Juicy tomatoes, sweet strawberries and crunchy green peppers are just a few of the many fresh fruits and vegetables you can find at a local farmers’ market. Food bought here has been grown by a local farmer and is taken to the market to be sold when it is perfectly ripe.

Fresh fruits and vegetables are part of a healthy and nutritious diet. Summertime fruits include blackberries, blueberries, cantaloupes, nectarines, peaches and watermelons. These are rich in antioxidants, vitamins and fiber.

Alongside fresh fruit, you will find many fresh and tasty vegetables at a farmers’ market. A trip to the market might lead you to snap beans (string beans), sweet corn, cucumbers and squash. When you fill your plate with these healthy choices, you will have both a colorful and delicious meal!

**DID YOU KNOW?**

Only two other states—Florida and California—produce more fresh tomatoes than Virginia.

**DID YOU KNOW?**

Salsa now outsells ketchup in the United States.

**TRY THIS!**

Circle all of the food items mentioned in this article.

**DIG INTO NEW VOCABULARY**

**Antioxidants:** compounds found in food that help defend your body against cell damage and help reduce the risk of cancer and heart disease

**Fiber:** found in the chewy parts of plants, helps move food through the digestive system
Word search

Next to this puzzle are 6 facts. Read each fact, and then find the highlighted words in the puzzle. There are a total of 10 highlighted words.

Facts:
1. A serving of strawberries has more vitamin C than an orange.
2. Fresh fruit is an excellent source of vitamins A and C.
3. Local farmers grow the food that is sold at farmers’ markets.
4. Foods high in fiber fill you up and aid in digestion.
5. While you may find sweet corn at a farmers’ market, most corn in Virginia is grown to feed livestock.
6. Many squash and tomatoes are grown on Virginia’s Eastern Shore.

From Market to Kitchen: Fresh salsa recipe

Before beginning, remember to wash your hands and have an adult help with chopping the vegetables.

INGREDIENTS
3 large tomatoes, chopped
1 medium onion, chopped
1 or 2 fresh jalapeño peppers, chopped (removing the seeds will make the salsa less spicy)
3 tablespoons fresh cilantro, chopped
juice from 1 lime
1 teaspoon salt

DIRECTIONS
Mix all of the ingredients together in a large bowl. Cover and refrigerate for at least 1 hour. Serve with tortilla chips or vegetables or as a topping for grilled chicken or fish.
Thanksgiving is a time to gather with family and to give thanks. And, of course, it’s time to eat—turkey, stuffing, pumpkin pie and other favorites. The list is enormous! But where does that food come from? If you answered “the grocery store,” you are only partially correct. There are many people involved in bringing the food to the store shelves.

It all starts on a farm, where a farmer raises the animal or grows the crop. Animals found on a farm might include cows, hogs, chickens or turkeys. These animals provide much of the protein that you eat. Some farmers do not raise animals; instead they grow plants. Those crops might include fruit, vegetables, grains or cotton.

From the turkey to the cloth napkins, each of the items on your Thanksgiving table began on a farm. So this Thanksgiving, don’t forget to thank the farmer.

**Dig into New Vocabulary**

**Protein:** comes from beef, fish, poultry, eggs, nuts and dairy products. Protein helps you build strong muscles.

**Crop:** a plant that can be grown and harvested.
**TRY THIS!**

**Thankful Turkey**

**MATERIALS NEEDED:**
- red, orange, yellow and brown finger paint
- markers
- 2 paper plates
- wipes (for clean-up)

**Directions:**
- Squeeze a bit of each color of paint onto one of the paper plates. Keep the colors separate.
- Place your index finger in the red paint.
- Make an arch of red fingerprints around the middle of the second paper plate, forming the top of the turkey’s tail.
- Wipe your finger off and place it in the orange paint.
- Make an orange arch underneath the red one.
- Wipe your finger and make a yellow arch under the orange one.
- Use your thumb to make a brown print in the middle for the turkey’s head.
- Use a black marker to give your turkey feet, a beak and eyes.
- Write things that you are thankful for around the turkey.

**Get the turkey to your table!**

Visit Agriculture in the Classroom: Connecting Children to Agriculture. To learn more visit AgInTheClass.org
George Washington Carver was born the son of slaves around 1864 in Missouri. From a very young age he was intrigued by nature, and his peers called him the “Plant Doctor.” At age 12 he moved to a new town all by himself so he could attend a school for black children, because the school in his town would not admit him.

Carver held many jobs so that he could go to school and save for college; by 30 he had saved enough. In college he chose to study agriculture. After college he taught at the Tuskegee Institute in Alabama. There he taught his students and black farmers how to make their crops grow better.

