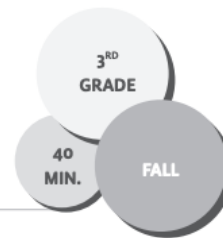


FOOD CORPS LESSONS

All in for Applesauce

THEME: LIVING UP TO OUR FULL POTENTIAL



ESSENTIAL QUESTION

How can we pay close attention to our surroundings and each other?

LEARNING OBJECTIVES

- ✓ Students will be able to closely observe apples and describe them in detail.
- ✓ Students will be able to articulate how diverse varieties of produce contribute to a flavorful applesauce and how diverse people contribute to a vibrant community.

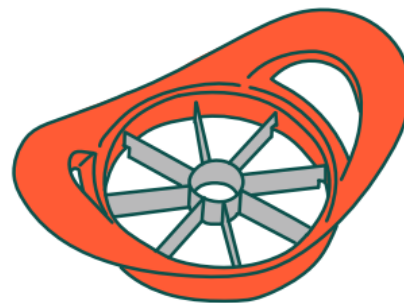
LESSON DESCRIPTION

In this lesson, students test their close observation skills by studying one apple and then trying to identify it among other apples. They then reflect on the importance of diversity in a community and have a taste test of homemade applesauce.

MATERIALS

- 1 apple for each student of varying varieties (or each pair of students if you have a large class)
- Applesauce ingredients
- 4 bowls
- Pot
- Hot plate
- Extension cord
- Flexible cutting mat for each group
- Long wooden spoon
- Potato masher (or immersion blender, if you have one)
- Paper and pencils or pens for all students

- Chart paper or a whiteboard with markers
- Tasting cup for each student
- Spoon for each student
- 2 apple corers (optional)



PREPARATION

- › Divide the apples into bowls for each group of three students.
- › Set up a station where you can plug in the hot plate, and small groups of students will be able to gather around to make applesauce. Have a couple of cutting mats and apple corers set out for students to use.
- › Have a couple of apples already sliced and ready to start cooking to help the process along. No need to peel them.
- › Write the following prompt on chart paper or a whiteboard where all students can see: "Diverse varieties of apples contribute to a flavorful applesauce. How do diverse people contribute to a vibrant community?"

Applesauce

- 10 apples of different varieties
- Juice of 1 lemon
- Tbsp of cinnamon
- Pinch of salt
- 1 cup of water, if needed

ACTION STEPS

1. Wash Hands! (5 min.)

2. Sensory Observation: Divide students into groups of three, and pass out an apple to each group. Ask students to observe closely, saying, *What if this apple were the world? I want you to observe every nook and cranny, finding all the mountains, all the cities, and all the farms. Where are the oceans? Where are the rivers? Can you find where we live? Can you find your home?* Give students time to observe their apples. (5 min.)

3. Finding Your Apple: Say, *You're going to test your close observation skills by placing your apple back in the bowl with everyone else's to see if you can find it again.* Give students one more minute to notice any unique markings or other characteristics of their apple. Then have students place their apples back in the bowl. You might want to go around and rearrange some of the apples in the bowls so students can't easily find theirs again. Announce, *When I say "applesauce" you're going to find the original apple that you studied so well.* Have students hunt for their apple. (5 min.)

4a. Making Applesauce: Explain to students that the class will be making applesauce

using the different apple varieties they just studied. Say, *Some apple varieties taste sweet and others are tart, so they each contribute something unique to the applesauce.* Call up groups one at a time to contribute to the applesauce. Have each group of students use the apple corer to slice and core one apple, toss it into the pot, and stir or mash the apples.

4b. Writing Activity: While the applesauce is cooking, have students write responses to the following prompt: *Diverse varieties of apples contribute to a flavorful applesauce. How do diverse people contribute to a vibrant community?* Before they begin, explain that "vibrant" can mean exciting, strong, and lively. If your applesauce still needs more time to cook after the writing activity, you might include one of the extensions below. (15 min.)

5. Tasting: Pass out a tasting cup of applesauce to each student. Ask students to use adjectives to describe the taste and texture of the applesauce. (5 min.)

