digit code using the first two letters of the school name and the first two letters of the teacher's last name. For example, if the student attends Hagginwood Elementary School and his teacher's last name is Hass, the code would be HAHA.

Collect PRE-tests when finished.

Nutrition Component

Objectives

- Learn the concept of grouping fruits and vegetables by color.
- Learn the need to eat fruits and vegetables from all five color groups to stay healthy

Supplies Needed

- "Colorful Fruits and Vegetables" Worksheet
- Grocery store advertisements for each group

Background

Each year (during the month of September), the Produce for Better Health Foundation conducts a nationwide effort to promote eating colorful fruits and vegetables daily for better health. It is important to eat a variety of fruits and vegetables within each of the five color groups (blue/purple, green, white, yellow/orange, and red) because individual fruits and vegetables contain different nutrients and phytochemicals.

Phytochemicals are natural plant compounds that may provide a variety of health benefits. "Phyto" comes from the Greek word for plant, so phytochemicals are chemicals found only in plants. Phytochemicals give plants their color and aroma. This means that blue blueberries contain different phytochemicals than green spinach, and oranges smell differently than onions.

It is important to eat a colorful variety every day because each fruit or vegetable has its own mix of vitamins, minerals and phytochemicals that work in different ways to help keep a person healthy:

- Bananas contain the mineral potassium, which helps keep blood pressure normal
- Red peppers contain vitamin C, which helps keep gums healthy
- Grapes contain a phytochemical (Quercitin) that may help keep a person's heart healthy

Some vitamins, like A and C, and many other phytochemicals are

	antioxidants. This means they may help prevent disease. Antioxidants work by gobbling up leftover parts of oxygen molecules (called free radicals) before they can damage cells in the body that eventually cause disease. Activities below have been selected from "There's a Rainbow on My Plate," developed by the Produce for Better Health Foundation. **Note:** Although the number five or "five servings" is often still used as a general recommendation for fruit and vegetable servings per day (and is a good start), more specific recommendations exist. Download "How many fruits and veggies do you need?" http://www.fruitsandveggiesmatter.gov/downloads/General_Audience_Brochure.pdf (p. 3) to quickly calculate how many fruits and vegetables your students need each day.
Do the Activity:	Introduce the activity by helping students associate fruits and vegetables with color. Write the following color words on the chalkboard: blue/purple, green, white, yellow/orange, and red. Then name some produce and ask students to put them in the right color group. (If you eat the skin of a fruit or vegetable, it is grouped by the color of its skin; if you don't eat the skin, it is grouped by the color of its flesh.) • Blue/purple – blueberries, eggplant • Green – cucumber, peas • White – banana, pear • Yellow/orange - lemon, carrot • Red – tomato, radishes Divide students into color groups and give each group a "*Colorful Fruits and Vegetables"* worksheet; or hand out a copy of the worksheet to each student. *OPTIONAL: Hand out grocery store advertisements to help each group.* Share results including a discussion of fruits and vegetables that students had never heard of and/or never tasted. (Using grocery store advertisements may help to identify different fruits and vegetables.)
Talk It Over:	Talk about produce that can be more than one color such as peppers (red, green, yellow, purple) and grapes (green, red, purple). Talk about classifying produce by the part we eat. For example,

	bananas are part of the white group because we eat the white fruit, not the yellow skin. Green apples are part of the green group because we eat the green skin.
Apply:	Have the students help plan a different fruit or vegetable snack for each day of the week, representing a different color group each day. Have the students help plan a fruit or vegetable pizza that would have the five color groups represented.

Produce of the Month Component

Objectives

- Learn the special characteristics of mandarins.
- Learn that mandarins are colorful and easy to eat as snacks.

Supplies Needed

- January POM parent newsletters
- Mandarin, Tangelo, Tangerine, Can of mandarin oranges
- Mandarins for each student to take home

Background

Our featured fruit this month is a citrus fruit- the mandarin. Other citrus fruits include tangerines, grapefruit, oranges, lemons, limes, mandarins, tangelos, pummelos, kumquats, citron and calamondin. Citrus fruits grow on evergreen trees (stay green all year) in subtropical regions around the world.