Most of the farmers Carver worked with grew cotton, but each year their cotton crop kept getting worse. That was because the cotton was taking too much nitrogen out of the soil. Carver taught the farmers to grow other crops such as sweet potatoes and peanuts, which put good stuff back into the soil. He also showed people that peanuts could be used to make many different things, including lotion, shampoo, glue, paint and ink. In fact, he demonstrated more than 300 uses for the peanut!

Virginia peanuts are grown in the southeastern part of the state.

Peanuts are part of a healthy diet! They are good sources of protein and fiber.

George Washington Carver: A Life in Poems
by Marilyn Nelson

George Washington Carver: The Peanut Wizard
by Laura Driscoll

A Weed is a Flower: The Life of George Washington Carver
by Aliki

Parents and Teachers: Want more great book ideas? Visit AgInTheClass.org to find Agriculture in the Classroom’s comprehensive book list.
Peanut butter treat

Make your own peanut butter for a tasty treat! Remember to ask an adult to help you use the blender.

Materials needed:

- measuring cup
- measuring spoon
- spoon
- blender
- 1 cup salted, roasted peanuts
- 1½ teaspoons peanut oil

Directions:

1. Measure 1 cup peanuts, and put them in the blender.
2. Measure 1½ teaspoons peanut oil, and put that in the blender with the peanuts.
3. Blend for about 3 minutes.
4. Scrape the mixture down off the sides of the blender with your spoon, and blend for another 3 minutes.
5. Enjoy your peanut butter with toast, carrots, celery, an English muffin, apple slices or crackers!
Spring is the perfect time for gardening. Whether your garden includes beautiful flowers, healthy vegetables or both, it is a great way to enjoy warm spring weather. In fact, people have enjoyed this hobby for centuries.

One famous gardener was Thomas Jefferson, who grew more than 330 types of vegetables and 170 types of fruit at his home, Monticello, near Charlottesville. Gardening was such a passion of his that he wrote both a garden book and a farm book. Jefferson’s 2-acre vegetable garden included tomatoes, asparagus, eggplant, radishes, beans, carrots and peas, along with many other types of vegetables. He enjoyed experimenting in his outdoor “laboratory” with vegetables from other countries, like peppers from Mexico.

In addition to his vegetable garden, Jefferson maintained an 8-acre fruit garden or “fruitery,” as he called it. The orchard included apples, pears, cherries, plums and nectarines. Like the vegetable garden, the orchard included many fruits from other countries.

**DID YOU KNOW?**

- Peas were Thomas Jefferson’s favorite vegetable. He grew 15 different types and even held a neighborhood contest to see which farmer could bring the first peas to table in spring.

- Jefferson’s vegetable garden was organized by the plant part that people eat—roots, leaves or flowers.

**BOOK NOOK—RECOMMENDED READING**

- **Green Thumbs: A Kid’s Activity Guide to Indoor and Outdoor Gardening** by Laurie Carlson
- **Growing Vegetable Soup** by Lois Ehlert
- **One Bean** by Anne Rockwell
- **City Green** by DyAnne DiSalva-Ryan

**Parents and Teachers:** Want more great book ideas? Visit [AgInTheClass.org](http://AgInTheClass.org) to find Agriculture in the Classroom’s comprehensive book list.
You can start vegetable plants or herbs—like these—in a clear plastic food container.

**TRY THIS!**

**Homegrown salad**

Thomas Jefferson loved salads, which were made with ingredients from his own garden. You can grow your own salad too!

**MATERIALS NEEDED:**
- clear plastic food container with a lid (the type you would get at a salad bar)
- potting soil
- various seeds, such as lettuce, radish, carrot and cucumber
- water

**Directions:**
- Fill the container with potting soil.
- Use directions on the back of seed packets to determine how deep and how far apart to plant the seeds.
- Water the planted seeds until the soil is moist.
- Place the open garden container in indirect light, and add water as needed.
- Close the lid when you see the first signs of growth.
- Remove the young plants when they are tall enough to touch the closed lid.
- Transplant them to a larger container or an outdoor garden.

*Enjoy your homegrown salad!*

**MYSTERY MESSAGE**

Unscramble the tiles below to reveal the mystery message!

FU ING RYO EVE GAR
NE! IS NF OR DEN

Answer on opposite page.

**DID YOU KNOW?**

If certain plants are grown next to each other, they can keep harmful insects away! Tomatoes like garlic and parsley. Carrots like dill and sage. Asparagus likes tomatoes. Try this in your own garden!

**MONTICELLO MAZE**

Help Thomas Jefferson get home to Monticello
Ice cream is the perfect treat on a hot summer day. As a matter of fact, July is National Ice Cream Month.

