



Illinois  
**A**GRICULTURE  
in the Classroom<sup>SM</sup>  
**2020-2021 CALENDAR**

*Photos by Illinois Farm Bureau® photographers*





Dairy (Late Season)



# August 2020

pasteurization, homogenization,  
ruminant, udder, methane, heifer,  
gestation

*Words & Terms To Learn*

*Clarabell* by Cris Peterson  
*Yogurt and Cheese and Ice Cream  
that Pleases* by Brian P. Cleary  
*Dairy Queen* by Catherine Gilbert  
Murdock

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3 There are seven different dairy cow breeds in the United States. The most common breed is Holstein, which are black and white.	4 Before modern milking machines, a farmer could milk about six cows by hand in one hour. Now, farmers milk over 100 cows in an hour.	5 Each year, U.S. dairy farmers provide milk to make more than 1 billion pounds of butter, 7 billion pounds of cheese, and 1 billion gallons of ice cream.	6 Milk provides your body with calcium, which is needed for healthy bones and teeth. It also provides us with protein, vitamin D, and carbohydrates.	7 Heifers are female dairy cattle that have not given birth to a calf. After a heifer gives birth, they are called a cow.	8
9	10 Antibiotics are not routinely used for dairy cows to promote growth. If cows need antibiotics to treat an illness, the treated cow's milk is discarded.	11 A dairy cow spends 8 hours per day eating, 8 hours chewing her cud, and 8 hours sleeping.	12 Dairy cows are called ruminants because they have multiple compartments in their stomach.	13 About 97% of all U.S. dairy farms are family-owned and operated. There are approximately 51,000 dairy farms in the United States.	14 Dairy products found in the grocery store include milk, ice cream, cheese, butter, yogurt, cream cheese, sour cream, cottage cheese, and buttermilk.	15
16	17 Milk has every nutrient your body needs to live. A person could survive wholly on milk alone!	18 Ruminants first chew their food to soften it, swallow it, and then return it to their mouth to continue chewing, which is called "chewing the cud."	19 The udder is the part of a dairy cow that produces, stores, and dispenses milk.	20 Pasteurization is the process of heating and cooling milk to kill bacteria and protect its purity and flavor.	21 New methane digester technology on some dairy farms converts manure into methane-rich biogas, a renewable fuel that can be used to generate electricity.	22
23	24 A cow turns grass into milk in only 2-3 days.	25 On average, each cow produces enough milk to fill 125 glasses. That's about 8-10 gallons per day!	26 The process where milk fat is broken into tiny particles that are evenly spread throughout the milk is called homogenization.	27 The gestation (pregnancy) period for cows is nine months. A newborn calf weighs 80-100 pounds at birth.	28 National Milk Day is January 11!	29
30	31 Vanilla is America's favorite ice cream flavor					





Horses (Mid Season)



# September 2020

herbivore, equine, farriers, tack, paddock, gait, foal, mare, stallion, withers, ungulate, feral

*Words & Terms To Learn*

*Horse Power: The Wonder of Draft Horses* by Cris Peterson  
*War Horse* by Michael Morpurgo  
*Leah's Pony* by Elizabeth Friedrich

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		<b>1</b> Horses are herbivores, which means they only eat vegetation, preferably fresh grass and hay (dried grass).	<b>2</b> Equine is the scientific name for all hooved mammals in the horse family including horses, ponies, mules, and donkeys.	<b>3</b> Tack is the term used for brushes, saddles, and other equipment used to ride and care for a horse.	<b>4</b> Horses wear shoes to protect their hooves, which are like our fingernails or toenails. Farriers are the professionals who trim horses' hooves to help them stay healthy.	<b>5</b>
<b>6</b>	<b>7</b> Horses were first domesticated around 4000 BC. Genghis Kahn, leader of the Mongols, used horses in warfare for the first time in 1206 AD.	<b>8</b> The overall economic impact of the horse industry in Illinois is \$3.23 billion. This includes horse ownership, equine institutions and organizations, and tourism.	<b>9</b> Hippology is the study of horses.	<b>10</b> The four natural gaits, or speeds, of a horse are walk, trot, canter, and gallop.	<b>11</b> Dressage is a skilled style of training and riding.	<b>12</b>
<b>13</b>	<b>14</b> Large outdoor enclosures used to house horses are called paddocks.	<b>15</b> A hand is a unit used to measure the height of a horse. A hand is equal to four inches.	<b>16</b> The height of a horse is measured from the ground to their withers, which is the high point between a horse's shoulder blades.	<b>17</b> The average lifespan of a horse is 20-25 years.	<b>18</b> Modern equines are classified into four different groups based on their size. The four groups are miniatures, ponies, lightweight horses, and heavyweight (draft) horses.	<b>19</b>
<b>20</b>	<b>21</b> Horses are ungulates – mammals with hooves.	<b>22</b> Typically, a horse only sleeps 2.5-3 hours per day and can sleep both lying down and standing up.	<b>23</b> Out of all of Earth's land animals, the horse has the biggest eyes. They can see nearly 360 degrees around without moving since their eyes are on the side of their head.	<b>24</b> Horses only breathe through their noses and not through their mouths like humans.	<b>25</b> Out of over 400 breeds of horses, the most popular breed is the Arabian.	<b>26</b>
<b>27</b>	<b>28</b> A group of horses is called a herd.	<b>29</b> Horses that were once domesticated and have become wild are called feral horses.	<b>30</b> A male horse is called a stallion, a female horse is called a mare, and a newborn horse is called a foal.			