REFLECTION

Have students discuss the following questions in small groups, then share with the class: (5 min.)

- *What flavors did you taste in the applesauce?*
- *Why do you think we added many different types of apples to our applesauce rather than just using one type?*
- *Similar to our diverse apples creating a flavorful applesauce, how do diverse people contribute to a vibrant community?*

ADAPTATIONS

Garden: If you have a bountiful crop in your school garden, such as cherry tomatoes, you can adapt this activity so students are closely observing the crop that they can then harvest.

Extension: Have pairs of students sit together back-to-back. Demonstrate how to draw an object based on another person's description, explaining, *One person will hold the apple and explain it with as much detail as possible. Meanwhile, the other partner will be drawing what they hear the partner describing.* Have students try the activity, then switch apples with other pairs, switch roles, and try again.

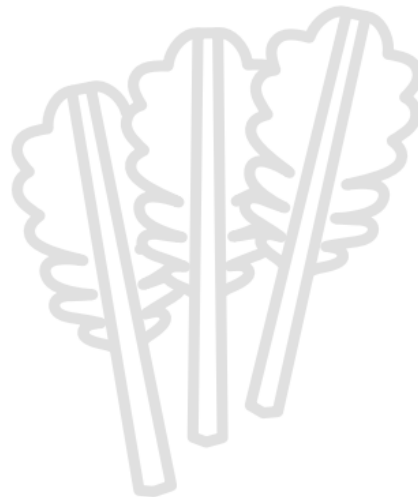
Geography: Use one apple as a model of the world. Slice it into quarters, and explain that three-fourths of Earth is covered in oceans and seas. Remove those sections. Then take the remaining one-fourth, and explain that that's the land. Chop that in half, and explain that half of the land is inhabitable, and the other half is uninhabitable. Remove the uninhabitable half. Now take the remaining apple slice, and chop it into fourths. Explain that only one-fourth of our inhabitable land is arable (or farmable). Remove all the other parts. Use this to discuss how precious our arable land is.

ACADEMIC CONNECTIONS

English Language Arts Common Core State Standards

CCSS.ELA-LITERACY.L.3.5

Demonstrate understanding of figurative language, word relationships and nuances in word meanings.



Cycle of a Nutrient

THEME: EXPLORING THE ECOLOGY OF FOOD



ESSENTIAL QUESTIONS

Where do the nutrients in our food come from?
Where do the nutrients in our food waste go?
Why is composting food waste an important step in the nutrient cycle?

LEARNING OBJECTIVES

- ✓ Students will be able to explain how the nutrients that nourish us are derived from soil and air.
- ✓ Students will be able to explain how our food waste can go back into the nutrient cycle in the form of compost to replenish the soil.

LESSON DESCRIPTION

In this lesson, students learn about the nutrient cycle and demonstrate their understanding of the nutrient cycle through a cartoon or narration.

MATERIALS

- Objects that represent the nutrient cycle, such as an apple, a decaying apple core, a small container of rich garden soil or finished compost, and a small twig
- Handkerchief or tray
- Cycle of a Nutrient Cards (p. 536)
- Cycle of a Nutrient Poster (p. 537)
- Paper for each student
- Markers and crayons

PREPARATION

- Photocopy Cycle of a Nutrient Cards, and cut them out; create sets for partners. Set aside all the cards with images of a worm or a human to be passed out separately.

ACTION STEPS

1. Connecting the Dots: Gather students around a handkerchief or tray with objects that represent the nutrient cycle. Make sure that the objects are not in any logical order. For example, you might just have the twig, then the apple core, then the apple, and then the soil in a line. Explain to students, *These objects tell a story. But right now they're not in order! It's your job to figure out the mystery of how to reorder them to tell the story.* Pass out sets of cards (minus the worm and human cards) to pairs of students, and have students work in pairs to figure out the order the cards would go in to tell a story. The goal is to have students recognize that the decaying plant eventually becomes part of the soil, and the nutrients released in the process of decomposition help nourish a new plant. Have students share their story and, as they do, reorder your real objects to reflect the story they're telling (soil to twig to apple to decaying apple). **(5 min.)**



