

Lesson 5: Eat Your Colors

TOTAL TIME REQUIRED: 95 minutes / 3 sessions

- Session 1: Getting Started** 15 min;
Activity I “Triple Taste Combo Game”
20 min (English Language Arts)
- Session 2: Activity II “Get Your Engine Going”**
20 min (Health/Science)
- Session 3: Activity III “Garden Designers”** 30 min
(Math/Art – can be done with art teacher);
Reflect 10 min

LESSON OVERVIEW:

Students will learn that including fruits and vegetables of many colors at meals looks attractive, and helps them get the nutrients they need to grow and be healthy. They will also learn more about the **Red and Orange Vegetable Subgroup** and design a colorful garden.

ESSENTIAL QUESTIONS: *What colorful veggies can flavor up my plate? How can I be sure I’m getting all the nutrients I need?*

TEACHING PROCEDURE:

GETTING STARTED (15 minutes)

1. Write the following riddles on the board and have students write them down and guess the answer in their **Garden Journals**.

Q: “Does this clue ring a bell? I’m sweet, but not spicy.
I’m no longer green because I’ve been hanging out for a while.”

A: Red and orange bell peppers

Q: “I’m one sweet root that’s orange inside.
Some people confuse me for a yam.”

A: Sweet potato

Q: “I’m a crunchy root that’s fun to dip.
Enjoy me ‘baby size’ or cut into sticks.”

A: Carrot

2. Ask students: *What do these three answers have in common?*
They are all vegetables and they are part of the **Red and Orange Vegetable Subgroup!** **Note:** *Yellow and green peppers are part of the **Other Vegetable Subgroup**.*

3. Review with students that eating a colorful variety of fruits and vegetables at meals and snacks helps their bodies get the nutrients they need to grow and be healthy. Most people need to eat more from the **Dark-Green, Red and Orange,** and **Beans and Peas Subgroups.** (Lessons 3, 4)

Key Message:

Rock your colors! Choose red, orange, and dark-green veggies at meals and snacks.

Subject Connections:

English Language Arts, Science, Math, Health, Science, Math (Art – see p. 39)

Learning Objectives:

Students will be able to...

- Describe ways to include a variety of fruits and vegetables in their diet.
- Design and plan a colorful garden using a variety of vegetables that grow well together.
- Plan a healthy meal featuring the vegetable subgroups.

Supplies (per student)

- Access to sink with warm, running water and soap
- Plates, bowls (for dips and fillings), spoons, forks, and napkins (per student)
- Graphing and plain paper, colored pencils, rulers, poster board

• Garden Journals

- Student handouts (pp. 78-79):
 1. **Garden Companions**
 2. **My Garden Plan**

• **Dig In!** poster – **Veggie Rock Stars**

Featured Fruits and Vegetables:

Red and orange bell peppers

Provide enough raw bell peppers (rinsed, seeded, cut into scoops) to provide students with 4 to 5 scoops. Provide water (and cups) for students to drink as they taste the vegetables.

Additional Foods:

Provide a variety of fillings for a bell pepper tasting activity on pp.38-39. (For example, brown rice with beans, veggie salsa, hummus, bean dip, or low-fat veggie dip.)

LESSON 5



Teacher Tip!

Display the **Dig In! Veggie Rock Stars** poster in the classroom. Looking at the poster, ask students if they can identify vegetables in the **Red and Orange Vegetable Subgroup**. Which ones have they tried before, and which ones will they try?

Note: A list of all vegetables pictured in the poster can be found at:

http://teamnutrition.usda.gov/Resources/dig_in.html.

RED AND ORANGE VEGETABLE SUBGROUP

Acorn squash
Butternut squash
Carrots
Hubbard squash
Pumpkin
Red and orange bell peppers
Sweet potatoes
Tomatoes (including tomato juice and tomato sauce)

POPULAR AND TASTY COMBINATIONS

Stew: Carrots, potatoes, onions

Chili: Peppers, tomatoes, kidney beans

Fruit Salad: Apple, banana, strawberries

Crudit  Tray: Broccoli, carrots, celery

Mixed Vegetables: Corn, carrots, green beans

PROFESSIONAL FOOD PREPARATION

Invite a guest chef or dietitian to show the class how to use colorful veggies to make healthy meals appealing. They may wish to demonstrate how to make the Colorful Quesadillas recipe from **Dig In! at Home** and provide samples for everyone to try.

- Write the words **Red and Orange Vegetables** on the board. Have students volunteer names of vegetables that are in the **Red and Orange Vegetable Subgroup**. List them on the board. **Note:** *Beets range from red to deep purple in color; however, it is important to note that they are not part of the **Red and Orange Vegetable Subgroup** (see sidebar).*

LEARNING ACTIVITIES

Activity I. Triple Taste Combo Game (20 minutes, English Language Arts)

- Next, play the **Triple Taste Combo Game**. Ask a student to start by naming a colorful fruit or vegetable. Then, ask two more students to name a different colored fruit or vegetable they think might go well with the first one. (For example, the first student might start with "lettuce." The next two students may volunteer "onion" and "tomato." The resulting combination would be "lettuce + onion + tomato.") Ask students where they might eat this combination (*on a sandwich*). Starting with "tomato," have two more students create another combination.
- You can also allow students to have one of the three foods in their combination be from another food group (*such as yogurt, blueberries, and strawberries*). The combinations will get creative and you may come up with some clever new snacks!

Activity II. Get Your Engine Going (20 minutes, Health/Science)



***Allergy Alert!** See p. 2 for more information on food safety and allergies before starting this food preparation activity.

