

MAY

SPINACH

DARK GREENS

GRADE
2-3

RECOMMENDED BOOK	<p>"Water, Weed, and Wait" by Edith Hope Fine "Sylvia's Spinach" by Katherine Pryor "Our School Garden!" by Rick Swann</p>
NEEDED SUPPLIES	<p>Fresh spinach leaves for tasting. (Optional: baggies, forks, strawberries or other fruit, spinach and dressing for individual salads) Potting soil, spinach seeds, paper cups for each student Unsharpened pencil marked ½ inch, spray bottle with water, extra cups or plastic spoons for scooping dirt</p>
NEEDED RESOURCES	<p>"Plant Growth Observations" worksheet "Spinach Salad" pictorial recipe Spinach photo</p>
21ST CENTURY SKILL	<p>Students will learn the importance of vegetables in a healthy diet.</p> <ul style="list-style-type: none"> Practice preventive health behaviors. <ul style="list-style-type: none"> 2-3: Choose healthy foods.
OBJECTIVES	<ul style="list-style-type: none"> Students will gain knowledge of spinach (how to recognize, how to eat, part of plant, how to prepare). Students will taste spinach and learn it is a vegetable. Students will learn that friends and educator eat fruits and vegetables.
PHYSICAL ACTIVITY	<p>"Shakedown." Explain to students that they will need to remember two details. First, they need to remember "5-4-3-2-1." Educator, count down using your fingers. Second, students need to remember "hand, hand, foot, foot." Demonstrate this by flicking out one hand, then the other; then kick out one foot, then the other. Explain to students that they will combine the two things they memorized. Have them practice counting down while doing the motions. Then, lead students in the "Shakedown." Students and instructor flick out one hand five times, counting down out loud "5-4-3-2-1." Repeat with other hand. Then, kick out one foot five times, counting down "5-4-3-2-1." Repeat with the other foot. Repeat all the motions again, counting down 4 times, then 3, then 2, then 1. You may want to only count down from 3 for younger students and repeat the activity a couple of times.</p>
RECAP FROM LAST LESSON	<p>Did anyone try peaches at home? Were they fresh, canned or frozen? What time of year is the best time to eat fresh peaches? Why? If you want your grown-ups to get peaches for you, what should you do? (ask politely, tell grown-ups that you tasted peaches at school and liked them, be sure to eat them when served, say thank you)</p>
FUN FACTS ABOUT SPINACH	<ul style="list-style-type: none"> Spinach originated in Persia (modern Iran). It was not commonly eaten in the U.S. until the early 19th century. Spinach was the first frozen vegetable available commercially. Many Americans associate spinach with Popeye, a 1929 cartoon character who ate spinach to gain his strength. Annual consumption of spinach increased drastically from 1992 to 2002 according to USDA's Economic Research Service, mostly due to availability of pre-cut, bagged spinach. California produces the most spinach grown for commercial use in the U.S. Other states that produce much of the commercially grown spinach are Arizona, New Jersey and Texas.

DARK GREENS
FEATURED TASTING:
SPINACH



ALTERNATIVE:
KALE



WHAT YOU NEED TO KNOW ABOUT SPINACH

- Choose spinach with fresh, crisp green leaves with no spots or signs of damage.
- Spinach is a dark green vegetable. While all lettuces are healthy, darker leafy greens generally offer more nutrition (e.g., spinach v. iceberg lettuce).
- Spinach is available fresh, frozen and canned.
- Wash fresh spinach under clean, running water before eating. Bagged spinach is pre-washed and ready to eat.
- Spinach is an annual plant, so it must be planted each year.
- Spinach can grow in Iowa and grows best in cool, damp weather. Peak seasons are spring and fall.

HEALTH CONNECTION

- Spinach is high in vitamin C, which helps to heal and protect the body. Reinforce with defense shield and cross arms in front of chest.
- Spinach is high in Vitamin A, which is important for eyes, skin and growth. Reinforce with super goggles and make circles with hands over eyes.
- Spinach is an excellent source of fiber, which helps with digestion and helps us feel full longer. Reinforce by rubbing stomach.

PARTS OF THE PLANT

Leaf and stem

DISCUSSION

What do you like to do to be physically active? Educators, tell students how you stay active. Allow students to respond. Idea: students pair up with another student to share their favorite activities. Ask a few groups to report out to the entire class. Those are all great activities. Why do you think it's important to be physically active?

