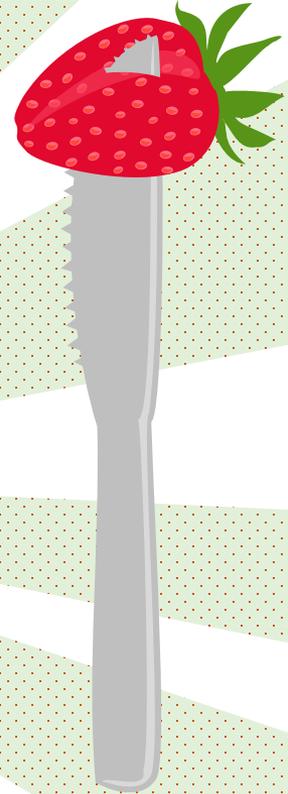
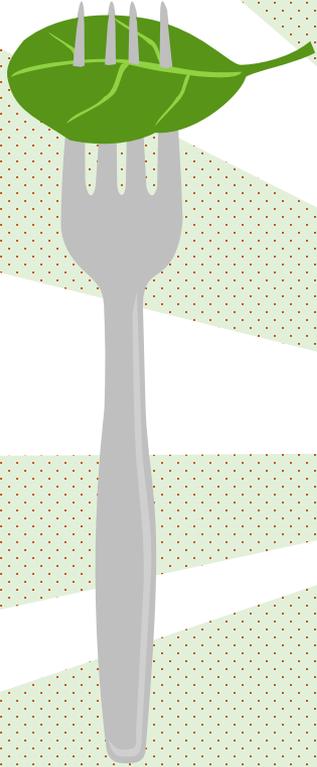




Little CHEFS COOKBOOK

Tested Recipes for Windham's Little Chefs
Created by Grow Windham

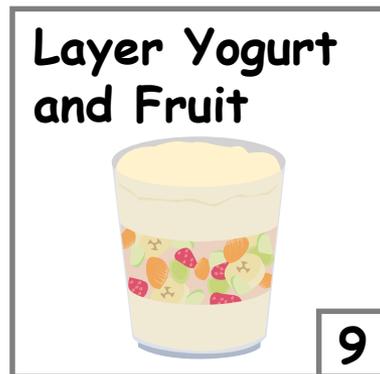
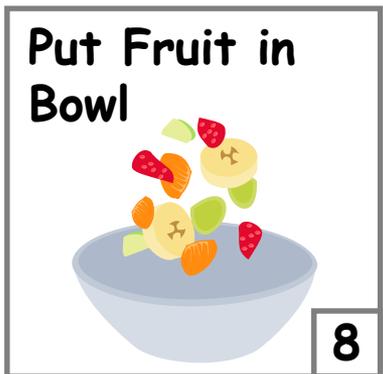
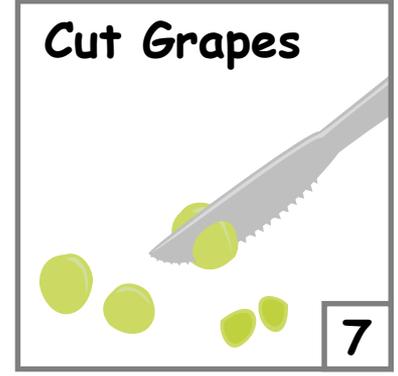
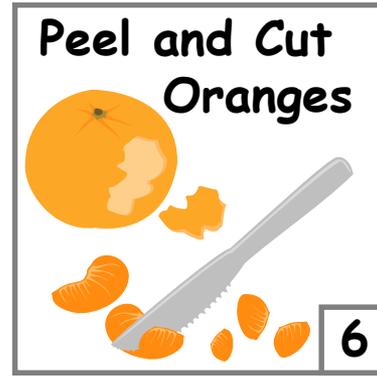
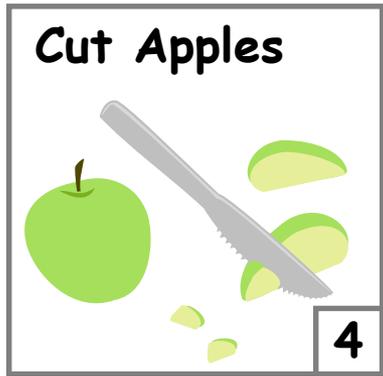
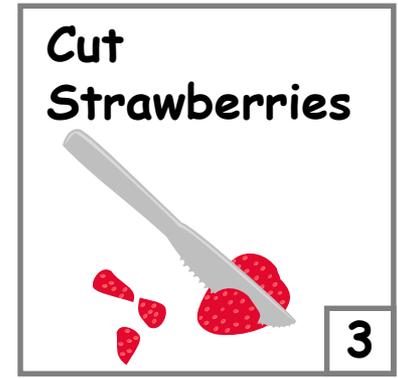
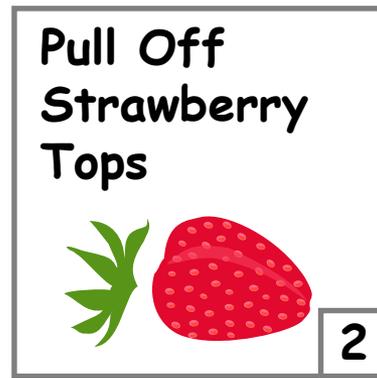
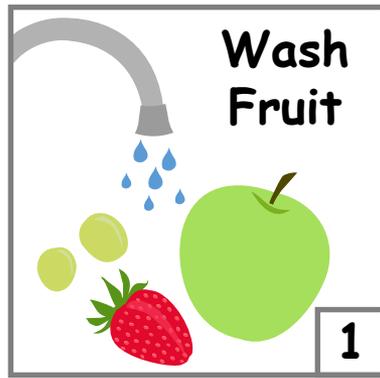
Certificate of Graduation