Wheat (Late Season)



# October 2020

kernel, cultivated, annual, combine,  
gluten, dormant, adhesive, sown

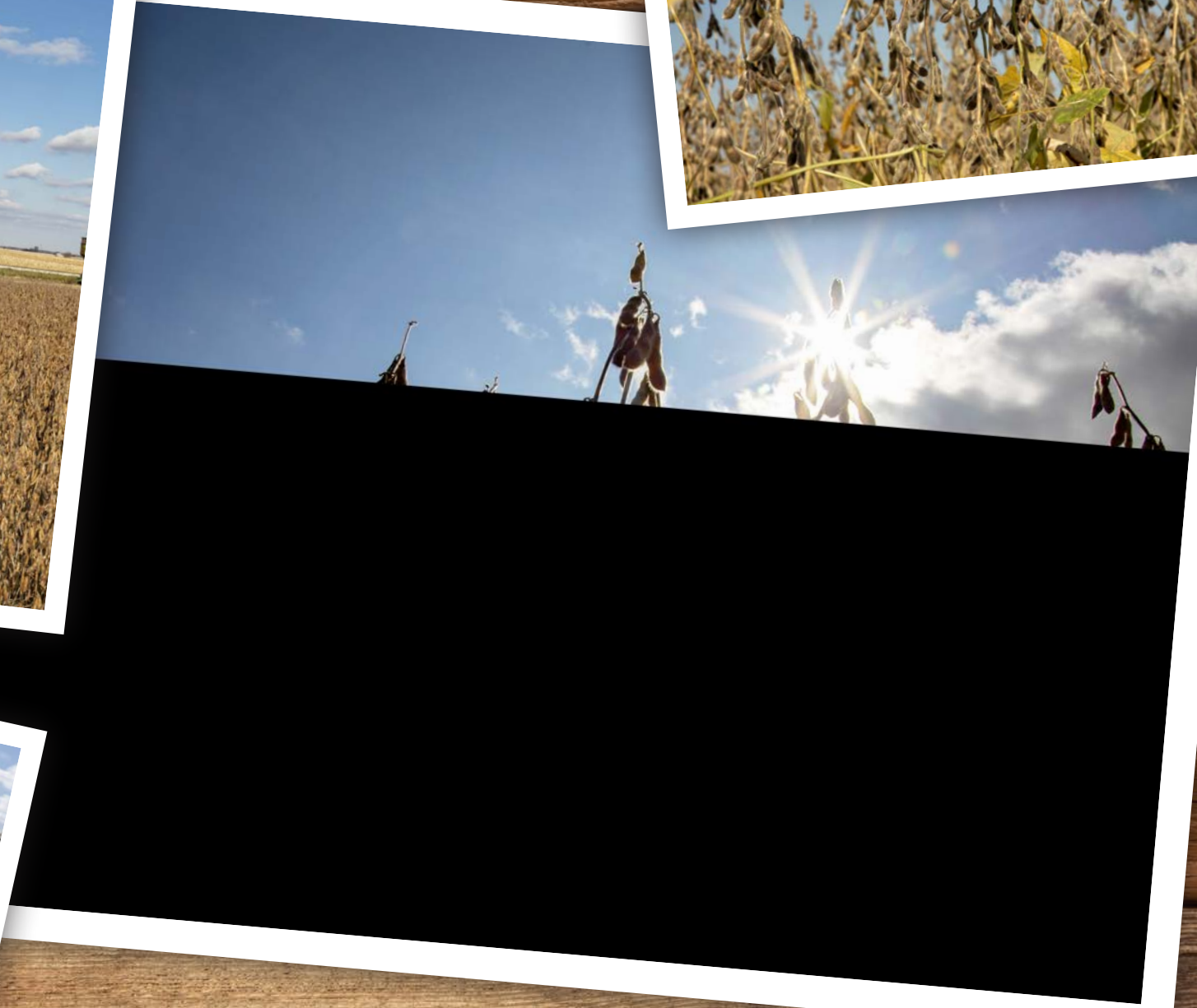
*Words & Terms To Learn*

*Bread Lab!* By Kim Binczewski  
and Bethany Econopoulou  
*Farmer George Plants a Nation*  
by Peggy Thomas  
*The Thing About Luck*  
by Cynthia Kadohata

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				<b>1</b> Wheat is an annual grass plant that grows to be two to four feet tall.	<b>2</b> A kernel is a wheat seed. There are about 50 kernels in a head of wheat and 12,000-14,000 kernels in a pound.	<b>3</b>
<b>4</b>	<b>5</b> Wheat is a grain that produces a dry, edible seed called a kernel which is used mostly for human consumption.	<b>6</b> The top of the wheat plant is called the spike, or head.	<b>7</b> Cultivated wheat originated in the "cradle of civilization" in the Tigris and Euphrates River Valley, near what is now Iraq.	<b>8</b> The four basic parts of a wheat plant include the head, stem, leaves, and roots.	<b>9</b> The stem of the wheat plant supports the head and is known as straw after harvest. Straw is baled and used as bedding for animals.	<b>10</b>
<b>11</b>	<b>12</b> All varieties of wheat fall into six classes: hard red winter, hard red spring, soft red winter, hard white, soft white, and durum.	<b>13</b> Most of the wheat grown in Illinois is soft red winter wheat and is used to make cereals, cakes, cookies, and pretzels.	<b>14</b> Wheat is harvested with combines, which separate the kernel from the straw.	<b>15</b> Kernels of wheat are ground into a fine powder to make wheat flour.	<b>16</b> A bushel of wheat weighs 60 pounds and can make about 42 pounds of white flour or 60 pounds of whole wheat flour.	<b>17</b>
