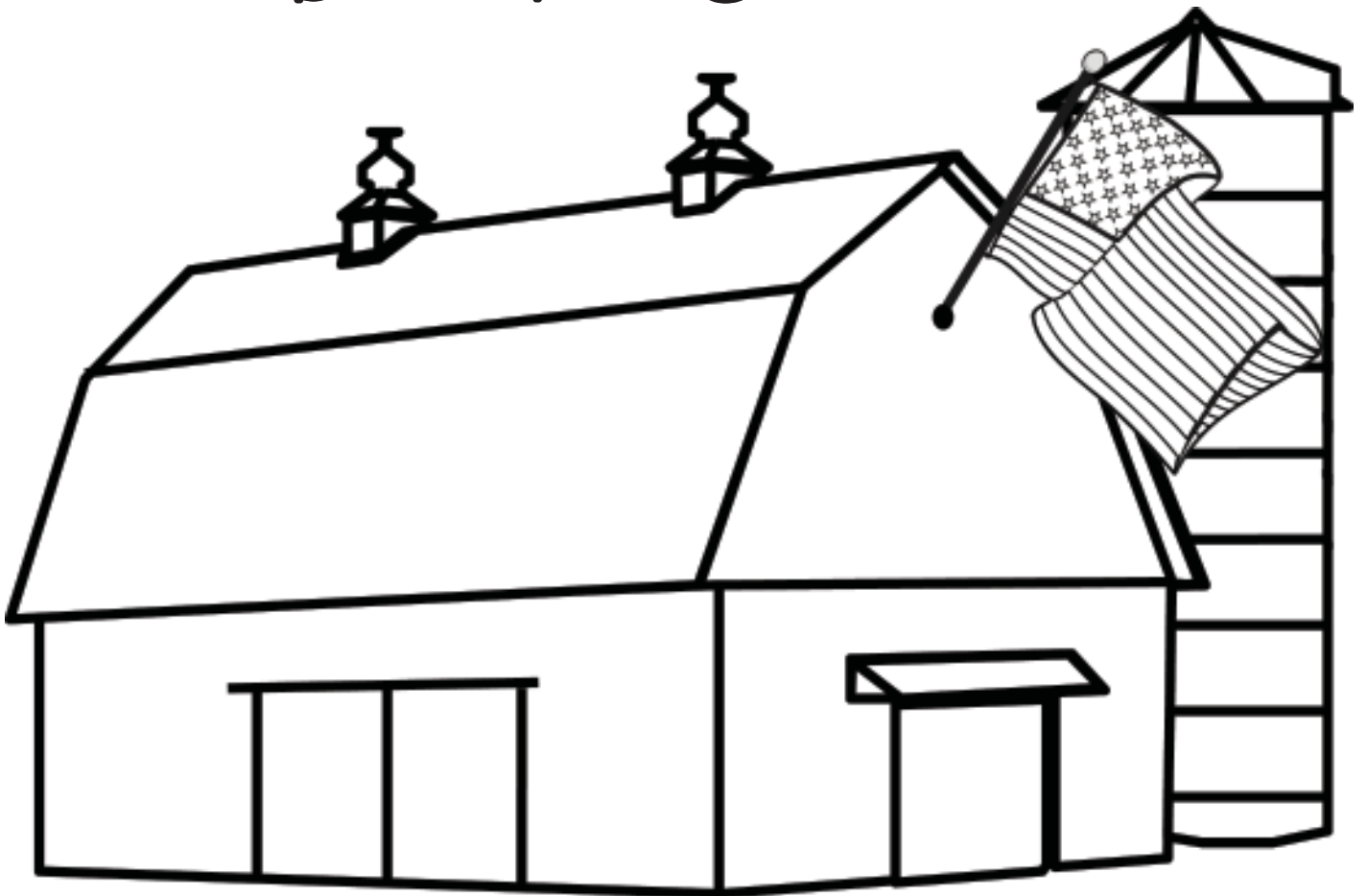


All About
AGRICULTURE
in the U. S.

Reading, Coloring and Activity
Book for Children



Acknowledgments

This activity book was developed and compiled by American Agri-Women (AAW), a national coalition of farm, ranch and agribusiness organizations. AAW membership includes individuals who are interested in agriculture, such as producers, educators, students, accountants, marketers and consumers. Our members are involved in production agriculture, agribusiness and processing.