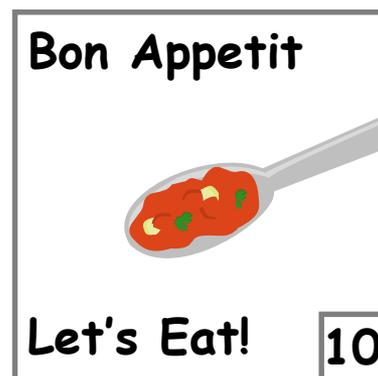
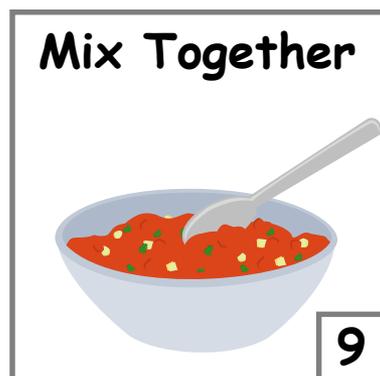
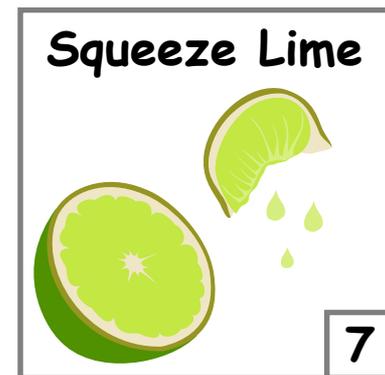
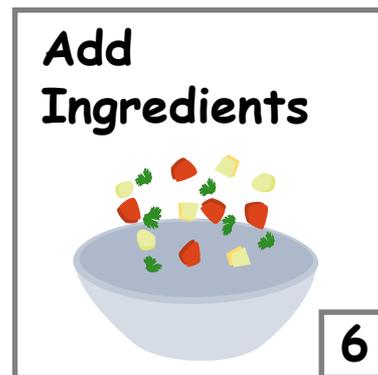
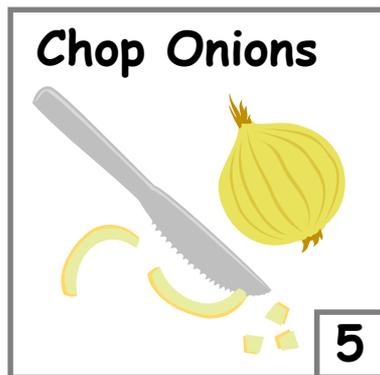
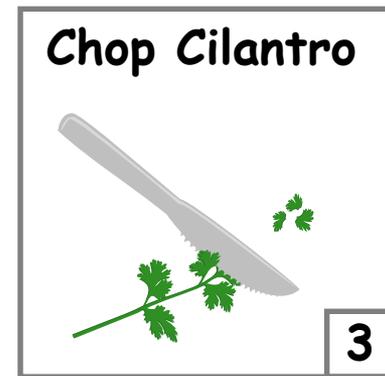
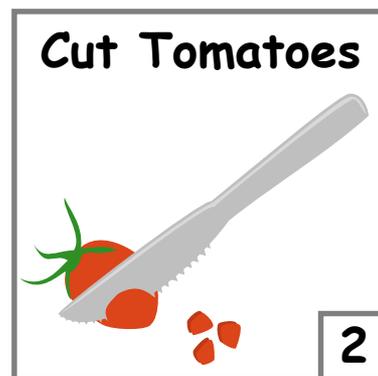
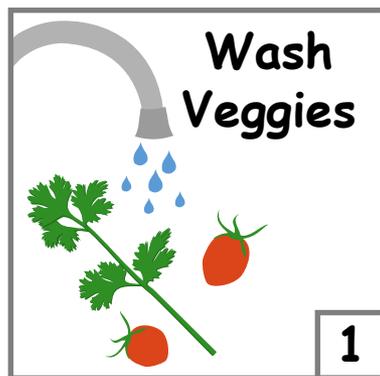
Teacher Signature(s)