<b>18</b>	<b>19</b> Gluten is the general name for the proteins found in wheat. Gluten helps foods maintain their shape, acting as glue that holds food together.	<b>20</b> Kansas is the leading wheat producer in the United States with North Dakota a close second.	<b>21</b> One bushel of wheat contains approximately one million individual kernels of wheat!	<b>22</b> As early as 7000-6000 B.C., Swiss lake dwellers ground wheat kernels, mixed flour with water, and baked the first flatbreads.	<b>23</b> Winter wheat varieties are sown in the fall, becoming established before going dormant when cold weather arrives. In the spring, plants resume growth, growing rapidly until summer harvest.	<b>24</b>
<b>25</b>	<b>26</b> In the United States, one acre of wheat yields an average of around 40 bushels of wheat.	<b>27</b> In 2019, U.S. farmers grew an estimated total of 1.884 billion bushels of wheat on 47.8 million acres of cropland.	<b>28</b> Semolina is coarsely ground durum wheat with a texture somewhat like sugar. It is the best product for pasta.	<b>29</b> Never refrigerate any bread products as they will become stale 6 times faster. Leave bread and bagels at room temperature or freeze them.	<b>30</b> The starch found in wheat makes it suitable to be used as a versatile adhesive. The sticky stuff on your stamps contains wheat!	<b>31</b>





Soybean (Late Season)



# November 2020

legume, radicle, trifoliate, biodiesel, biodegradable, extract, export, nitrogen

*Words & Terms To Learn*

*Auntie Yang's Soybean Picnic*  
by Ginnie Lo  
*Full of Beans, Henry Ford Grows a Car* by Peggy Thomas  
*Pod to Plate, The Life Cycle of Soybeans* by Julie D. Blunier