Special thanks to New Holland, Inc. for their printing support for this activity book. Their equipment is pictured on pages 17, 18 and 30. This book was originally printed in 2004 and updated in 2007.

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Answers to the activities within this book are available at www.americanagriwomen.org.

*To request additional copies email:
education@americanagriwomen.org*

U.S.A. Farms

Food comes from plants and animals. It is grown on farms. There are farms in every state in the United States from Hawaii to Maine and Alaska to Florida.

Directions: Label each state and color your home state.



Fun Fact

The U.S. has
2.264 billion acres
of land!



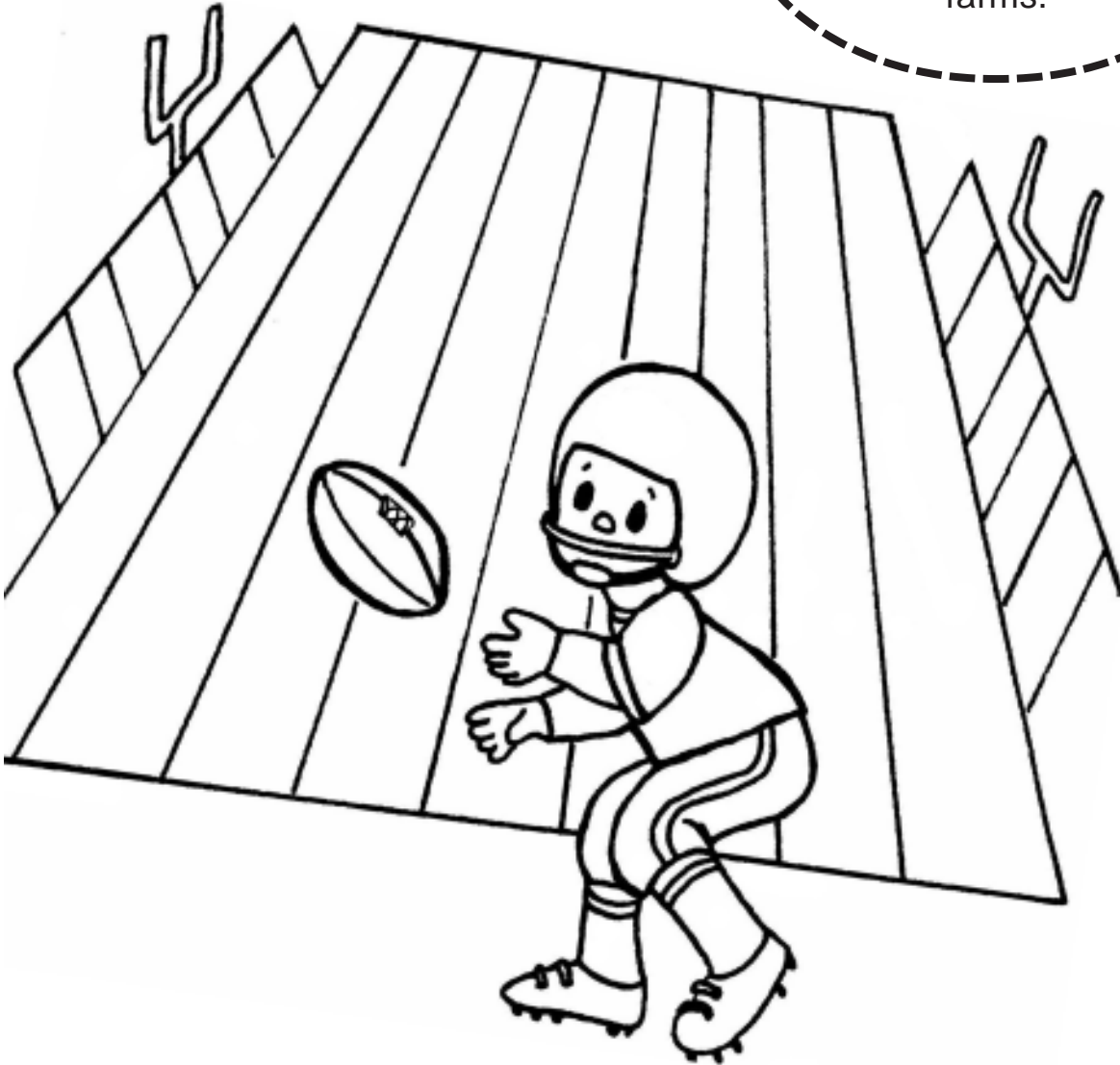
Farms produce food, fiber, shelter and energy. Some farms grow one or two products. Some farms produce many products.