2. Animals in the Cycle: Pass out a picture of a human to each pair and ask, *How would a human fit into this story?* Pass out a picture of a worm and ask students how it would fit in as well. Call on pairs to share their guesses. Have students fill in the gaps where the first pair leaves off. If students don't mention it, say, *This is a story with no beginning and no end. It is a cycle.* Reorganize the objects into a circle to connect the dead plant to the soil and the soil back to the new plant. **(5 min.)**

3. Putting it All Together: Display the Cycle of a Nutrient poster. Explain to students, *Nutrients are chemical elements that all plants and animals need to grow. For example, Foods such as bread, tortillas, pasta, and rice all have a nutrient called carbohydrate that is a great source of energy. Fruits and vegetables have nutrients called vitamins and minerals that help our bodies work well and make us glow. That's where we get the word nutrition from. Nutrients move from our environment into living things. Once those living things die, they decompose, or break down, thanks to the help of decomposers. The process of decomposition releases the nutrients back into the soil, where they're ready to nourish and support new plant life.* Explain to students that the earth is very efficient at recycling waste, but humans often interrupt this cycle by throwing our food scraps into a plastic garbage bag that goes to a landfill. When we compost, we are giving those nutrients from our food waste right back to the soil, which helps us grow new food. **(10 min.)**

4. A Year in the Life of a Nutrient: Tell students, *I'm giving you the challenge to put yourself in the place of a nutrient! What would your life look like over the course of a year?* Give them the choice between drawing

their own cartoon or writing a narrative from the point of view of a nutrient. Have students start by thinking of one of their favorite foods. They will start their cartoon or narrative from the perspective of a nutrient inside an ingredient from that food. Have them include the food growing, part of the food getting eaten and part of it getting composted, the nutrients going back into the soil from composted food, and the new ingredients growing from that soil. For the food that is eaten, students can depict waste being excreted directly back into nature by animals. Circulate through the room, checking in with students and providing support. **(20 min.)**

5. Sharing: Have small groups of students share their cartoons and narratives with each other. **(10 min.)**

REFLECTION

Have students discuss the following questions in small groups, then share with the class: **(5 min.)**

- *Where do the nutrients we eat originally come from?*
- *What role do decomposers, such as worms, play in the nutrient cycle?*
- *What steps can humans take to play a positive role in the nutrient cycle?*

ADAPTATIONS

Garden: Have students find objects in the garden to represent the various components of the nutrient cycle, and have them put them in order to tell stories.

Physical: Play decomposer tag as an energetic way to reinforce the concept. Have one student

wear an armband indicating that they're "frost" (Death), and have a couple other students wear an armband in a different color, indicating their roles as "worms" (Decomposers). Have all other students be plants. If Death tags a plant, the plant is frozen until a Decomposer tags it, representing the decomposition cycle. Try playing where Death is allowed to tag the Decomposers to show that without decomposers recycling plant matter, there's no new life.

Musical: Teach students the song "Dirt Made My Lunch" by the Banana Slug String Band.

Extension: Have students create their own game to represent the nutrient cycle. You can show them *Caine's Arcade* for inspiration. Provide materials such as cardboard boxes, markers, tape, and marbles, but let students use their own imagination to dream up the game. Have students present how their game represents the nutrient cycle. Then allow students to play each other's games.

ACADEMIC CONNECTIONS

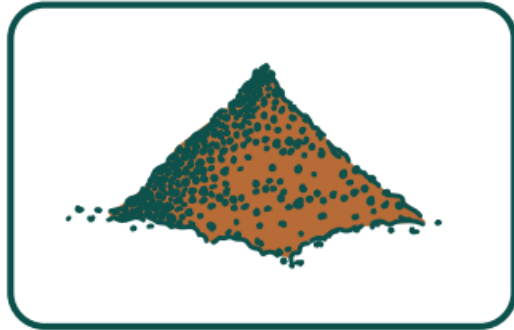
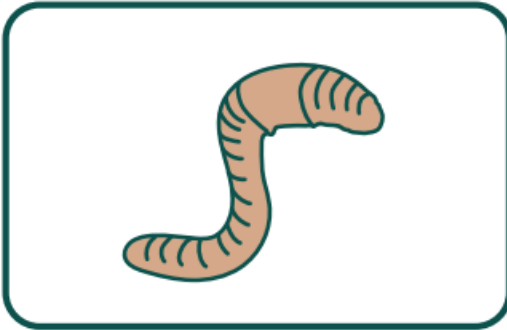
Next Generation Science Standards