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>1</b>	<b>2</b> Soybeans are part of the legume family and are a great source of protein and all nine of the essential amino acids, essential vitamins, and minerals.	<b>3</b> In Illinois, soybeans are grown on 10.7 million acres. That's ¼ of Illinois!	<b>4</b> Farmers in China began growing soybeans more than 5,000 years ago.	<b>5</b> Soybean seeds grow on a soybean plant in pods, like peas.	<b>6</b> About four to seven days after the seeds are planted, the soybean seed grows a little, tail-like root, called a radicle, which becomes the main root, or tap root.	<b>7</b>
<b>8</b>	<b>9</b> The leaves of a soybean plant grow in groups of three, called trifoliate.	<b>10</b> Biodiesel is a renewable fuel made from soybeans that is biodegradable and non-toxic.	<b>11</b> Although soybeans are grown and eaten all over the world, the United States grows more soybeans than anywhere else.	<b>12</b> In 1904, George Washington Carver discovered a method of extracting soybean oil from soybeans. He also invented a process for making paints and stains from soybeans.	<b>13</b> The Mississippi River is an important route for delivering soybeans to the Port of New Orleans for export to other countries.	<b>14</b>
<b>15</b>	<b>16</b> Almost half of all soybeans the United States produces annually are exported.	<b>17</b> One bushel of soybeans weighs 60 pounds and makes 11 pounds of crude soybean oil or 47 pounds of soybean meal.	<b>18</b> Soybean oil is used for human consumption, as well as consumer and industrial products.	<b>19</b> In the fall, soybean plants turn brown and their leaves fall off, but the pods remain on the plant and the beans inside the pods get hard and dry.	<b>20</b> Each soybean plant grows 60-80 pods, and each pod has three to four beans inside.	<b>21</b>
<b>22</b>	<b>23</b> Farmers harvest soybeans using a combine. It separates the beans from the dried pods and stem of each plant.	<b>24</b> Soybean meal is used for livestock feed after the oil is separated.	<b>25</b> Rotating crops with soybeans plays an important role in the nutrient cycle as soybeans add nitrogen back to the soil naturally.	<b>26</b> The average American consumes nearly half a cup of soybeans in some form each day.	<b>27</b> New soy products are being developed every day. Some of the latest examples include the foam seats of Ford vehicles and plastics used on John Deere products.	<b>28</b>
<b>29</b>	<b>30</b> During the Civil War, soybeans were used to brew a drink for soldiers since coffee was scarce.					







# December 2020

domesticated, oviparous, fertilized,  
rotate, coop, omnivore, wattle,  
incubator, fowl

*Words & Terms To Learn*

*Chicks and Chickens*  
by Gail Gibbons  
*Eggs* by Jerry Spinelli  
*Sonya's Chickens* by Phoebe Wahl

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		<b>1</b> Poultry is the term used to describe domesticated birds that are raised for their products including meat, eggs, and feathers.	<b>2</b> All poultry are oviparous. This means their young are hatched out of an egg after the egg is laid by a parent.	<b>3</b> Mature male chickens, called roosters, must be present for an egg to be fertilized. Fertilized eggs become chicks, or baby chickens.	<b>4</b> The eggs you find at a store are not fertilized.	<b>5</b>
<b>6</b>	<b>7</b> It takes a hen approximately one day (24-26 hours) to produce an egg.	<b>8</b> Mature female chickens and turkeys are called hens.	<b>9</b> Chickens raised for their meat are called broilers, while those that produce eggs are called layers.	<b>10</b> Poultry farmers constantly monitor their flock and use bio-security measures to keep their chickens healthy and avoid introducing diseases to the flock, which includes wearing protective clothing.	<b>11</b> When a hen lays her fertilized eggs, she keeps them warm with her body heat, rotating them to keep a constant temperature, for 21 days until they hatch.	<b>12</b>
<b>13</b>	<b>14</b> The shelter in which a chicken lives is called a coop.	<b>15</b> Chickens are omnivores. They eat seeds and insects but also eat larger prey like small mice and lizards.	<b>16</b> Poultry feathers and down are used to stuff pillows and insulate clothing. Down is the layer of feathers found under the tough exterior feathers.	<b>17</b> An egg's shell color is a breed characteristic. When opened, the eggs look and taste the same regardless of the shell color.	<b>18</b> The wattle is the bright red appendage at the neck of a turkey.	<b>19</b>
<b>20</b>	<b>21</b> An incubator is a box which maintains a constant temperature and is used to hatch eggs.	<b>22</b> In 1620, settlers brought turkeys along on their ships. Although there were wild turkeys in the forests, they wanted domesticated birds for their barnyards.	<b>23</b> Chickens need grit, which is a mixture of angular, hard crushed rock, in their diet to help them digest their food and to produce eggs.	<b>24</b> The yolk of an egg is one of the few foods that naturally contain vitamin D.	<b>25</b> Each year, on average, Americans eat 93 pounds of chicken per person. That is a lot of nuggets!	<b>26</b>
<b>27</b>	<b>28</b> Chickens have better vision than humans, which is why roosters can see the sunrise and crow around an hour before humans can see the sunrise.	<b>29</b> Egyptians domesticated, or tamed, fowl that laid eggs for man to eat by 3000 B.C.	<b>30</b> Chickens can run up to nine miles per hour for short periods of time and can get airborne enough to fly over a fence.	<b>31</b> Eggs have 6 grams of protein that helps sustain mental and physical energy. Also, there are no carbs or sugars in an egg.		