Prepare: Set up a tasting station with red and orange bell peppers. Rinse and cut enough bell peppers to give students four to five pieces each. Cut the pepper into four to five pieces lengthwise so the curve at the end is shaped as a "scoop." Get rid of the seeds. Work with parent volunteers or school food service staff to provide a couple of different foods students can use as "fillings" for the red pepper vehicles. (For example, brown rice with beans, salsa, hummus, bean dip, or low-fat veggie dip.) You can also use other veggies or fruit as fillings after they are finely chopped.

- Tell students they will now taste red and orange pepper vehicles! Explain that these bright colored peppers are part of the **Red and Orange Vegetable Subgroup**, and are full of good nutrients including vitamins A and C. Their shape also happens to make a great "vehicle" to scoop different dips or fillings (*whatever you are able to provide*).



2. First, have students wash their hands following proper procedures (see sidebar). Give students plates, forks, spoons, and napkins. Provide them each with three to five pepper “scoops” and a sampling of dips. Before they fill their peppers with anything, have them taste the pepper on its own and write down their observations in their **Garden Journals**. Next, have them spoon different fillings into their red or orange bell pepper vehicles to taste. Ask students to write down each combination, and a reflection on the flavors of each sample.
3. Invite students to share their thoughts. Ask: *What was your favorite pepper vehicle combination? Do you have ideas of other unique combinations you may want to try? How did the combination change or enhance the flavor of the pepper?* If serving orange and red bell peppers, ask them to reflect on whether the two varieties taste different or similar.

Activity III. Garden Designers (30 minutes, Math/Art)



Teacher Tip! Collaborate with the **Art** teacher to turn student garden plans into colorful works of art. Display them around the school.

1. Provide each student with a copy of the handout **Garden Companions** (p. 79). Now that students have explored how to combine colors and flavors in the kitchen using fruits and vegetables, students should continue to think in color, but this time in the garden.
2. Ask students: *What new and colorful variety of fruits and vegetables can we grow in our garden? What plants grow well together?* Explain that just as certain foods look and taste good together, certain plants grow better together. (For example, have you or your students ever heard of a “Three Sisters Garden”? It is an ancient and common agricultural/gardening practice of intercropping, or simultaneously growing crops (corn, squash, beans) together in the same area.) Corn grows tall and provides the height and surface for beans to climb. Squash grows low and over the ground, shading the soil and protecting her “sisters” (corn and beans) from weeds. Beans also help her sisters through the roots, which keep the soil fertile with nutrients from the sun. Which of the three sisters are growing in your garden? Do any local farms practice companion planting? (🌿 p. 101)
3. Have students work in their **Garden Teams** to design a colorful garden. Provide them with the handout **My Garden Plan** (p. 78), or graphing and plain paper, colored pencils, and rulers. Alternatively, they can also make collages of images for their garden plan instead of drawing. Encourage them to use the list of fruits and vegetables from the beginning of the lesson (Getting Started, step 4, p. 38) as well as the Garden Companions handout (p. 79), for reference. You may want to set some parameters before beginning, such as the size of the garden or to include certain vegetables (for example, red bell peppers). Have them draw their designs to scale on their graph paper. Otherwise, allow your students to use their imaginations and be creative in designing their own edible garden!



IMPORTANT FOOD SAFETY STEPS!

Please see p. 4 for a reproducible handout to post in a visible location in your classroom. It is important that you follow these steps to keep yourself, your students, and any parents or volunteers safe and healthy.

Hand Washing:

All persons participating in the food preparation activity (teachers, students, volunteers, parents) should wash hands before and after preparing, handling, or sampling foods.



DIG DEEPER! (SOCIAL STUDIES)

In addition to companion planting, it is important to consider the weather and amount of sunlight and shade in each area of your garden.

- Have students check the garden at different times of the day to determine which plots are the sunniest and shadiest to determine what plants will grow best there.
- Ask students to check the **Growing Guide** (🌿 p. 96-99) to find out which plants can be planted and harvested at the same time of the year. They should factor this information into their garden plans.

DIG DEEPER! HEALTHY PROMOS




Using the existing **Dig In!** posters as inspiration, have students create their own colorful posters with motivating slogans featuring healthy choices. Then display them around the school and cafeteria as inspiration for others to eat more fruits and vegetables.



GARDEN DESIGN

If you have just begun your school garden, think about how you can design it to integrate plant companions.

( p. 101) Collaborate with your students using their garden design plans. If your garden is already growing, think about what new fruits and vegetables you want to grow. Perhaps you want to expand your garden with new containers or a new garden bed.

REFLECT (10 minutes)

1. Have students reflect in their **Garden Journals** on the following questions, then invite students to share their reflections with the class: *Why is it important to consider the color of foods when planning a meal? Did your dinner last night include any colorful fruits and vegetables? How about your lunch? How would you feel about eating bell pepper vehicles for a snack at home? What type of bell pepper vehicle would you make for each member of your family?*

EXTENSIONS

Rainbow Meals. Have students collaborate with the cafeteria staff on how to include a colorful variety of fruits and vegetables, present meals in attractive ways, and incorporate garden colors on the school lunch menu. Team Nutrition's *Recipes for Healthy Kids Cookbook* includes kid-tested recipes for Rainbow Rice, Purple Power Bean Wraps, and more!

<http://teamnutrition.usda.gov>



Garden Colors Day. Encourage kids to choose a rainbow of fruits and vegetables from the cafeteria on a "Garden Colors Day" by rewarding them with inexpensive food-related prizes, such as temporary tattoos of fruits and vegetables or food-themed stickers. Prizes are earned by eating at least three differently colored fruits or vegetables.