An orange, named for its color, is often a favorite from this family of fruits. The sweet varieties of oranges are great for both eating and for their juice. Navel and Valencia are the two most common varieties of sweet oranges.

Other citrus fruits that are great for snacking include the "zipper-skinned citrus fruits." Mandarins, tangerines, and tangelos belong to the family of citrus fruits call zipper skins because their skin peels off so easily. Tangerines are really mandarin fruits that are native to China but were imported to the Mediterranean through the city of Tangiers in Morocco, thus getting the name "tangerine."

Mandarins and tangelos are grown in Florida, California, Arizona and Texas. Each variety has its own short season, lasting about 2-3 months. Some types of tangerines include:

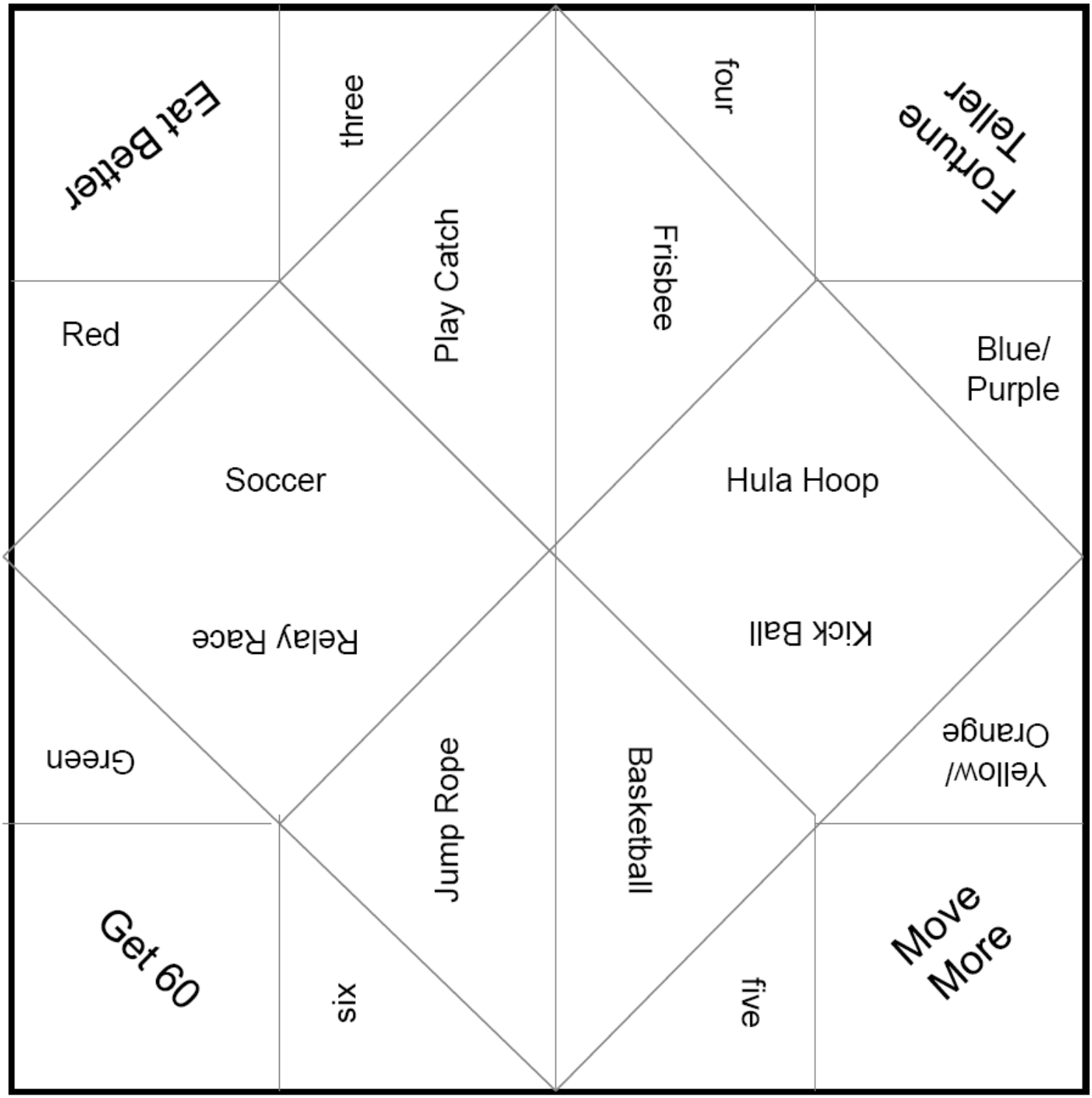
- Dancy Tangerine- is around during Christmas in the U.S., is reddish-orange in color, has lots of seeds, and has a sweet-tart flavor
- Honey Tangerine- is very sweet, yellowish-orange in color, full of juice, with a smooth, thin skin
- Clementine (Cutie)- round, easy to peel and very sweet, sometimes has seeds
- Minneola tangelos- cross between tangerine & grapefruit, large with an elongated "neck" on one end