Beef (Early Season)



# January 2021

by-products, gestation, cud, silage,  
fermented, cloven

*Words & Terms To Learn*

*Amazing Grazing* by Cris Peterson  
*Beef Cattle in the Story of  
Agriculture* by Susan Anderson &  
JoAnne Buggy  
*Temple Grandin* by Sy Montgomery

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					<b>1</b> Cattle are ruminants, along with sheep and goats. They have a four-compartment stomach which allows them to digest very tough food.	<b>2</b>
<b>3</b>	<b>4</b> Beef is the meat that comes from cattle. Hamburger, steak, and brisket are all examples of beef.	<b>5</b> The average American eats 62 pounds of beef each year.	<b>6</b> All products, except for beef, that come from beef cattle are called by-products. Paint, plastics, soaps, basketballs, and insulation are all examples of beef by-products.	<b>7</b> There are 50 breeds of cattle in the United States, and Angus is the most popular breed. They are usually solid black and known for their high-quality meat.	<b>8</b> The hide is the animal skin that is treated for human use, such as leather.	<b>9</b>
<b>10</b>	<b>11</b> The gestation (pregnancy) period for cows is nine months. Calves weigh 60-100 pounds at birth.	<b>12</b> Ruminant animals first chew their food to soften it, swallow it, and return it to their mouth for continued chewing called "chewing the cud."	<b>13</b> Beef is a good source of ZIP: zinc, iron, and protein. Beef also provides B-complex vitamins.	<b>14</b> Cattle spend most of their lives grazing on grass pasture. In addition, they are fed chopped silage, which is fermented corn, wheat, or hay with the stalks and leaves.	<b>15</b> The scientific name for cattle is Bovidae. This family of mammals also includes sheep, goats, bison, and antelopes.	<b>16</b>
<b>17</b>	<b>18</b> Between the meat from beef cattle and the beef by-products, 99% of every cow is used.	<b>19</b> Many medicines, including insulin, are made from the glands and organs of cattle.	<b>20</b> Male cattle are called bulls. Females, prior to giving birth, are called calves or heifers. Once a female gives birth, she is called a cow.	<b>21</b> Cattle were first domesticated in 6500 B.C.	<b>22</b> On his second voyage in 1493, Christopher Columbus brought cattle to the western hemisphere for the first time.	<b>23</b>
<b>24</b>	<b>25</b> One cow hide can make 20 footballs. Each year, 700,000 footballs are produced for the NFL, which means about 35,000 cowhides are used for one single professional sport!	<b>26</b> Cattle are raised in different climates and settings throughout the world because they can thrive on low-quality rangeland feed and grasses.	<b>27</b> One three-ounce serving of beef provides more than half of your required protein for the day.	<b>28</b> Beef cattle have cloven, or split, hooves.	<b>29</b> Cattle eat around 40 pounds of feed each day.	<b>30</b>
<b>31</b>						





Pork (Mid Season)



# February 2021

nutrients, manure, phosphorus,  
fertilizer, insulin, sow, farrow

*Words & Terms To Learn*

*A Hog Ate my Homework* by Gary  
Metivier  
*Pigs* by Gail Gibbons  
*Pigs, an A-to-Z Book* by Susan  
Anderson and JoAnne Buggey