Date

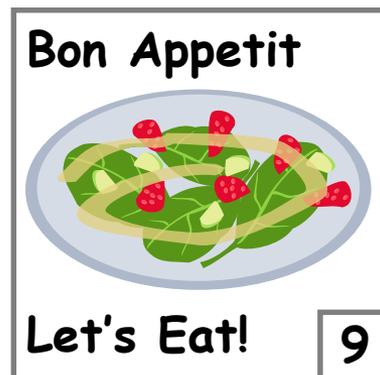
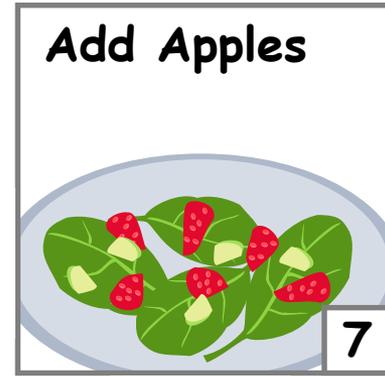
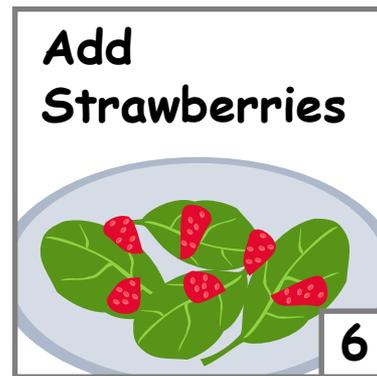
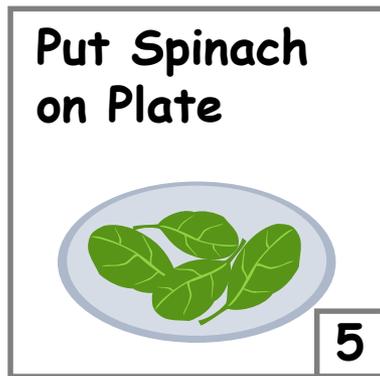
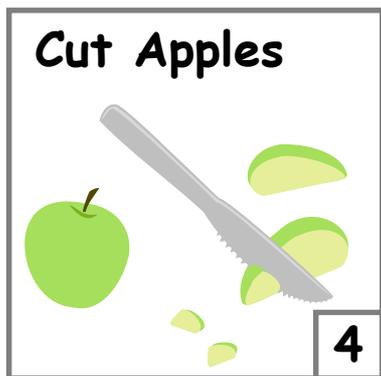
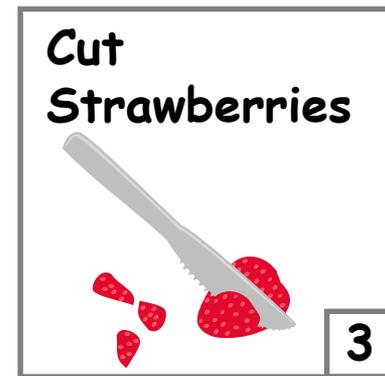
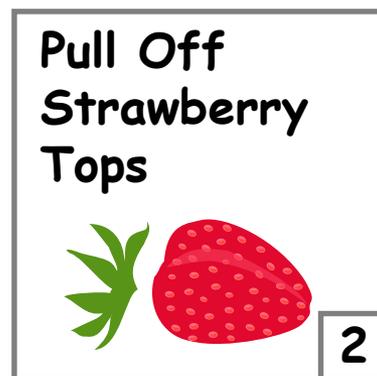
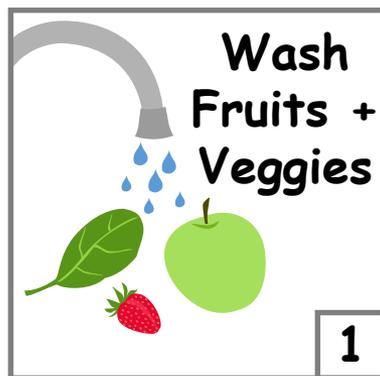
Fruit Salad Sundaes