But have you ever considered where ice cream comes from? The main ingredient is milk, which comes from dairy cows. The most commonly recognized dairy cow is the Holstein, which has large black spots. Other dairy cow breeds include Guernsey, Ayshire and Jersey.

Cows have four stomachs, and it’s a good thing, because they spend almost seven hours a day eating. Cows eat about 100 pounds of grass or feed and drink about 50 gallons of water a day—about enough water to fill a bathtub.

Dairy farmers milk their cows at least twice a day. One cow produces about 100 glasses of milk a day, and a cow’s udder can hold between 25 and 50 pounds of milk!

Milk is a very important source of calcium, which helps build strong bones and teeth. You should have at least three servings of milk products a day. In addition to ice cream, milk is used to make cheese and yogurt.

**UDDERLY AMAZING!**

A cow gives more than 2,000 gallons of milk a year.

**DID YOU KNOW?**

- Immigrants arriving at Ellis Island were served vanilla ice cream as part of their ‘Welcome to America’ meal.

- The first ice cream parlor in America opened in New York City in 1777, and the ice cream cone made its debut at the 1904 World’s Fair in St. Louis.
TRY THIS!

You do the math!
It takes about 16 pounds of milk to make one half-gallon of ice cream. If Bessie’s udder holds 48 pounds of milk, how many gallons of ice cream will that make?

COW CRAFT

MATERIALS
- large white paper plate
- small white paper plate
- black construction paper
- pink construction paper
- black marker
- glue
- hole punch
- white or black pipe cleaner or yarn

Directions
1. Flip both plates upside-down. Glue the small plate near the bottom of the large plate.
2. Cut black spots from construction paper, and glue them onto the cow.
3. Cut a large oval from the pink construction paper, and glue it onto the small plate (See photo). Use the black marker to draw eyes, a nose and a mouth.
4. Cut small ovals (You also can trace your thumb) from the black and pink construction paper. Glue behind the small plate for ears.
5. Punch a hole at the top of the large plate. Thread the pipe cleaner or yarn through the hole to make a tail. You also can use the tail to hang and display your cow.

Source: busybeekidscrafts.com

Make your own ice cream in a bag!

MATERIALS
- 1 tablespoon sugar
- ½ cup milk or half-and-half
- ¼ teaspoon vanilla
- 6 tablespoons rock salt
- 1 pint-size plastic food storage bag
- 1 gallon-size plastic food storage bag
- ice cubes

Directions
1. Fill the large bag half full of ice.
2. Add rock salt.
3. Combine milk, vanilla and sugar in the small bag and seal the bag.
4. Place the small bag inside the large bag, and seal the large bag.
5. Shake both bags until the mixture in the small bag becomes ice cream. It will take about 5 minutes.
6. Open, scoop and enjoy!

Word search

Calcium
Chocolate
Cone
Cow
Dairy
Farmer
Holstein
Ice cream
Milk
Scoop
Sprinkles
Sundae
Toppings
Vanilla
Yogurt

Visit Agriculture in the Classroom: Connecting Children to Agriculture. To learn more visit AgInTheClass.org
Virginia has more than 7 million Christmas trees growing on hundreds of acres. Christmas tree growers have to work the whole year to be ready for harvest in the fall. Right after Christmas, farmers start walking their fields to see where new trees need to be planted, and once March rolls around, it is time to plant new seedlings. During the spring and summer months, Christmas tree farmers mow weeds, buy supplies and start shaping their trees so they can be sold. August is when growers mark the trees they want to sell. During September and October seedlings that did not live through the summer are replaced, and farmers start preparing for customers to arrive. Farmers will start a process called **baling**, which is binding trees with twine or netting so that they are easier to carry.

Some families choose to cut down their own trees in December, while others buy the ones that already have been cut by the farmer. Once Christmas has passed farmers take a few days off and are back at work again!

**BOOK NOOK—RECOMMENDED READING**

- **Christmas Tree Farm**
  by Ann Purmell

- **A Wish to be a Christmas Tree**
  by Colleen Monroe

- **Why Christmas Trees Aren’t Perfect**
  by Richard Schneider

**Parents and Teachers:**

Want more great book ideas? Visit [AgInTheClass.org](http://AgInTheClass.org) to find Agriculture in the Classroom’s comprehensive book list.
TRY THIS!

EDIBLE TREES

MATERIALS
• paper plate
• sugar ice cream cone
• green cake frosting
• small candies
• baking sprinkles

Directions
• Turn the cone upside down on the paper plate.
• Cover the entire cone with green frosting.
• Decorate the cone with candy and sprinkles.
• Now you have your very own edible Christmas tree!