Life Science Disciplinary Core Idea

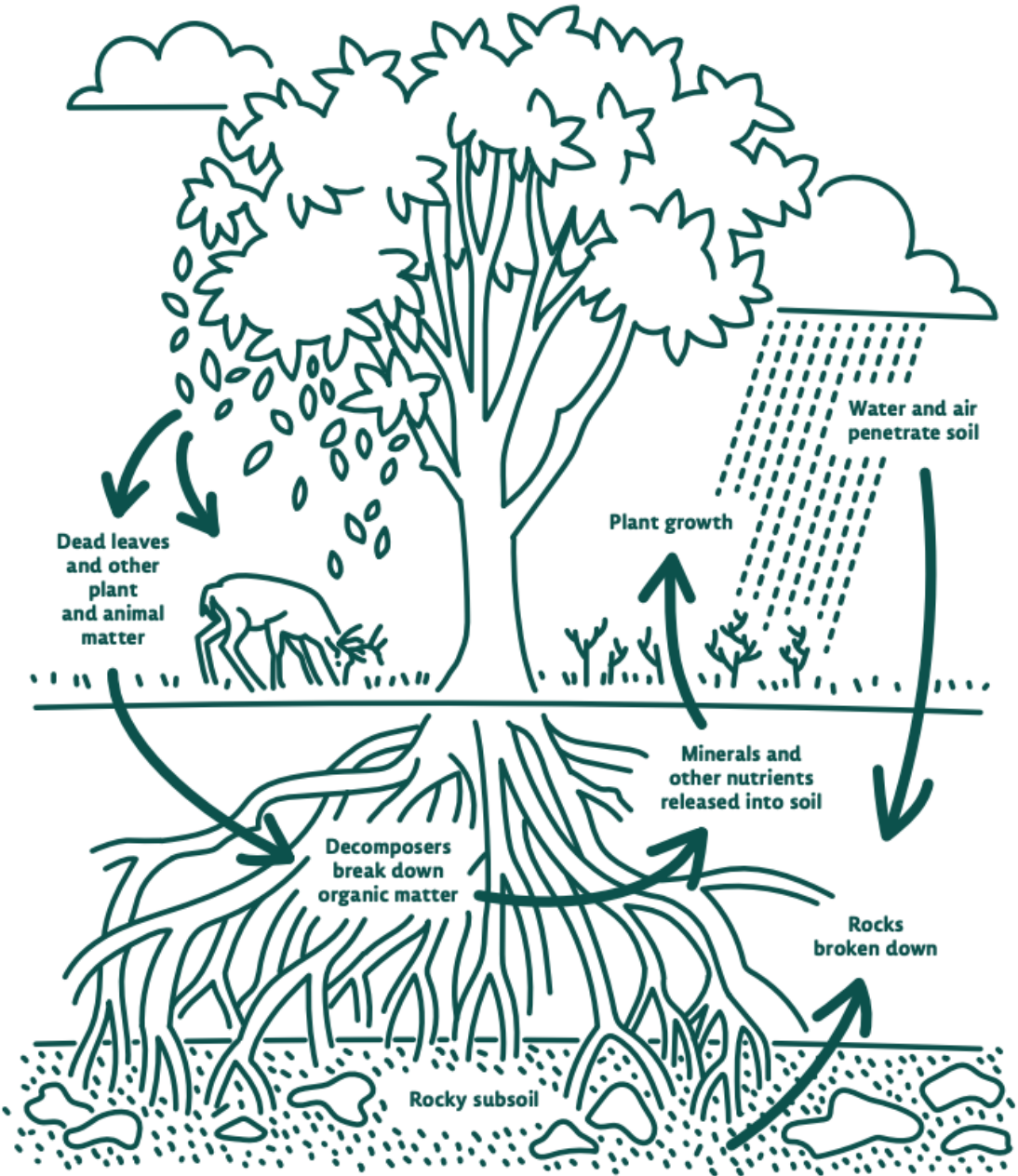
NGSS.LS.2.A.