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	<b>1</b> A piglet is a baby pig. At birth, a piglet weighs around 1.5 pounds.	<b>2</b> Pork is the food products that come from pigs. Some examples are bacon, ham, ribs, and pork chops.	<b>3</b> A farrowing barn is where piglets are born. A group of piglets born at the same time and from the same mother is called a litter.	<b>4</b> Pigs are kept in temperature- and humidity-controlled barns since they cannot sweat and can become easily overheated.	<b>5</b> Farmers recycle manure by spreading it over fields since it is a great source of nutrients that plants need to grow, like nitrogen (N) and phosphorus (P).	<b>6</b>
<b>7</b>	<b>8</b> Farmers inject manure into the ground to use as fertilizer, replacing the nutrients a plant pulls from the ground as it grows.	<b>9</b> A sow is a female pig that has given birth. Pigs are pregnant for three months, three weeks, and three days.	<b>10</b> Pigs eat a special mixture of corn, soybeans, vitamins, and minerals to keep them healthy and help them grow.	<b>11</b> The pig dates back 40 million years. Fossils indicate that wild pig-like animals roamed forests and swamps in Europe and Asia.	<b>12</b> Electronic equipment allows farmers to monitor the fat content of a pig and adjust the pig's diet to produce very lean meat.	<b>13</b>
<b>14</b>	<b>15</b> Hernando de Soto brought the first pigs to North America when he landed at Tampa Bay, Florida, with 13 pigs in 1539. Within three years, the herd of pigs grew to over 700.	<b>16</b> Some of de Soto's pigs ran away into the wild and became the first wild pigs, or Razorbacks, that now roam the southern United States.	<b>17</b> A pig is one of the few animals that will not overeat.	<b>18</b> Illinois pig farmers produce nearly two billion pounds of pork each year. That's more than six billion pork chops!	<b>19</b> Insulin, made from pigs' adrenal glands, is a medicine that help people who have diabetes maintain their blood sugar.	<b>20</b>
<b>21</b>	<b>22</b> Pigs have a tremendous sense of smell. The top of their snout is connected to a muscle that gives it strength and flexibility to root in the ground.	<b>23</b> The pork industry contributes \$1.8 billion to the Illinois economy annually, and it is directly connected to over 10,500 Illinois jobs.	<b>24</b> A pig weighs about 280 pounds by the time it is four to six months old and ready for market.	<b>25</b> Mature pigs drink up to five gallons of water each day.	<b>26</b> A pig's tongue contains 15,000 taste buds. By comparison, the human tongue has 9,000 taste buds.	<b>27</b>
<b>28</b>						



Pumpkin (Early Season)





# March 2021

pollination, gourd, processing,  
ornamental, palatable, antioxidant,  
native, pepitas

*Words & Terms To Learn*

*Pick a Pumpkin* by Patricia Toht  
*How Many Seeds in a Pumpkin* by  
Margaret McNamera  
*Squashed* by Joan Bauer

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	<b>1</b> Pumpkins start as a large orange or yellow flower and begin growing when the flower is pollinated. They continue to grow while connected to a long green vine.	<b>2</b> Pumpkins are members of the gourd family, which includes cucumber, honeydew melons, cantaloupe, watermelons, and zucchini.	<b>3</b> Depending on the variety, pumpkins can range in size from less than one pound to more than 2,000 pounds.	<b>4</b> Pumpkins grow on a vine that can grow up to 30 feet long, while the taproot of a pumpkin grows six feet deep.	<b>5</b> Farmers plant pumpkin seeds in April and May for a harvest that starts in late July and lasts through November.	<b>6</b>
<b>7</b>	<b>8</b> Native Americans used pumpkins as a staple in their diets centuries before the Pilgrims arrived.	<b>9</b> Over time, a tiny green pumpkin grows much larger and changes in color from green to yellow to orange.	<b>10</b> Most pumpkins are grown for processing into canned pumpkin and canned pie mix.	<b>11</b> The flowers of a pumpkin are edible.	<b>12</b> Pumpkins are good for your body. The filling is rich in vitamin A and potassium. The seeds are full of protein and iron.	<b>13</b>
<b>14</b>	<b>15</b> Processing pumpkins are harvested with a machine that moves them into rows, while another machine elevates them into trucks to transport them out of the field.	<b>16</b> It takes 110-120 days for a pumpkin vine to produce mature pumpkins.	<b>17</b> Pumpkins are a fruit because they are the part of the plant that contains seeds.	<b>18</b> Processing pumpkins are bred and selected to be canned. They have pale flesh, meatier insides, and a more palatable flavor.	<b>19</b> Ornamental pumpkins (pumpkins used for jack-o'-lanterns) are picked by hand to avoid bruising and damage.	<b>20</b>
<b>21</b>	<b>22</b> Morton, Illinois, where 80% of the world's canned pumpkin is processed, is considered the Pumpkin Capital of the World.	<b>23</b> Native Americans developed a method of planting corn, beans, and pumpkins together called "Three Sisters." Each of the "sisters" contribute something to the planting.	<b>24</b> Corn provides the beans needed support, the beans bring beneficial nitrogen to the soil, and the large pumpkin leaves shade the soil, keeping it cool and moist and preventing weeds.	<b>25</b> The bright orange color of pumpkins is a strong clue that they are full of the antioxidant beta-carotene.	<b>26</b> Pumpkin seeds can be roasted as a snack. They are also known as pepitas.	<b>27</b>
<b>28</b>	<b>29</b> Illinois farmers grow more pumpkins than anywhere else in the world!	<b>30</b> Pumpkins are over 90% water.	<b>31</b> Pumpkins are low in calories, fat, and sodium, and are high in fiber.			