Physical activity keeps our minds and bodies healthy. When we are physically active, we sleep better, feel better, pay attention better and do better in school. It helps us feel calmer (i.e., reduce anxiety), helps us control our emotions and gives us energy. Physical activity helps our bones and muscles stay strong and keeps our body at a healthy weight. It's good for our heart and lungs, too!

Do you know how many minutes of physical activity kids need every day? (60 minutes – that's one hour – or more!) Most of these minutes should be spent on "aerobic" activities – or activities that make you breathe harder, increase your heart rate and make you sweat. Examples of aerobic activities include running, jumping rope, bike riding, playing tag, soccer, brisk walking, basketball and swimming. It's okay if you aren't active for one hour at a time; all the minutes you spend being physically active in a day active add up to meet the goal. Some activities don't count as physical activity, such as watching TV, playing video games or using the computer.

Sometimes during Pick a better snack™ we talk about gardening (or relate to students' experience in the school garden if applicable). Did you know that gardening counts as physical activity? Gardening can help you stay healthy.

Today we're going to taste a vegetable that grows well in an Iowa garden. It's called spinach.

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ACTIVITIES	<p>If time and space allows, help each student plant spinach. Fill a paper cup $\frac{3}{4}$ full with potting soil. Make three holes in the soil $\frac{1}{2}$ inch deep. Show how deep the seeds go into the soil with a pencil or your finger. Place a seed in each hole and cover with soil. Spray water over top of soil. Set cups in a sunny spot or under grow lights. Have the children check the cups weekly to see the progress. Use the “Plant Growth Observations” worksheet to chart growth, if desired.</p> <p>If planting is not feasible, pass around spinach seeds, allowing each child to touch them. Explain how spinach grows and that it is ready for harvest in about 40 days. Show students a photo or actual spinach plant.</p> <p>Another option: Make personal salads in a bag.</p>
TASTING	<p>Taste fresh spinach. Optional: Combine spinach, strawberries (or other berries or oranges) and vinaigrette salad dressing in a small bag to make a personal salad. Eat with a fork, right out of the bag. Click here or Click here for recipes.</p> <p>Or, make spinach salad on a plate using the pictorial recipe attached with this lesson.</p>
CLOSING DISCUSSION	<p>What leafy vegetable did we taste today? What will you tell your grown-ups about spinach? Where can you get spinach? Will you grow it at home? How will you eat it? (raw in a salad, smoothie, or on a sandwich; steamed with a little olive oil; cooked in pizza or lasagna) How many minutes of physical activity do you need every day? What physical activity will you do today? Tell students about opportunities to garden (e.g., school garden, community garden).</p>
TAKE-HOME MATERIALS	<p>Pass out “Ask me about...spinach” stickers. Pass out bingo incentives. Send home the family newsletter.</p>
REFERENCES AND RESOURCES	<p>Click here Move for Thought (classroom physical activity ideas)</p> <p>Click here CDC Youth Physical Activity Guidelines</p> <p>Click here 2018 Physical Activity Guidelines Advisory Committee Scientific Report</p> <p>Click here U.S. Dept. of Health and Human Services Youth Physical Activity Guidelines</p> <p>Click here Together Counts physical activity lesson</p> <p>Click here Team Nutrition Grow It, Try It, Like It: Book 3 Spinach Lane</p> <p>Click here Kids Gardening “Lettuce Be Healthy” lesson</p> <p>Click here Spend Smart. Eat. Smart. Produce Basics: Greens/Lettuce</p> <p>Click here SNAP-Ed Connection: Spinach</p> <p>Click here Fruits and Veggies More Matters: Spinach</p> <p>Click here California Harvest of the Month: Spinach</p> <p>Click here Earthcare 4 Veggies video (:40)</p> <p>Click here Life Lab Farm and Garden Jokes</p>
OTHER WAYS TO EAT SPINACH	<p>Steam, boil, microwave, sauté or stir-fry; add to soups, lasagna or other vegetable dishes; spinach salad with strawberries, mandarin oranges, dressing; salad on a stick; pick a leaf off a plant, wash and eat; smoothies; sauté with garlic; blanch and freeze in ice cube trays; spinach pasta; spinach wraps; pinwheels; quiche or omelets; spinach soup; baby spinach; spinach rolls w/veggies; wrap around strawberry and dip in raspberry vinaigrette; make salad in a baggie.</p>