CHRISTMAS CLASSICS
• In 1856 Franklin Pierce, the 14th president of the United States, placed the first Christmas tree in the White House.
• The first Christmas tree farm was started in 1901, when W.V. McGalliard planted 25,000 Norway spruce trees on his farm in New Jersey.

Fir facts
• For every Christmas tree that growers harvest, two to three new seedlings are planted.
• Christmas trees are grown in all 50 states.
• Christmas trees are coniferous trees, which means that they have narrow needles that drop continually, not all at once. That is why coniferous trees are sometimes referred to as evergreens.
• One acre of farmed Christmas trees supplies enough oxygen for 18 people.
• Pine and fir trees are among the most popular choices for Christmas trees.

Tree scramble

Directions
• Unscramble each of the clue words. Each word can be found on Page 28 or 29.
• Copy the letters in the numbered cells to other cells with the same number.
People are not the only ones who need water, though. It is also a critical resource for crops and animals. The Earth, however, has a limited amount of water that constantly keeps going around and around in a cycle. In fact it’s called the water cycle, and it has five steps: sunlight, condensation, precipitation, evaporation and accumulation.

The sun is the energy behind the cycle. Warmth from the sun causes the water in lakes, rivers and oceans to heat up and turn into water vapor. This is called evaporation.

During evaporation the water vapor goes up into the atmosphere, where it changes back into a liquid and forms clouds. This process is called condensation. When the condensation in clouds gets heavy enough, it falls to the Earth as precipitation. The temperature will determine whether that precipitation is liquid—rain—or solid—snow. Lastly, when precipitation gathers back on the Earth, this is called accumulation; and the cycle starts again!

Because water is so important for farmers there are several things that they do to conserve it and keep it clean. For example, they use watering systems that put water directly at crop plants’ roots so more water goes straight to the plant instead of evaporating. Farmers also water crops at times when the plants will benefit most. Many of them also plant trees and grasses between their crops and streams to create a buffer zone.

What are some things that you can do at your house to conserve and protect water?
Diggin’ It!

QUESTION & ANSWERS

Q: What moves nutrients in your body and dirt in the streets?
A: Water

Q: What do your body and the planet Earth have in common?
A: Both control their temperatures

Q: What can live a month without food but only a week without water?
A: You

TRY THIS!

COLOR AND LABEL THE WATER CYCLE

Use words from the Word Bank below.

Word Bank:
• evaporation
• precipitation
• condensation

WEARING THE WATER CYCLE: Create your own bracelet!

MATERIALS
• white beads, blue beads, clear beads and yellow beads
• yarn or a leather strap

Directions
1. String your beads on the bracelet in the following order:
   • yellow, to represent the sun
   • clear, for evaporation, which is caused by the sun
   • white, for condensation in the clouds
   • blue, for precipitation that falls from the clouds when the condensation gets too heavy.

2. Tie the loose ends around your wrist to wear your own water cycle bracelet!

Water Words

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accumulation
animals
buffer
clouds
condensation
conserve
crops
earth
evaporation
farmer
people
precipitation
rain
sun
water cycle
There are many different types of farmers. Some grow crops, while others raise animals, and some do both.

Farmers who raise animals such as cows, chickens, turkeys, sheep or pigs are called livestock producers. It is their job to make sure that their animals are well taken care of. Animals rely on farmers to provide them with food, water, shelter and care to keep them healthy. In turn, people rely on farm animals for food and clothing.

All animals share the same basic needs of food and water. Some farm animals graze on pastureland and might be provided with extra hay or silage. Silage is made when a plant such as corn or grass is cut, finely chopped, and packed tightly to store for animals to eat later. Farmers carefully choose the correct type and combination of grains and other foods for their animals in order to give them the best possible nutrition. They also make sure their animals have plenty of clean water.

In addition to food and water, farmers provide their animals with shelter to protect them from severe weather and to keep them safe. Lastly, in order to keep their animals healthy, farmers will seek the help of veterinarians. Veterinarians are doctors who take care of animals and make sure they stay healthy. Some veterinarians take care of pets like dogs or cats, while others, called large animal veterinarians, specialize in the care of farm animals.

DID YOU KNOW?

- There are more chickens in the world than people.
- A dairy cow consumes 35 gallons of water, 20 pounds of grain and 35 pounds of hay or silage in just one day.
- Pigs have no sweat glands.
- Today's American farmer raises enough food for about 155 people worldwide each year. In 1960, that number was 26 people.
Try This! Make your own Animal Care Farm Charm to represent the ways that farmers care for their animals.

Farm Charm!