Garden Salsa



Spinach Salad





Kids
Dig In!



Garden-Based Activities for Little Scientists

Disciplinary Core Ideas:

1-LS1-1 Structure and Function: All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.

3-LS1-1: Growth and Development of Organisms: Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse lifecycles.

5-LS2-2: Interdependent Relationships in Ecosystems: Some organisms, such as fungi and bacteria, break down dead organisms and therefore operate as “decomposers.” Decomposition eventually restores (recycles) some materials back to the soil.



Wiggly Worms

Key Facts:

Worms like a dark, moist environment. Worms must stay moist in order to breath. They take in oxygen through the mucus on their skin. If their skin dries out they suffocate.

Worms are invertebrates. They do not have a backbone.

Worms are decomposers. They break down organic matter (bits of decaying plants and animals) and help recycle the materials back into the soil.

Vocabulary:

Segments	Decomposition
Castings	Soil

Essential Questions:

- What are the parts of a worm?
- How do worms move?
- How do worms respond to moisture?
- How do worms respond to light?
- How are worms beneficial?

Books:

Wiggling Worms at Work
by Wendy Pfeffer

Compost Stew
by Mary McKenna Siddals

Warm-up:

Give each student a worm on a wet paper towel and ask them to label the parts. (WW.WS.1)

Ask students to sequence the worm life cycle models. (WW..KIT.1)



Investigate:

Worm Behavior

Materials (WW.KIT.2):

2 shoe boxes with lids

Flashlight

paper

Red wiggler worms

Paper towels

Black construction

Observation Sheets

Preparation:

Cut out a 2 inch circle on the right side of one of the shoe box lids. In the same box, tape a piece of black construction paper upright across the middle of the box, to create a barrier between the left and right sides. Leave a small space at the bottom of the divider to allow the worms to move from one side to the other.

Procedure:

1. Read *Wiggling Worms at Work*.
2. Ask students what they learned about worm behavior. How do worms move? Do they prefer a moist or dry environment? How do they respond to the sun?
3. Set up the two worm experiment chambers. (See WW.WS.2 for instructions.)
4. Ask students to make a prediction about how the worms will behave in each worm chambers on the observation sheet.
5. After 10 minutes open each shoe box and invite your students to record the number of worms that they see on each side of the worm chamber on the observation sheets and draw conclusions about the worms' behavior.
6. Discuss the results: Was your prediction correct? Did the worms behave the way you expected?