	• Satsuma mandarin- sweet, seedless, delicious! Originally imported from Japan • Sunburst mandarin- very attractive looking, reddish-orange color and smooth, thin skin Canned mandarins are usually from Spain and China • Peel and pith (white part) is removed during processing • No waste as peel is used for oils, marmalade, pectin and citric acid One of these citrus fruits contains half the amount of vitamin C needed daily to stay healthy (4-10 year olds need 45 mg). So you can say it is high in vitamin C! Vitamin C functions in body • Growth and repair, heal cuts and wounds • Healthy teeth and gums • Prevents scurvy, a deficiency disease
Taste Opportunity	Have students wash their hands. Peel and section mandarins to sample. How would you get mandarins ready for a snack? **Wash. Peel. Eat. (How easy is that?)**
Physical Activity Component	
Objectives • Encourage students to be physically active for 60 minutes every day. • Encourage students to explore different and creative ways to be physically active. • Realize how fun physical activity can be when being active with a friend. **Supplies Needed** • Activity fortuneteller worksheet	**Do the Activity:** Discuss with students the importance of physical activity. Remind them that 4th and 5th graders should be active 60 minutes a day (it does not have to be done all at once, and can be broken up into segments all day long). Being active does not necessarily mean joining a team sport. Being active is getting up and doing something fun. Brainstorm with students some examples (i.e. helping clean up a park, taking a walk, dancing with a friend, etc.)

Apply:	Create activity fortuneteller using the worksheet on page 6. Can be printed in black and white. Encourage students to play their game after school or at recess. If you cannot print out the fortune teller template, all you need to construct a paper fortune teller is a square piece of paper. The steps are as follows: 1. Fold the paper into fourths 2. Unfold the paper (place writing side face down here) 3. Fold over the four corners, evenly into the middle 4. Fold into fourths again 5. Flip over the paper 6. Fold over the corners on the new side of the paper 7. Fold into fourths one last time 8. Fit your fingers into the slits 9. Open **Setting Up the Game** (use if you don't have a printed template) 1. On the 4 flaps, write out a color (Blue, Green, etc.). There should be one color name to a flap. 2. Turn over the flaps, so they are lying face down. You should see 4 large triangle and 8 smaller triangles. Write random numbers on each of the 8 smaller triangles. 3. Open up the 4 larger triangles, and you will see that there are 8 smaller triangles divided by fold lines. Write an action move that corresponds with the 8 numbers that you just wrote. **Playing the Game** 1. Place your thumbs and index fingers into the 4 flaps. Ask a friend to name a favorite sport or activity. 2. If he chooses kickball, spell out k-i-c-k-b-a-l-l opening and closing the fortuneteller with each letter. 3. Then have her pick a color or number from inside. 4. Spell out the color or count the number chosen while opening and closing the fortuneteller. 5. Now have him choose another number or color. 6. Lift that flap to reveal an activity. 7. Combine it with the one your friend named in step 1. 8. Go play the game you've created!