**MATERIALS**
- blue glitter, to represent water
- cornmeal or grits, to represent ground-up grain
- shreds of brown paper, to represent hay and silage
- red or gray construction paper cut into small squares, to represent shelter
- “googly” eye, for crafts, because farmers have to keep an eye on their animals’ health and well-being
- small zip-top plastic bag, of the size used for beads and jewelry
- yarn

**Directions**
Place a pinch of the first three materials and then one construction paper square and one googly eye into the plastic bag. Zip the top of the bag, and punch a hole above the zipper. Thread yarn through the hole and tie it to wear the charm or hang it up.

---

Try This! Use lunch-size paper bags to make farm animal hand puppets!

**Hand puppets**

---

**Farm scramble**

**Directions**
Unscramble each word to spell a farm animal or one of its needs. Then copy the letters in the numbered boxes to the matching square below to reveal the mystery message.

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Answers on Page 28.

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Visit Agriculture in the Classroom: Connecting Children to Agriculture. To learn more visit AgInTheClass.org

Cultivate APRIL 2010
Diggin’ It!

Dig into Summer Reading!

Summer is the perfect time to discover new books. Here are three good ones, as well as activities you can do after reading each.

Virginia’s Agriculture in the Classroom program has a big list of recommended books on its website at AgInTheClass.org.

Too Many Tomatoes
(Suggested age: 5–7)

Rachel helps Mr. Thomas plant his vegetable garden and produces a bumper crop of tomatoes! Come along as she tends the garden and then shares with the neighbors.

Try This!
The neighbors in Too Many Tomatoes! create various dishes with their fresh tomatoes. Here’s one you can try at home (Remember to have an adult help with the cutting).

Garden Vegetable Wraps

**Ingredients**

- ½ cup garden vegetable-flavored cream cheese
- 4 flour tortillas
- 1 cup spinach leaves
- 1 large tomato, diced
- ¼ cup shredded carrot
- 8 slices of cheese
- 1 bell pepper, chopped

**Directions**

1. Spread 2 tablespoons of cream cheese over each tortilla. Top with spinach and tomato to within 1 inch of the tortilla’s edge. Top with shredded carrot, then cheese, and then chopped bell pepper.
2. Roll up each tortilla tightly. Serve immediately, or wrap them securely with plastic wrap and refrigerate no longer than 24 hours.

DID YOU KNOW?

- The average American eats 22 pounds of tomatoes a year!

Visit Agriculture in the Classroom: Connecting Children to Agriculture. To learn more visit AgInTheClass.org.
Try This! The first step the father and child take in Growing Vegetable Soup is to plant the seeds. You can do the same thing!

Seed Viewer

MATERIALS
• Clear plastic punch cups
• Potting soil
• Vegetable or flower seeds
• Water

DIRECTIONS
1. Fill a plastic cup with potting soil.
2. Press seeds into the soil, making sure to place them against the inside of the cup so you can see them.
3. Keep the soil moist, and place the cup in a warm, sunny place.
4. In a few days you will be able to see the seeds sprout and grow!
5. You can replant your sprouts in a larger container or in your backyard garden.

Summer garden word search

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

Answers on Page 29.

TRY THIS! Create your own Bumblebee Queen bookmark.

Bumblebee Queen bookmark

MATERIALS
• Wooden craft stick
• White and black pipe cleaners
• “Googly” eyes for crafts
• Craft glue
• Yellow and black markers
• Large yellow craft pom-pom

DIRECTIONS
1. Use markers to draw alternating yellow and black sections on the craft stick.
2. Glue pom-pom to top of stick, and then glue two googly eyes to the pom-pom.
3. Twist white pipe cleaner around the middle of stick to form wings.
4. Cut a 2-inch segment off a black pipe cleaner, and twist it around the top of the stick to create antennae.

DID YOU KNOW?
• Honey bees communicate with each other by dancing.

TRY THIS! Create your own Bumblebee Queen bookmark.

Growing Vegetable Soup

(SUGGESTED AGE: READ-ALOUD OR 3–7)

This colorful book shows the process of growing a garden, and the different vegetables within it. It includes a recipe at the end to make your own vegetable soup.

The Bumblebee Queen

(SUGGESTED AGE: 4–7)

Journey along with the Bumblebee Queen as she collects nectar for her young and tends the hive, and learn about the life cycle of a bumblebee.

Growing Vegetable Soup

Written and illustrated by Lois Ehlert

The Bumblebee Queen

April Pulley Sayre • Illustrated by Patricia J. Wynne

Try This!
Create your own Bumblebee Queen bookmark.