The food of almost any animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants, while decomposers restore some materials back to the soil.

Cycle of a Nutrient Cards



NUTRIENT CYCLE



EDIBLE SCHOOLYARD LESSONS



How Do We Get Apples?

Aim

Students will build upon their seed-to-table knowledge and begin to discuss the impact of transportation and processing on food.

Summary

Students will read and illustrate about where apples come from in the winter.

Standards

CCSS: ELA, Grade 1, SL4: Describe people, places, things and events with relevant details, expressing ideas and feelings clearly.

CCSS: ELA, Grade 1, SL5: Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts and feelings.

NYS: Social Studies, 4.1a: Know some ways individuals and groups attempt to satisfy their basic needs and wants by utilizing scarce resources.

Materials

- Apple tasting
- Apple for demonstration
- Map
- Crayons or colored pencils
- Apple story
- Coloring sheets

Vocabulary

- fresh
- seasonal

Procedure: Day One

Opening Circle (10 minutes)

- Hand out tastings of apples. *Who knows what these are? Apples!*
- *There are no apples on the apple trees in our garden because it is too cold for them to grow right now. They like growing when it is a little warmer.*





- *But I have a fresh apple right here! I didn't get it from the garden. Who can guess where I got it from? And who can guess where the store got it from? Apples are not growing in New York right now. It's too cold!*
- *If it's too cold in New York to grow a lot of food, do you think our food comes from farms in New York, or does it have to come from far away where the weather is warmer?*
- *So, if I have a fresh apple, it might mean that it came from far away. In other places in the world, far away, it's much warmer, and there are still apples on the apple trees.*
- *Hold up a map and point to your location on the map. This is where we are! It's very cold here right now. But in other places in Central America, South America, Africa and parts of Asia (where many apples are grown), it is warm. Circle these places on the map while you talk about them.*
- *How do you think apples, or other food that is grown in these places, can get all the way to us? There are many countries and oceans that they have to pass over to get to us. How do they get here? Show on the map the journey they'd need to take to you.*



Inquiry Activity One (15 minutes)

- *Those were all great guesses about how an apple might get to us here! We're going to read a story about how apples can travel very long ways to get to us. Let's see where it has to go! Have students act along with the story: pretend to plant seeds, pretend to pick apples, etc.*

Inquiry Activity Two (15 minutes)

- *Now we are going to make our own illustrations for the story!*
- *Distribute to each student one coloring page of the apple story. Students spend the rest of the period coloring and labeling a picture. At the end (or after class, time depending), you could choose to staple the drawings together in order as a book.*

Closing Circle (5 minutes)

- *The next time you go to the store and buy an apple, ask yourself: Where did this apple come from? It might even have a sticker on it to tell you where it came from!*



Procedure: Day Two

Opening Circle (10 minutes)

- *Welcome students back to garden class. What did we learn about last time? How did the apple get to us in our story?*
- *Recap the previous lesson on how the apple got to us.*



Inquiry Activity (30 minutes)

- *Even though many things are not growing in our garden right now, there are still things we can do to get our garden ready for the spring.*
- Lead students in a seasonal job, such as seed saving or making potting soil.

Closing Circle (5 minutes)

- Have students share their reflections on the work they did today.



Common Core State Standard Extensions

ELA, Grade 1, W2: Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.

- After discussing the path from seed to table of another food (peanut butter, cheese, a carrot), students can write and illustrate this food's story.