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Plant Growth Observations

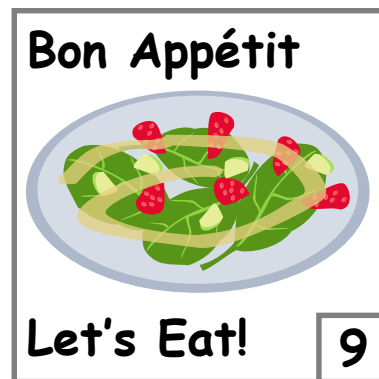
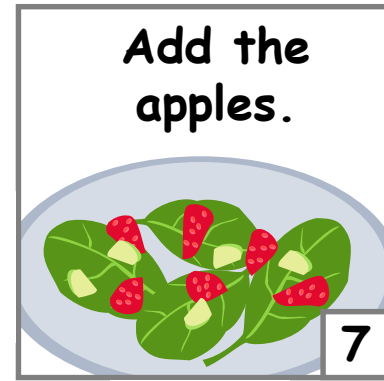
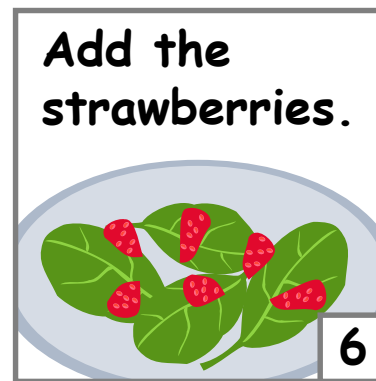
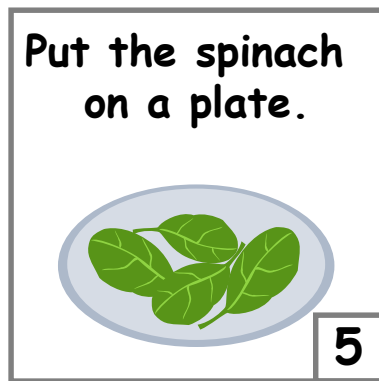
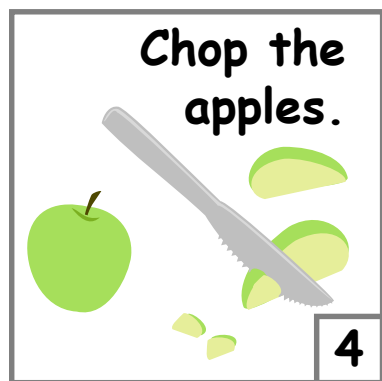
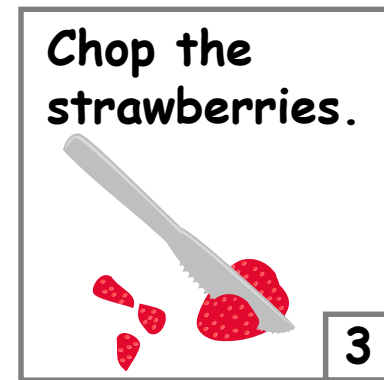
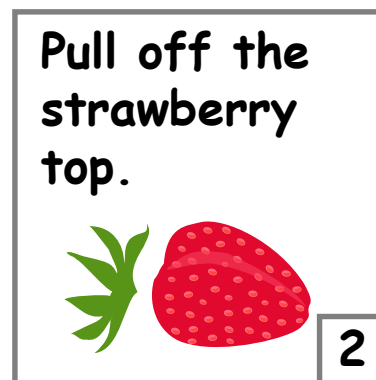
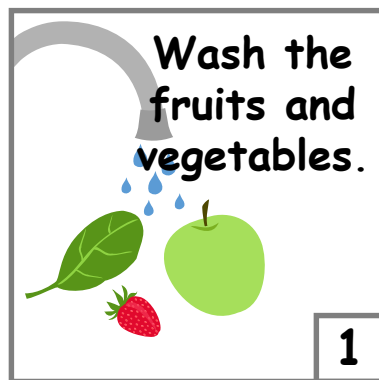


Type of seeds planted: _____

Date seeds planted: _____

1 	2 	3 
4 	5 	6 

Spinach Salad



Helpful tip: reduced-sugar raspberry vinaigrette goes great with this salad!