Bumblebee Queen bookmark

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Summer garden word search

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

Answers on Page 29.
A favorite holiday tradition for many is baking cookies. Whether your favorite is gingerbread, sugar or chocolate chip, the ingredients began on a farm. Some, like flour or eggs, might have come from a Virginia wheat or poultry farm. Others, like sugar, vanilla extract or chocolate, most likely came from somewhere else.

Join Grandma in the book *All in Just One Cookie* by Susan E. Goodman as she searches for the many ingredients in her special chocolate chip cookies:

**Grandma’s Recipe**

**INGREDIENTS**

1 hungry Virginia dairy cow
2 stalks Hawaiian grass
1 teaspoon flower seeds from Madagascar
2 days hard work from a Virginia hen
1 teaspoon Pacific Ocean
1 teaspoon dried-up Wyoming lake
2½ cups Virginia wheat field
2 cups West African beans

**DIRECTIONS**

Read the book, and identify each of the actual ingredients represented above. Then make cookies to enjoy (See Page 30 for actual recipe).
**TRY THIS!** Salt and flour can be used in more than just cookies. You can even make your own play dough!

### All in Just One Cookie

* (Suggested age: 4–8)

You won’t believe what it takes to make one cookie!

---

**TRY THIS!** In *All in Just One Cookie*, Grandma needed to visit a dairy farm for butter. Dairy cows produce milk for us to drink, as well as milk that’s made into dairy products such as cheese, yogurt and butter. You can make your own butter at home.

<table>
<thead>
<tr>
<th>MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>small baby food jar or other small container with lid</td>
</tr>
<tr>
<td>heavy whipping cream</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIRECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill the container about half-full with heavy whipping cream. Place the lid on securely, and begin shaking the container! After about 20 minutes, you will be able to strain off the butter fat and taste the butter that’s left in the container.</td>
</tr>
</tbody>
</table>

---

### Solve It!

Unscramble the tiles to reveal a message (Answer on Page 30).

| S | A | G | P | N | D | A | R | K — | M | I | L | K | W | I | N |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| N | I | N | C | O | O | A |  |
| 9 | 10 | 11 |
A statewide survey found that there were about 215,000 horses—and ponies, donkeys and mules—in Virginia. Quarter horses and thoroughbreds were the two most popular breeds.

DIG INTO
VIRGINIA HORSE SENSE

DID YOU KNOW?
- The United States’ longest-running horse show, the Upperville Colt and Horse Show, takes place in Fauquier County each year. It began in 1853.

V
irginia is the nation’s fifth-largest equine—or horse—state. The equine industry began in Virginia in 1610 with the arrival of the first horses in the Jamestown colony. Horses were valuable to the colonists. They were used to transport people and products and to pull plows and tread grain from harvested wheat plants, and some even served in the military. Today, Virginia is still a vibrant horse state, and horses are used for racing, pleasure riding, hunting, competitions and breeding.
A Field Full of Horses  
(suggested age: 4–7)  
The beauty of horses is captured in *A Field Full of Horses* by Peter Hansard. This softly illustrated book takes readers on a ride through the pasture using descriptive writing and creative imagery. Readers will learn about different types of horses and basic horse care.

Make your own feed snack!  
INCLUDE THE FOLLOWING:  

- **Blue jellybeans** = water  
- **Corn cereal squares** (such as Chex) = corn, which provides protein and carbohydrates  
- **Granola** = oats, which provides protein and vitamin B  
- **Shredded whole-wheat cereal biscuits** (such as Shredded Wheat) = hay, which provides protein, minerals and vitamins  
- **Toasted oat cereal** (such as Cheerios) = bran, which provides protein and carbohydrates

Horse breed round-up  
A breed is an animal group that shares many of the same characteristics. There are more than 100 different breeds of horses. Horses in the same breed can have a similar appearance, size and stride.

Find the different horse breeds in the word search below (Answers on Page 29).

![Horse breeds list](image-url)

<table>
<thead>
<tr>
<th>Appaloosa</th>
<th>Arabian</th>
<th>Azteca</th>
<th>Caspian</th>
<th>Clydesdale</th>
<th>Falabella</th>
<th>Lipizzaner</th>
<th>Morgan</th>
<th>Palominino</th>
<th>Pinto</th>
<th>Quarterhorse</th>
<th>Shetland</th>
<th>Shire</th>
<th>Standardbred</th>
<th>Welsh</th>
</tr>
</thead>
</table>
Cultivate APRIL 2011

DIG INTO CORN, AN ‘A-MAIZING’ FOOD

Call it “maize” by Native Americans, corn was a completely new food for the American colonists, as it is native only to North America, Central America and South America. In fact, in the early 1600s the American Indians introduced the settlers to this crop and taught them how to grow and prepare it.