Farm Sizes

Some farms are big and some farms are small. Most farms are measured by the amount of land.

Did you know?

About 2 million people in the U.S. work on farms.

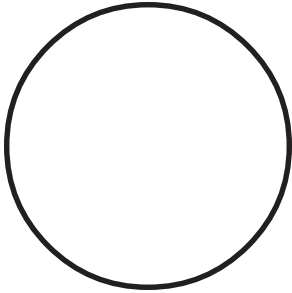


Land is measured in a unit called an acre. One acre of land is about the size of a football field.

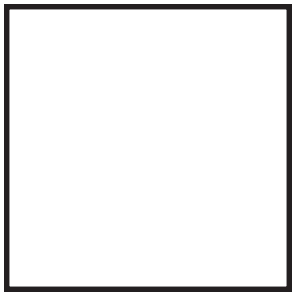
Farm Shapes

Farms come in many different sizes and shapes. Some farms are even groups of land shapes.

Directions: Fill in the blanks in the words. Match the word to the shapes they describe.



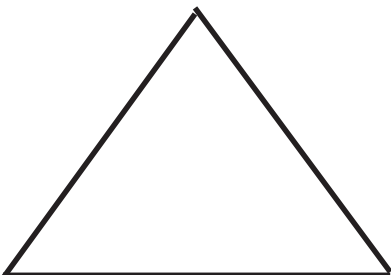
r _ _ c t _ _ n g l e



t r _ _ a n _ _ l e

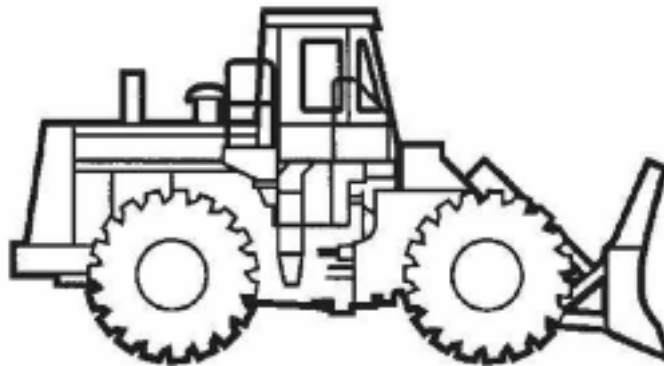
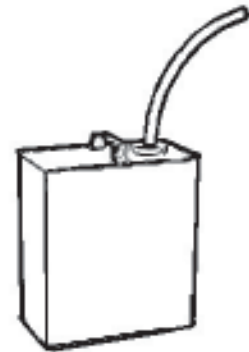
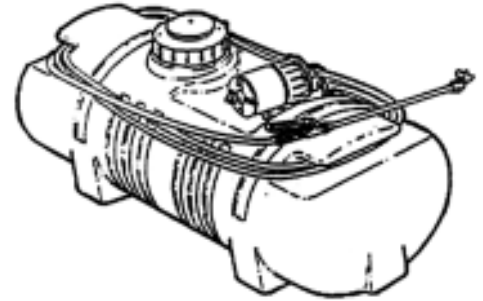


_ _ i _ _ c l e



s _ _ _ a r e

Farm Tools



Many tools are used on farms. Cell phones, lights, fuel containers, computers, machinery and chemical sprayers are all in a farmer's toolbox.

Natural Resources

Not only must farmers be safe with their tools, they must safely use natural resources to produce food, clothing and shelter. Natural resources include water, sunlight, air, plants, animals, soil and minerals.

Directions: Number these words in alphabetical order from A to Z.

- ___ soil
- ___ plants
- ___ air
- ___ water
- ___ sunlight
- ___ minerals
- ___ animals

Water

All plants and animals need water to grow. Water is found in the ocean, lakes, rivers, streams, and ponds. Water is also found underground and in the air we breathe.