Horseradish (Early Season)



# April 2021

perennial, enzymes, convenience, sinuses, dormancy, potash, wasabi

## Words & Terms To Learn

*Farmer Will Allen and the Growing Table* by Jacqueline Briggs Martin  
*Up in the Garden and Down in the Dirt* by Kate Messner  
*Tops and Bottoms* by Janet Stevens

## Recommended Reading

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				<b>1</b> Horseradish is a perennial plant that comes from the same family as mustard, wasabi, broccoli, and cabbage.	<b>2</b> The horseradish plant is cultivated primarily for its large, white, tapered root, although the leaves can be eaten.	<b>3</b>
<b>4</b>	<b>5</b> Horseradish is a root vegetable used as a spice.	<b>6</b> When cut or grated, enzymes from the now-broken plant cells cause changes that produce isothiocyanate, a compound that generates the bite and aroma of horseradish.	<b>7</b> Prepared horseradish is made by mixing ground horseradish with vinegar, which stops the oxidation of isothiocyanate, and keeps it from becoming bitter tasting.	<b>8</b> Horseradish dates to 1500 BC. Early Greeks used it as a rub to alleviate lower back pain.	<b>9</b> After the first autumn frost kills the leaves, the root is dug out of the ground and divided. The main root is harvested for processing, while the large offshoot roots are replanted to produce next year's crop.	<b>10</b>
<b>11</b>	<b>12</b> Early settlers brought horseradish to North America and began cultivating it in the colonies.	<b>13</b> Sales of bottled horseradish began in 1860, making it one of the first convenience foods.	<b>14</b> Horseradish is celebrated at the International Horseradish Festival in Collinsville, Illinois, on the first full weekend of June each year.	<b>15</b> Collinsville, IL, which supplies roughly 60% of the world's horseradish production, is known as the "Horseradish Capital of the World."	<b>16</b> The area around Collinsville, IL, supplies soil rich in potash that the horseradish needs to thrive.	<b>17</b>
<b>18</b>	<b>19</b> Unlike hot peppers that burn the tongue, the intense spice of the horseradish is experienced through the nose and sinuses.	<b>20</b> The cold winters of Illinois provide the required root dormancy, and the long summers provide excellent growing conditions for horseradish.	<b>21</b> In the name horseradish, "horse" is believed to denote large size and coarseness, and "radish" comes from the Latin "radix," meaning root.	<b>22</b> Horseradish is believed to have originated in central Europe.	<b>23</b> Like many other root vegetables, horseradish stores well and is often available well into spring.	<b>24</b>
<b>25</b>	<b>26</b> There are only two calories in a teaspoon of horseradish.	<b>27</b> Horseradish is still planted and harvested mostly by hand.	<b>28</b> The Japanese condiment wasabi, traditionally prepared from the wasabi plant, is now usually made with horseradish because the wasabi plant is rare.	<b>29</b> In the U.S., an estimated 24 million pounds of horseradish root are ground and processed annually to yield six million gallons of prepared horseradish.	<b>30</b> Horseradish root and leaves were used as a medicine during the Middle Ages.	





Apples (Mid Season)



# May 2021

grafted, carpels, pomology,  
archeology, consumption

*Words & Terms To Learn*

*Applesauce Day* by Lisa Amstutz  
*Seed by Seed* by Esme Raji Codell  
*The Year Money Grew on Trees* by  
Aaron Hawkins