Colonists ate corn both as a vegetable and a ground-up grain. As a result, corn was an important crop that appeared in many forms on Colonial tables.

Benjamin Franklin even called it “one of the most agreeable and wholesome grains in the world.”

Succotash, a common Colonial corn dish, gets its name from a Native American word that meant “boiled corn kernels.”

Today, corn for grain or silage—a mixture of grains that is fed to farm animals—is raised in nearly every Virginia county. Virginia farmers harvest about 340,000 acres of corn for grain each year.

DID YOU KNOW?

• Archaeologists think Native Americans might have been growing corn as long as 7,000 years ago.
• Corn is America’s No. 1 field crop.
• Corn is grown on every continent except Antarctica.

TRY THIS! Corn prints

While we often think of corn kernels as being yellow, Native Americans grew several different types. Colors included red, white, blue and black.

MATERIALS:
• yellow and green construction paper
• scissors
• glue
• finger paints (yellow, white, red, blue and black)

DIRECTIONS:
1. Cut the yellow and green paper to make a corn cob and husks. Glue them together.
2. Add the “kernels” by dipping your fingers into the paint and stamping them onto the cob.

You can make your own Indian corn print!
TRY THIS! Homemade johnnycakes

Do you ever enjoy pancakes for breakfast? Americans living during colonial times enjoyed a similar food. These corncakes would be eaten for breakfast with maple syrup or apple butter, or they would be wrapped up and given to travelers for a snack.

Be sure to have an adult help you make these, and always be extra-careful when working around the stove.

INGREDIENTS
- 1 cup water
- 2 tablespoons butter
- 1 cup cornmeal
- ½ teaspoon salt
- ½ teaspoon sugar
- ½ cup milk
- butter for frying

DIRECTIONS
1. Heat water and butter in a saucepan until they boil.
2. Put cornmeal, salt and sugar in a mixing bowl while water and butter are boiling.
3. Pour boiling water and butter into mixing bowl. Add milk, and stir with a wooden spoon until batter is mixed.
4. Over medium heat, melt a pat of butter in a skillet.
5. Drop six spoonfuls of batter into the skillet. Cook for 3-4 minutes or until bubbles form on the surface of the cakes. Flip the cakes over with the spatula, and cook the other side.
6. Remove the cakes with a spatula, and place them on a platter. Wrap them in foil to keep them warm.
7. Dab more butter on the skillet, and continue cooking the rest of the johnnycakes.
8. Serve with maple syrup or apple butter.

Source: Hasty Pudding, Johnnycakes, and Other Good Stuff: Cooking in Colonial America

Hasty Pudding, Johnnycakes, and Other Good Stuff: Cooking in Colonial America
(SUGGESTED AGE: 8–11)

Many people often enjoy Mexican, Chinese or Italian food, but what is American food? How did early settlers cook without grocery stores, refrigerators or microwaves?

Hasty Pudding, Johnnycakes, and Other Good Stuff by Loretta Frances Ichord seeks to answer those questions. It includes Colonial recipes and their modern adaptations.

Corn crossword

Words in this puzzle appear on these two pages (Answers on Page 29).

Across
3. A mixture of grains that is fed to animals
5. Corn is native only to the ___________________
6. This Colonial food could be eaten for breakfast or as a snack on a trip.
7. Corn is grown on every continent except ___________________

Down
1. Native American word for corn.
2. Corn can be eaten as a vegetable or a ______________.
3. The word _______ comes from a Native American word meaning “boiled corn kernels.”
4. Indian corn was not always yellow; it could be red, white, __________________ or black.
Diggin’ It!

DIG INTO

A GARDEN OF SUMMER READING!

Summer is when many people enjoy growing their own food, right in their backyards. Not all gardens look the same. You can read about unique gardens in The Ugly Vegetables, City Green and The Curious Garden.

INGREDIENTS
• 2 bottles tomato juice
• 2 packages frozen mixed vegetables
• 1 onion, chopped
• 2 stalks celery, chopped
• salt and pepper

DIRECTIONS
Put all ingredients in a large saucepot, and cook over medium heat until boiling. Reduce heat and simmer until vegetables are cooked through.

The Ugly Vegetables
by Grace Lin
ISBN: 9781570914911
(SUGGESTED AGE: ELEMENTARY)

This book takes readers into the backyard for the process of preparing, planting, and harvesting a vegetable garden. Mother and daughter join their neighbors in planting a garden, but the daughter wonders why their garden can’t be as pretty as those of their flower-growing neighbors. Discover why sometimes the best things come in the strangest packages!