Directions: Match the picture to the word describing the usage of water.

drinking

bathing

swimming

watering

boating



Fun Fact
The earth has just as much water today as it did when dinosaurs were here!

What Plants & Animals Need

Plants and animals also need sunlight and air. Sunlight gives us heat and light. Plants and animals need gases to grow such as oxygen, carbon dioxide, and nitrogen. They get them from air.

Directions: Draw a picture of a game you like to play in the sunlight and air.



Weather Affects Plants & Animals

Weather is important to plants and animals. Temperature, wind, rain, drought and storms are all parts of weather.

Directions: Find and circle the weather words below. One is done for you.

r g s v c r d p y d
a c x l m r o t s r
p r o l w x x u i o
d u m i q l f w m u
d l z a z h t i w g
l i g h t n i n g h
z d l y p s b d t t
o y l z e s n a f a
q b f o c l e o q q
r a i n c h o z w k

cloud

cold

drought

hail

heat

lightning

rain

snow

storm

wind

Did you know?

One flash of lightning has enough electricity to light a 100-watt bulb for 3 months!

Seasons

Most parts of our country experience four seasons through the year. Winter, spring, summer and autumn usually have different weather elements.

Directions: Write the words for the weather elements. Some letters are filled in for you.



d



a



u



s

Soil Make-up

Soil is made of minerals, air, water, plant and animal materials. Worms and other creatures mix the particles and recycle nutrients and waste. Plant roots grow through the soil with a twisting screw-like motion. Air and water move freely in and out of soil.

Directions: The following things are found in soil. Unscramble the words.

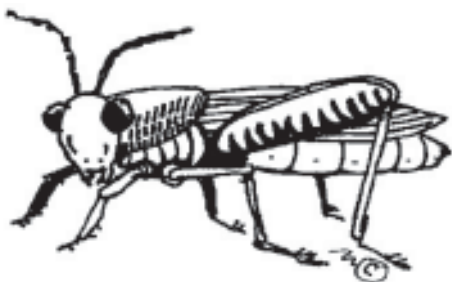
o r t o _____

k r c o _____

o m r w _____

e t e b l e _____

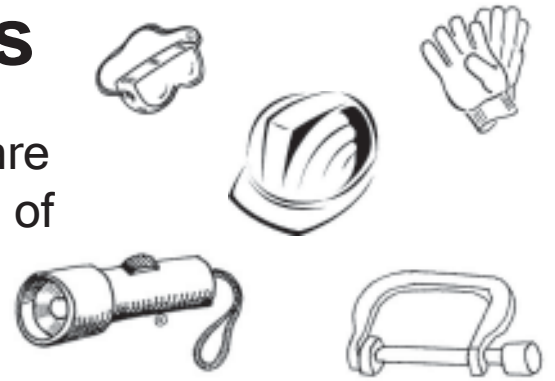
a r e w t _____



Soil Types

Some soil is rich with minerals. Minerals are harvested in mines. There are many types of mines like salt, metal, oil and gas mines.

Directions: Find and circle the tools in the picture.



Forests

Forests are large areas of land that grow many trees. There are many types of trees that grow in the U.S. Some produce needles and pinecones and the others produce leaves and fruit or nuts.

Directions: Circle the one in each set that is different.



Lumber

Lumber from trees is used to make many products used every day. Houses are built from trees. Paper and furniture are also made from trees.

Wildfires burn many acres of land every year. When trees are cut down or burned it is important to plant more trees.

Did you know?

Nine out of ten wildfires are started by people.

Directions: Find and circle the types of trees below. One is done for you.

e n i p e p v y l c
w k l a h r i r p e
d o o w n o t t o c
z u y i e r q p u u
c z b l b i r c h r
k e p d l f h p l p
z a d p e o m e x s
m y o a l r a c f q
c m j l r h h a v b
c h y u j x b n y n