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2	3 After bees pollinate an apple blossom, the flower develops into an apple.	4 Apples were brought to the United States by the Pilgrims in 1620.	5 Apples are harvested in late summer and early fall; however, we can buy fresh apples from the store all year long due to Controlled Atmosphere Storage.	6 Controlled Atmosphere Storage regulates the temperature, oxygen, carbon dioxide, and humidity of each variety of apple, which slows down the ripening process.	7 The GoldRush apple, a hybrid sweet-tart yellow apple, is the Illinois State Fruit.	8
9	10 The apple tree originated in Central Asia.	11 Since apple trees are difficult to grow from seeds, most trees are grafted to produce a new tree.	12 It takes 36 apples to make one gallon of apple cider.	13 Apple trees take four to five years to produce their first fruit.	14 The crabapple is the only apple native to North America.	15
16	17 Apple trees can live for more than 100 years.	18 Don't peel your apple. Two-thirds of the fiber and lots of antioxidants are found in the peel. Antioxidants help to reduce cell damage, which can trigger some diseases.	19 Apples have five seed pockets, or carpels. Each pocket contains seeds. The more seeds per carpel, the healthier the plant.	20 The science of apple growing is called pomology.	21 Sunlight causes a chemical reaction in the sugars of the apples, which is why they change colors.	22
23	24 The world's top apple producing countries are China, United States, Turkey, Poland, and Italy.	25 Apples are part of the rose family, as are pears and plums.	26 There are more than 2,500 varieties of apples grown in the United States and over 7,500 grown around the world.	27 In 1730, the first apple nursery was opened in Flushing, New York.	28 Apples ripen six to ten times faster at room temperature than if they were refrigerated.	29
30	31 Archeological evidence of human consumption of apples dates to at least 6500 BC					





Corn (Mid Season)



# June/July 2021

tassels, silks, kernels, evaporation,  
combine, commodity, emission

*Words & Terms To Learn*

*Harvest Year by Cris Peterson*  
*Popcorn Country by Cris Peterson*  
*The Popcorn Astronauts by Deborah*  
Ruddell

*Recommended Reading*

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		<b>1</b> There are several types of corn. The most common types are field corn, sweet corn, and popcorn.	<b>2</b>	<b>3</b> Field corn is a grain, not a vegetable, and is part of the grass family. Most corn grown in the Midwest is field corn.	<b>4</b>	<b>5</b>
<b>6</b>	<b>7</b> Over half of all the corn grown in the United States is grown in four states: Illinois, Iowa, Minnesota, and Nebraska.	<b>8</b>	<b>9</b> Field corn, also known as dent corn, is a special type of corn with a hard, outer shell that has more starch and less sugar than sweet corn.	<b>10</b>	<b>11</b> Tassels, stalks, husks, ears, leaves, roots, and kernels are all part of a corn plant.	<b>12</b>
<b>13</b>	<b>14</b>	<b>15</b> Most corn plants produce just one ear of corn and are ready for harvest after approximately 120 days of growth.	<b>16</b>	<b>17</b> An acre of corn gives off 4,000 gallons of water per day in evaporation.	<b>18</b>	<b>19</b>
<b>20</b>	<b>21</b> The tassel is the tuft at the top of the corn plant that contains the pollen.	<b>22</b>	<b>23</b> Long, silky threads found at the top of an ear of corn are called the silk.	<b>24</b>	<b>25</b> Once a corn plant tassels, pollen from the tassel lands on the silk of the ear and travels down to make one kernel of corn.	<b>26</b>
<b>27</b>	<b>28</b>	<b>29</b> A kernel is the yellow seed on an ear of corn. One ear of corn averages 800 kernels in 16 rows.	<b>30</b>			

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				<b>1</b> Popcorn is the official snack food of Illinois.	<b>2</b>	<b>3</b>
<b>4</b>	<b>5</b> Of the field corn grown in Illinois, 54% is exported, 25% is used to make ethanol, 15% is processed, and 7% is used for animal feed.	<b>6</b>	<b>7</b> At harvest, a combine separates the kernels from the ear and the rest of the corn plant.	<b>8</b>	<b>9</b> Native Americans taught the settlers of Jamestown how to grow their own corn.	<b>10</b>
<b>11</b>	<b>12</b>	<b>13</b> Corn plastic is a more environmentally friendly plastic than petroleum-based plastic and is completely biodegradable.	<b>14</b>	<b>15</b> A bushel is a unit of measure for volumes of dry commodities, such as shelled corn kernels.	<b>16</b>	<b>17</b>
<b>18</b>	<b>19</b> Corn is called maize by most countries outside of the U.S., which comes from the Spanish word 'maiz'.	<b>20</b>	<b>21</b> Ethanol is a high-performance, locally grown, renewable fuel made from corn. It is biodegradable and does not pollute groundwater.	<b>22</b>	<b>23</b> One bushel of corn produces 2.8 gallons of ethanol.	<b>24</b>
<b>25</b>	<b>26</b>	<b>27</b> In the days of early settlers to North America, corn was so valuable it was used as money and traded for other products.	<b>28</b>	<b>29</b> Compared directly to gasoline, ethanol reduces greenhouse gas emissions by 40-50%.	<b>30</b>	<b>31</b>





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