Activity Fortune Teller

This fortune teller will need to be cut out along the dark square line before you can fold it:



A complete tutorial and fill-in-the-blank template may be found at
http://www.gaillovely.com/resources/cootiecatcher.gaillovely.com.ppt

Colorful Fruits and Vegetables

Identify which color group(s) the fruits and vegetables belong to using the following code:
B = blue/purple; **G** = green; **W** = white; **Y** = yellow/orange; **R** = red
*Means that the fruit or vegetable belongs in more than one color group

	Color Group(s)
Apples*	
Apricots	
Artichokes	
Asparagus*	
Avocados	
Bananas	
Beets*	
Belgian Endive	
Blackberries	
Blueberries	
Broccoli	
Brussels Sprouts	
Butternut Squash	
Cabbage*	
Cantaloupe	
Carrots*	
Cauliflower	
Celery	
Cherries	
Chinese Cabbage	
Cranberries	
Cucumbers	
Dates	
Dried Plums	
Eggplant	
Elderberries	
Endive	
Figs	
Garlic	
Grapefruit*	
Grapes*	
Green Beans	
Honeydew Melon	
Jicama	
Kiwifruit*	
Leafy Greens	
Leeks	

	Color Group(s)
Lemon	
Lettuce	
Limes	
Mangoes	
Nectarines*	
Okra	
Onion*	
Oranges*	
Papayas	
Parsnips	
Peaches*	
Pears*	
Peas	
Peppers*	
Persimmons	
Pineapples	
Plums	
Pomegranates	
Potatoes*	
Pumpkin	
Radishes	
Raisins	
Raspberries	
Rhubarb	
Rutabagas	
Shallots	
Spinach	
Strawberries	
Summer Squash	
Sweet Corn	
Sweet Potatoes	
Tangerines	
Tomatoes*	
Turnips	
Watermelon*	
Winter Squash	
Zucchini	

Source: Colorful Fruits & Vegetables Worksheet, IDPH Pick a Better Snack & ACT,
http://www.idph.state.ia.us/pickabettersnack/common/pdf/sept_4_5_lessons.pdf

Colorful Fruits and Vegetables ANSWER KEY

Identify which color group(s) the fruits and vegetables belong to using the following code:
B = blue/purple; **G** = green; **W** = white; **Y** = yellow/orange; **R** = red
*Means that the fruit or vegetable belongs in more than one color group

	Color Group(s)
Apples*	**R, Y, G**
Apricots	**Y**
Artichokes	**G**
Asparagus*	**B, G**
Avocados	**G**
Bananas	**W**
Beets*	**R, Y**
Belgian Endive	**B**
Blackberries	**B**
Blueberries	**B**
Broccoli	**G**
Brussels Sprouts	**G**
Butternut Squash	**Y**
Cabbage*	**B, G**
Cantaloupe	**Y**
Carrots*	**B, Y**
Cauliflower	**W**
Celery	**G**
Cherries	**R**
Chinese Cabbage	**G**
Cranberries	**R**
Cucumbers	**G**
Dates	**W**
Dried Plums	**B**
Eggplant	**B**
Elderberries	**B**
Endive	**G**
Figs	**B**
Garlic	**W**
Grapefruit*	**R, Y**
Grapes*	**B, G, R**
Green Beans	**G**
Honeydew Melon	**G**
Jicama	**W**
Kiwifruit*	**G, Y**
Leafy Greens	**G**
Leeks	**G**

	Color Group(s)
Lemon	**Y**
Lettuce	**G**
Limes	**G**
Mangoes	**Y**
Nectarines*	**Y, W**
Okra	**G**
Onion*	**G, R, W**
Oranges*	**R** (blood), **Y**
Papayas	**Y**
Parsnips	**W**
Peaches*	**Y, W**
Pears*	**R, G, Y**
Peas	**G**
Peppers*	**B, G, R, Y**
Persimmons	**Y**
Pineapples	**Y**
Plums	**B**
Pomegranates	**R**
Potatoes*	**B, R, W**
Pumpkin	**Y**
Radishes	**R**
Raisins	**B**
Raspberries	**R**
Rhubarb	**R**
Rutabagas	**Y**
Shallots	**W**
Spinach	**G**
Strawberries	**R**
Summer Squash	**Y**
Sweet Corn	**Y**
Sweet Potatoes	**Y**
Tangerines	**Y**
Tomatoes*	**R, Y**
Turnips	**W**
Watermelon*	**R, Y**
Winter Squash	**Y**
Zucchini	**G**

Source: Colorful Fruits & Vegetables Worksheet, IDPH Pick a Better Snack & ACT,
http://www.idph.state.ia.us/pickabettersnack/common/pdf/sept_4_5_lessons.pdf