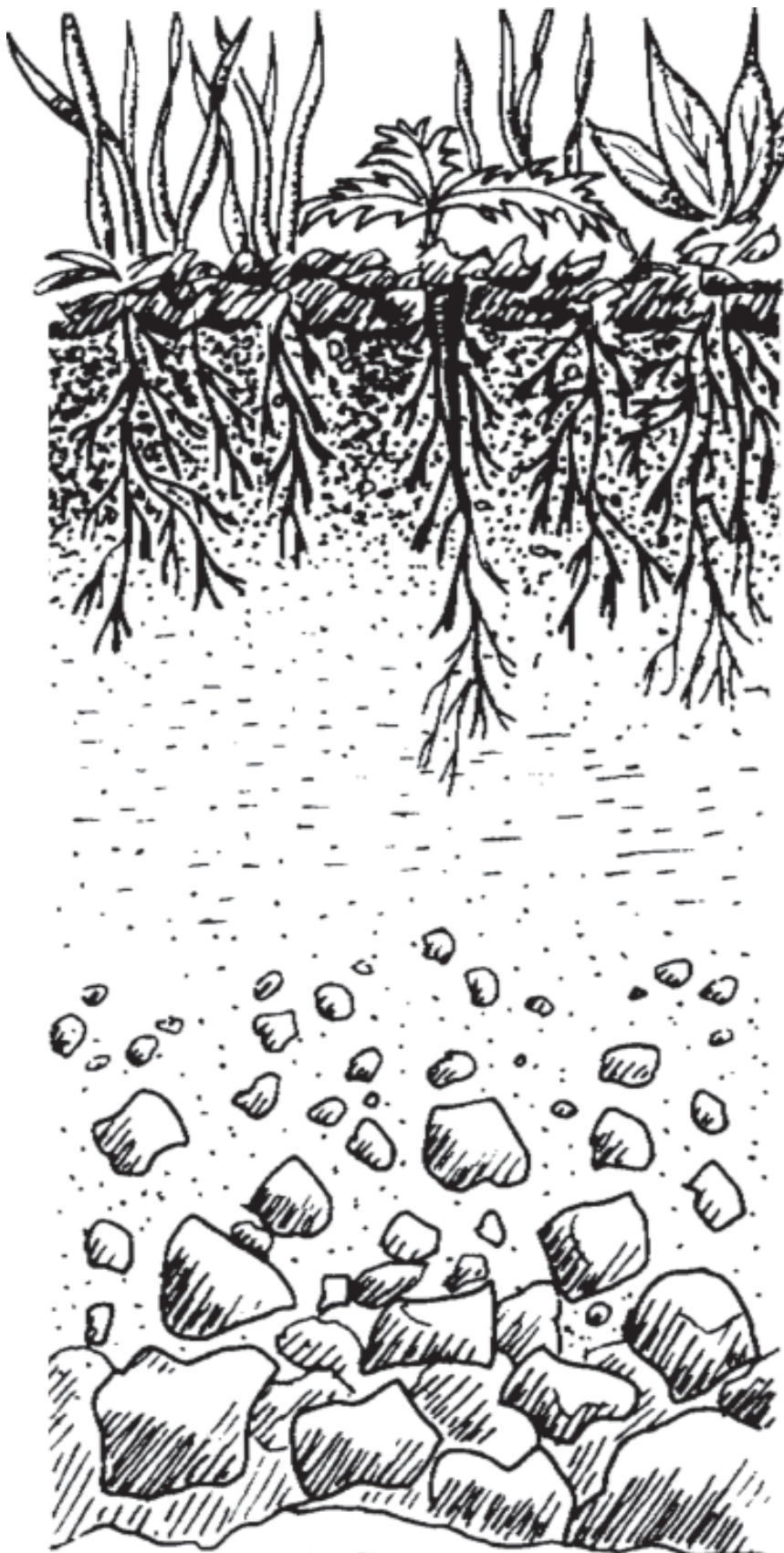
birch
cedar
~~cottonwood~~
fir
holly
maple
oak
pecan
pine
redbud
spruce

Plant Needs

All plants, including trees, grow from seeds.

Plants need sunlight, water, soil and carbon dioxide from air to make their own food.

Plant roots grow deep in the soil. This picture is what soil looks like below the plants.



Did you know?

Sugar that sweetens our food is made from crops!

Sweeteners are made from sugar cane, corn or the roots of the plants called sugar

Utah Agriculture in the Classroom

Farm Crops



Farmers grow plants in fields. A group of the same plants in a field is called a crop. Plants make roots, leaves and seeds, which we use in food and other items. Scientists are also finding ways to use those seeds to make clothing or CDs!

Crops are planted in rows with many types of machines. Tractors pull equipment through the field. They come in many sizes.