TRY THIS!
Enjoy vegetables in a soup, just like the characters in The Ugly Vegetables. Remember to have an adult help you in the kitchen. You can use frozen vegetables or fresh ones.

City Green
by DyAnne Disalvo-Ryan
ISBN: 9780688127862
(SUGGESTED AGE: ELEMENTARY)

You don’t have to live in a rural area to enjoy a garden. Join Marcy and her neighbors as they transform a vacant lot into a vibrant community garden.

SUPPLIES
• empty coffee or large soup can
• nail and hammer (to punch drainage holes in the bottom of the can)
• paint
• small rocks for drainage
• potting soil
• seeds of your choice

DIRECTIONS
1. Wash out your can and, with an adult’s help, punch drainage holes in the bottom of the can.
2. Use the paint to decorate your can.
3. Place a small handful of rocks at the bottom of the can for drainage.
4. Fill the rest of the can with potting soil.
5. Plant your seeds the appropriate depth according to the seed pack.
6. Water the seeds, place the can in a sunny spot and watch to see what happens!

TRY THIS!
Marcy and Miss Rosa started their garden in a coffee can – you can do the same thing!

Visit Agriculture in the Classroom: Connecting Children to Agriculture. To learn more visit AgInTheClass.org.
Diggin’ It!

The Curious Garden by Peter Brown
ISBN: 9780316015479
(SUGGESTED AGE: LOWER ELEMENTARY)

Watch Liam discover and tend a railway garden and bring life and color to his once-dreary city when the curious plants begin to spread.

TRY THIS!

Brighten up your house with some artwork using vegetables as stamps.

SUPPLIES
• fruits and/or vegetables, such as apples, potatoes, peppers, cucumber
• kitchen knife
• paint in a shallow dish
• construction paper

DIRECTIONS
1. Begin by having an adult help you cut the fruits and vegetables in half. You might also choose to carve designs in them.
2. Dip the food in the paint, and use it to stamp on the construction paper.

Solve it!

Unscramble the tiles to reveal a message! Answer below.

E E D N T E A D D R A S A N P L A

Parents, grandparents and teachers! For more summer reading suggestions and activities, visit Agriculture in the Classroom online at AgInTheClass.org.
SEASONAL SPOTLIGHT:
WINTER ON THE FARM

Winter is a quiet time on the farm. Farmers make sure that their animals
have shelter as well as enough food to eat. They also check to make sure
that their water does not freeze. Winter is also time to fix machines and
buy seeds to plant in the spring.

DIG INTO
SEASONS ON
THE FARM

The vibrant fall leaves have
become crunchy piles to jump
in, and on farms all over Virginia
harvest time is coming to a close.
Winter is almost here, and with it will
come more changes where you live and
on the farm.

Learn about those changes, as well
as the other seasons on the farm, in the
Alice and Martin Provensen book The
Year at Maple Hill Farm.

TRY THIS!
Seasonal tree mobile

MATERIALS
• wire clothes hanger
• brown finger paint
• 4 paper plates
• markers or crayons
• yarn
• hole punch

DIRECTIONS
1. On a paper plate, use a marker to
draw a tree trunk.
2. Next, dip your hand into brown finger
paint, and press down onto the plate
just above the tree trunk, creating
branches.
3. Decorate your tree according to the
season. In winter it will be bare, while
in fall it will have different-colored
leaves. There will be small green
leaves in the spring and larger ones
in the summer. Use the other three
plates to create a tree for each of the
four seasons.
4. After the paint has dried, punch a
hole at the top of each plate.
5. Use the yarn to hang the plates at
varying heights from the hanger.
6. Hang your mobile where the plates
can sway and spin.
Parents, grandparents and teachers! For more winter reading suggestions and activities, visit Agriculture in the Classroom online at AgInTheClass.org.

TRY THIS!

Winter farm snow globe

MATERIALS

• empty baby food jar or other jar with a lid
• water
• glitter or sequins
• hot glue gun
• plastic farm figurine, such as a small ornament or miniature toy

DIRECTIONS

1. Attach your figurine to the inside of the jar lid using hot glue. You also can use silicone or aquarium glue.
2. Fill jar with water up to ½ inch from the top. You can use glycerin or mineral water instead of tap water to make the “snow” fall more slowly.
3. Sprinkle your glitter or sequin “snow” into the jar.
4. Line the inside of the lid with hot glue, and screw it securely onto the jar.
5. Let stand and dry overnight, lid-side up.
6. Turn jar over and watch the winter scene you’ve created!

Solve it! Unscramble the tiles to reveal a message. Answer below.

F R O O Y T I N U R S O N O U . F A R M O
'S G G S S E A M T R E E