Extensions:

Build a classroom worm bin (WW.INFO.1)

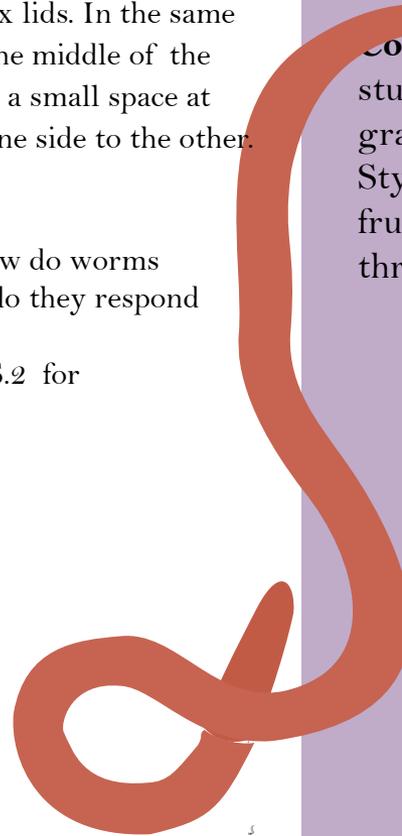
Set up a worm habitat to compost fruit and vegetable snack scraps in your classroom. Drill holes in the lid of a plastic storage bin. Fill the bin with plenty of shredded newspapers, a handful of garden soil, and a few food scraps. Add red wiggler worms and compost away!

Compost Sort (WW.KIT.3): Give students various materials (newspaper, grass clippings, plastic bottle, leaves, Styrofoam cup, pictures of vegetables and fruits, etc. Ask them to sort them into three piles: trash, recycling, and compost.

Snack!

Healthy Dirt Cups

Layer vanilla Greek yogurt, chocolate graham crackers crumbs, and banana slices in a clear cup. Top with a gummy worm.



Disciplinary Core Ideas:

1-LS1-1 Structure and Function: All organisms have external parts. Plants have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.

3-LS1-1: Growth and Development of Organisms: Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse lifecycles.

4-LS1-1 Structure and Function: Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.

Seeds

Key Facts:

Seed germination is the process where seeds begin to sprout and grow. Seeds germinate when they become moist.

Seeds have three parts; the seed coat, embryo, and cotyledon. The seed coat is the protective outer layer of the seed. The embryo is the beginning of a new plant. The cotyledon is where the seed stores all the energy it needs to germinate.

People rely on seeds as a source of food. Popcorn, peanuts, rice, beans are all seeds people eat.

Vocabulary:

Seed Coat	Embryo
Cotyledon	Germination

Essential Questions:

What are the parts of a seed?
How does a seed grow?

Books:

From Seed to Plant
by Gail Gibbons

Seeds (Plant Parts)
by Vijaya Khisty

Warm-up:

Read the Story of a Seed and invite students to act out the life cycle of a plant. (S.KIT.1)





Investigate:

What's inside a Seed?

Materials (S.KIT.2):

Red kidney beans

Toothpicks, one for each student

Hand lenses, one for each student

Bean Seed Dissection worksheets (S.WS.1), one for each student

Preparation:

Soak 30-40 red kidney beans in warm water for at least 12 hours

Procedure:

1. Read from *Seed to Plant*.
2. Give each student a bean and ask them to draw what they predict is inside the seed on their Bean Seed Dissection worksheet, based on what they learned from the book.
3. Invite each student to gently rub the bean between their fingers until the seed coat begins to peel away.
4. Then ask each student to carefully separate the bean into halves using their toothpick.
5. Invite each student to use their hand lens to observe the inside of their bean and then draw and label what they see on their worksheet.
6. Discuss the results: Was your prediction correct? What different parts of the baby plant do you see? Why does a seed have a coat?

Extensions:

Go on a seed hunt: Give each student a small Ziploc bag. Go outside and collect seeds on the playground, in the school garden, or on the nature trail.

Sort seeds (S.KIT.3): Give pairs of students a handful of assorted seeds and invite them to sort them in a variety of ways (by color, size, shape, texture, etc.)

Save seeds from the school garden (S.INFO.1): In the fall collect seeds from the garden and save them in homemade seed packets (S.WS.2). Beans and peas are easy seeds to save.



Snack!

Edible Seeds

Sample all types of edible seeds such as popcorn, sunflower seeds, pumpkin seeds, corn nuts, and chickpeas.