Harvest



When crops are done growing they must be harvested, or collected from the field. Farmers harvest the seeds from the plants with machines called combines.

The combine above harvests corn. The combine below harvests grains like wheat, oats, grain sorghum, barley or soybeans.



Grains

Some grains are grown for our food. These can be grains like wheat, oats and rice. Some grains are grown for animal food or feed. Corn and grain sorghum are feed grains that are grown in our country. Some grains are grown for both food and feed, like corn or oats.

Directions: Fill in the missing letters to the grain words to find the hidden word.



___ o r n

___ a t s

grain sorghu ___



soy ___ ean

r ___ ce



su ___ flower



wh ___ at



Oil Crops

Some crops are grown for oils that we can eat. Most of the time vegetable oil comes from soybeans. Oil is also squeezed from sunflowers, olives, peanuts, corn and canola.

Directions: Match the seed of the plants to the words that describe them.



sunflower



peanut



soybean

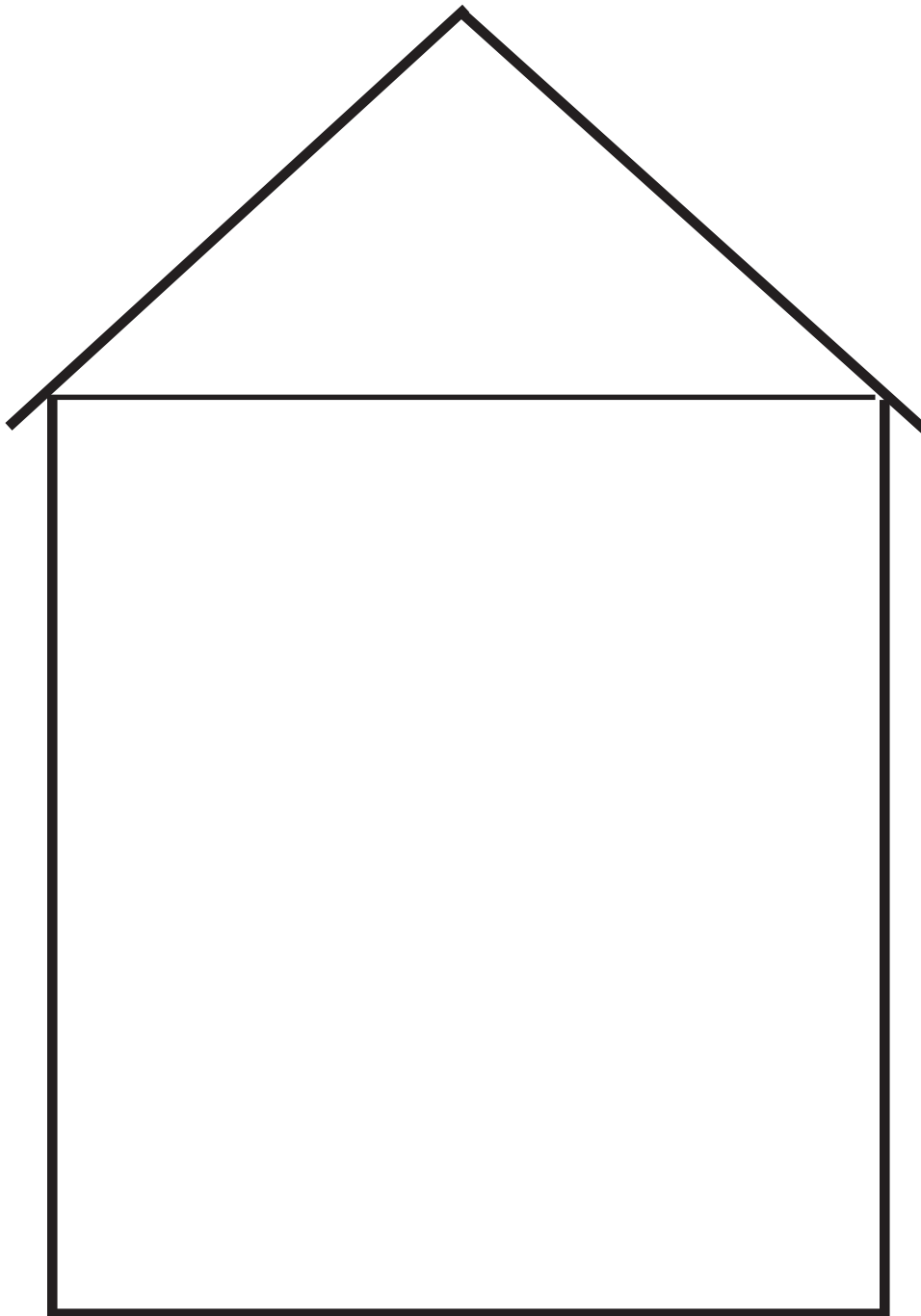


corn

Fiber Crops