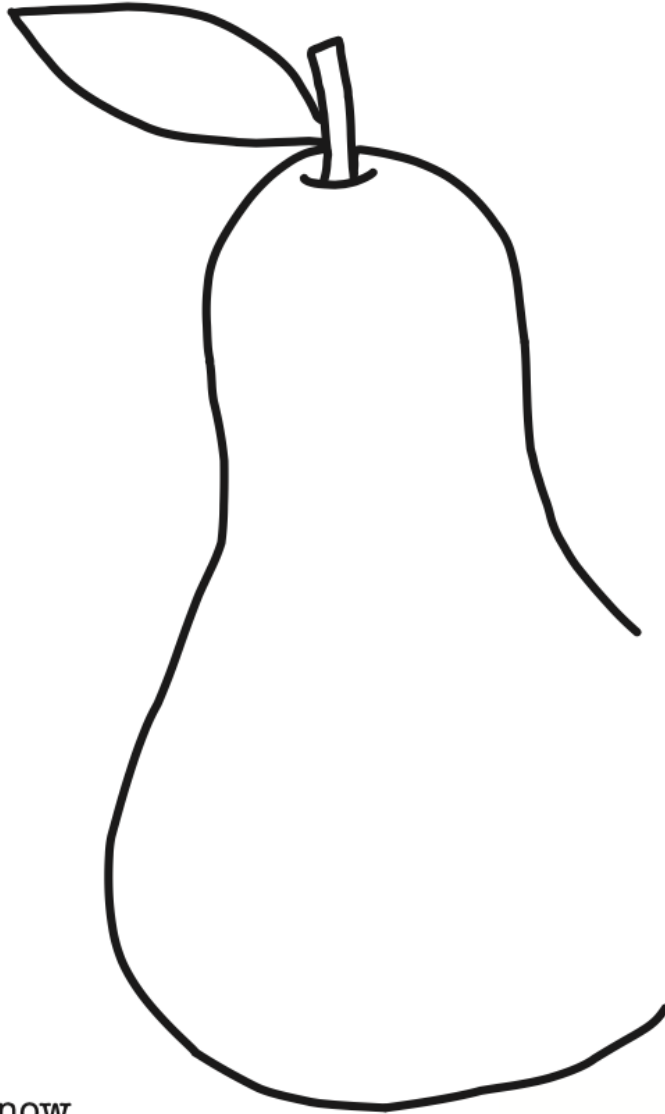
Other Extensions

Social Studies: Host a guest speaker or take a neighborhood walk in which students can interview a storekeeper about where different foods in the store came from.

DRAW YOUR CRUNCH

Draw Your Crunch!

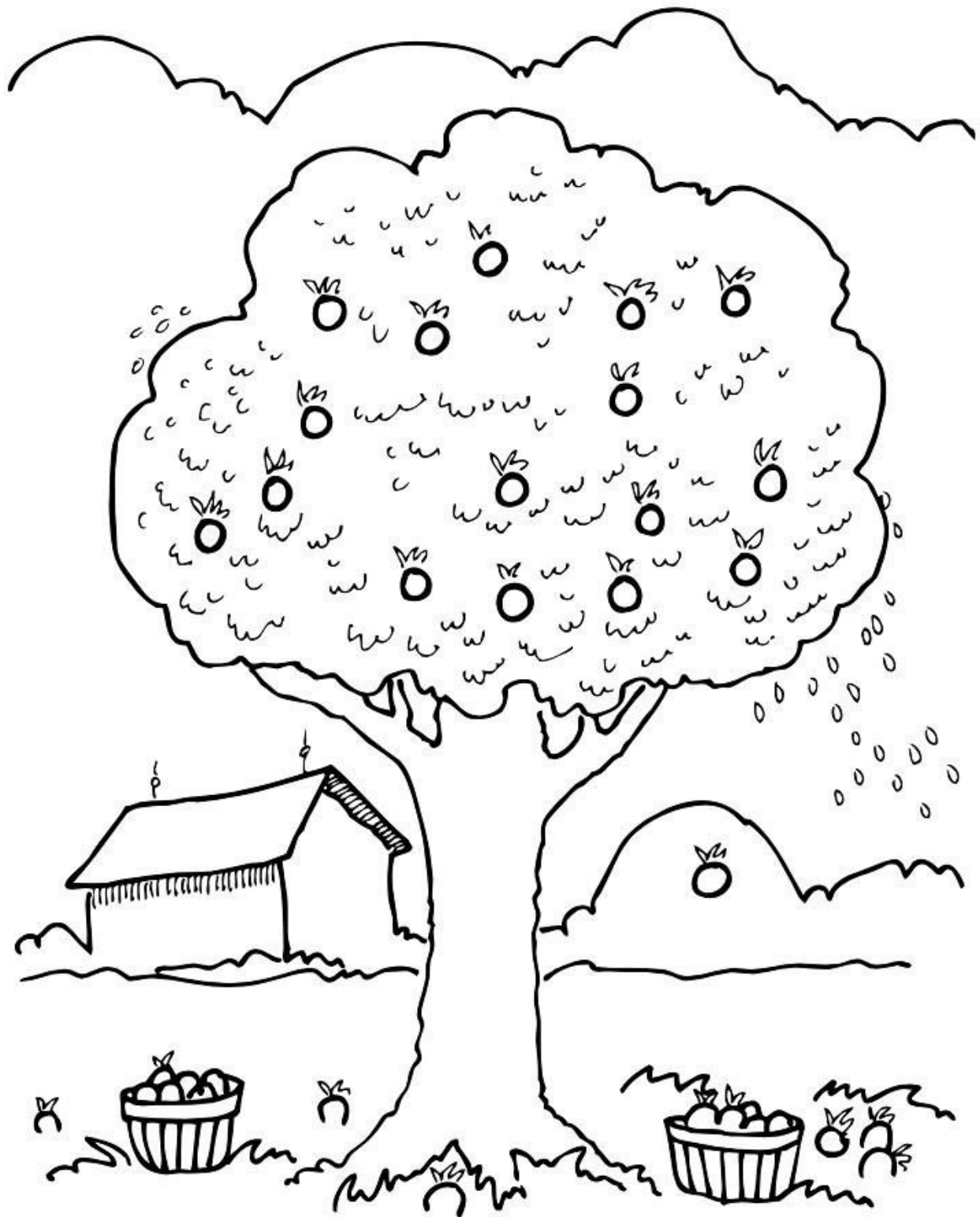
Finish the drawing!
What did your first bite into a CT grown pear look like?



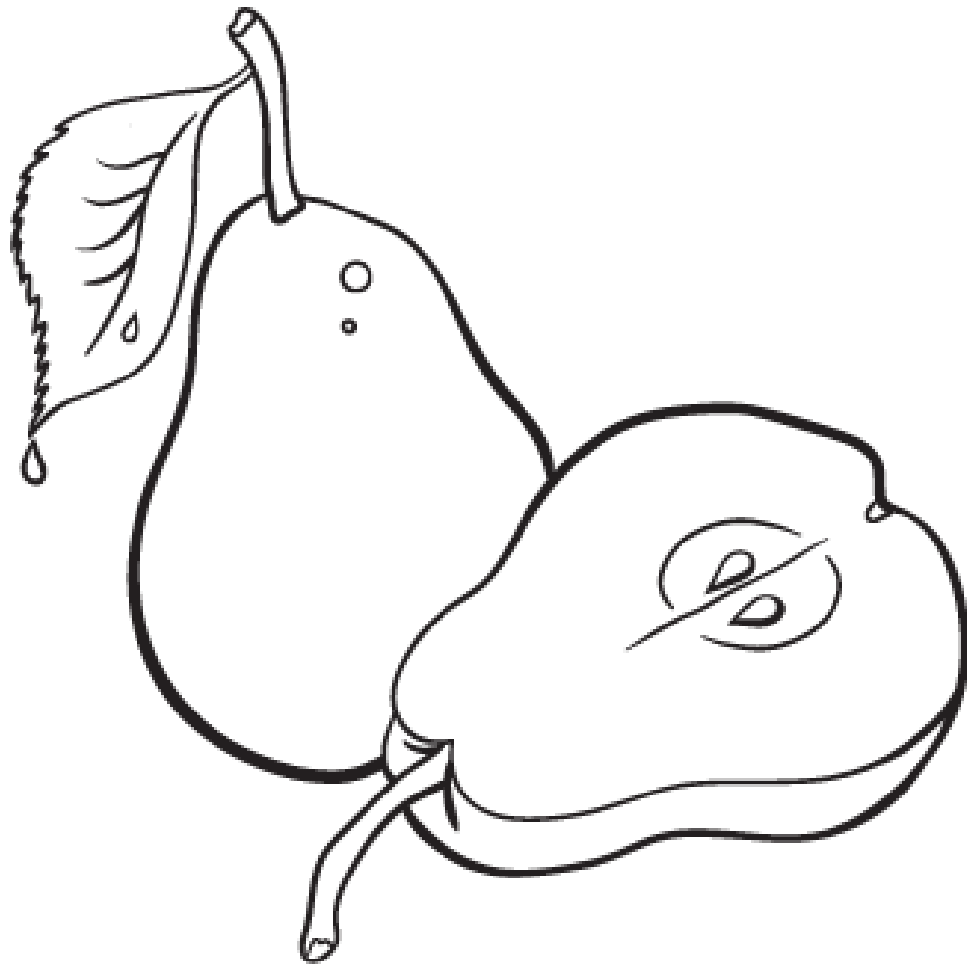
Did you know...
October is National
Farm to School Month?
#CTgrownforCTkids



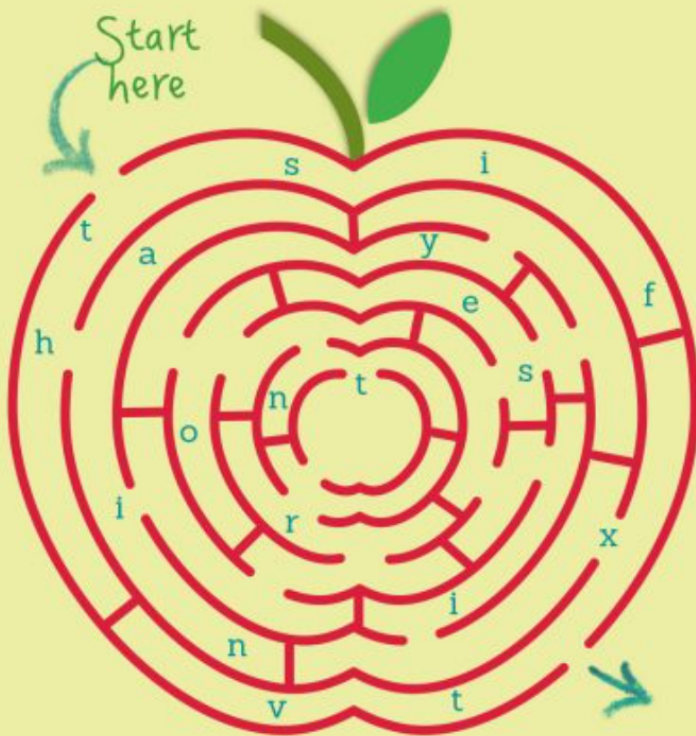
COLORING PAGES



Adapted from: <https://www.doghousemusic.net/apple-orchard-coloring-page/>



MAZE



Follow the Maze!

Find your way from start to finish through the apple maze. The letters along the correct path spell out the answer to the fun fact. Write the letters below!

ANSWER: THIRTY-SIX © 2017 KIDSTIR

How many apples does it take to make 1 gallon of apple cider?

WORD SEARCH

How Do You Crunch?

F B S Z U T S F U V P X W H W
O N M O R C H A R D E Q X J Z
O Q L X J Z B K Y B A F Z P X
T F R U I T M R C L R P A X Y
O L D G V Y O M H P M A S L Z
W N I R C W H K L R V V Q S L
U S F K R N D R M O L D Q Q C
V T N B U W F E J X C C V O X
X O Q O N X S Y T U F A J L
G V Z Z C S P Y R F W D L M M
R A E G H M I P E R T D F P M
K N P I R P E F E N A V A W T
H V C P S C R I S P T W L Q D
N G I M L O X Y K R Y A H K H
G I S J G E J O M T A E J P M

Download

orchard

fruit

tree

crunch

local

pie

apple

fall

crisp

pear