Some crops are grown to make things other than food or feed for animals. These are fiber crops like cotton or flax. Cotton is a crop that is made into clothes we wear and such things as wall coverings and book binding. Flax is milled into linen for clothing and other materials.

Directions: Draw an item from your house that uses fiber crops.

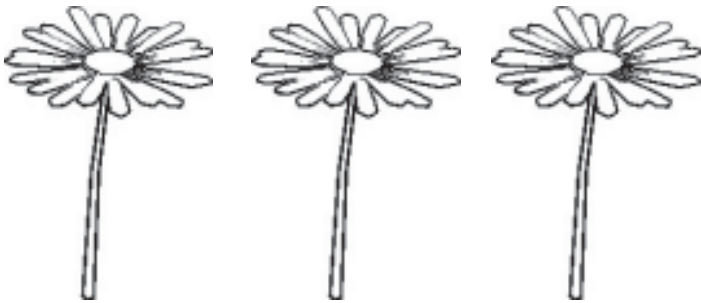


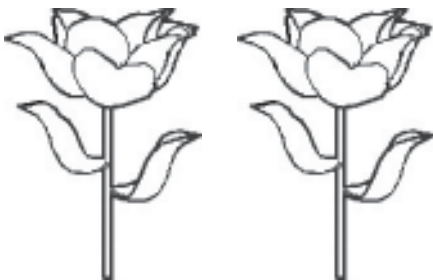
Greenhouses

Some plants are grown in greenhouses. Greenhouses allow plants to grow even if the weather outside is too cold.

Greenhouses are also used for raising flowers and houseplants. This is big business around Valentine's Day!

Directions: Count the number of flowers in each group. Write the number on the line.







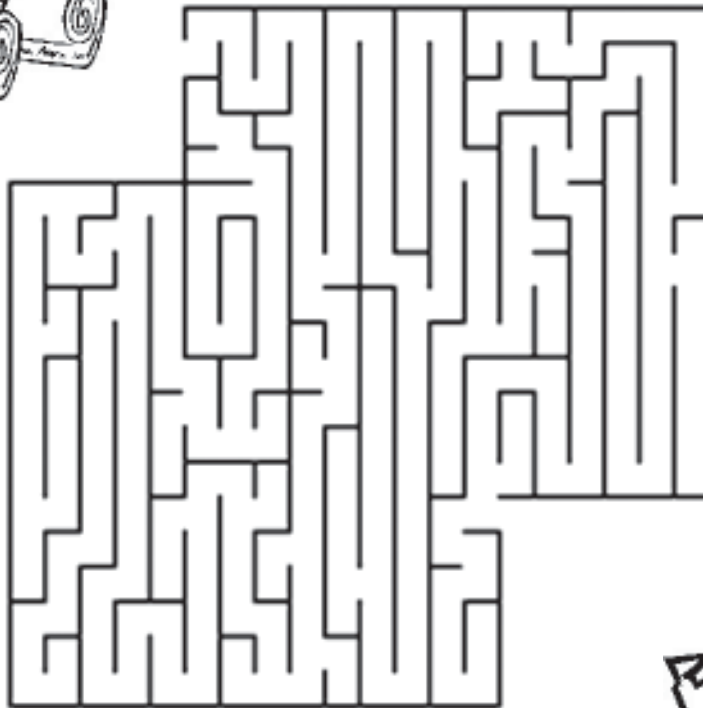


Nurseries and Grasses

A nursery is another place that grows special plants. Nurseries grow flowers, shrubs, and trees that are planted around houses and buildings.

Grass for these buildings is also a crop produced on farms. Grass and turf are planted in fields, then cut and rolled up to be unrolled onto soil for yards or ball fields.

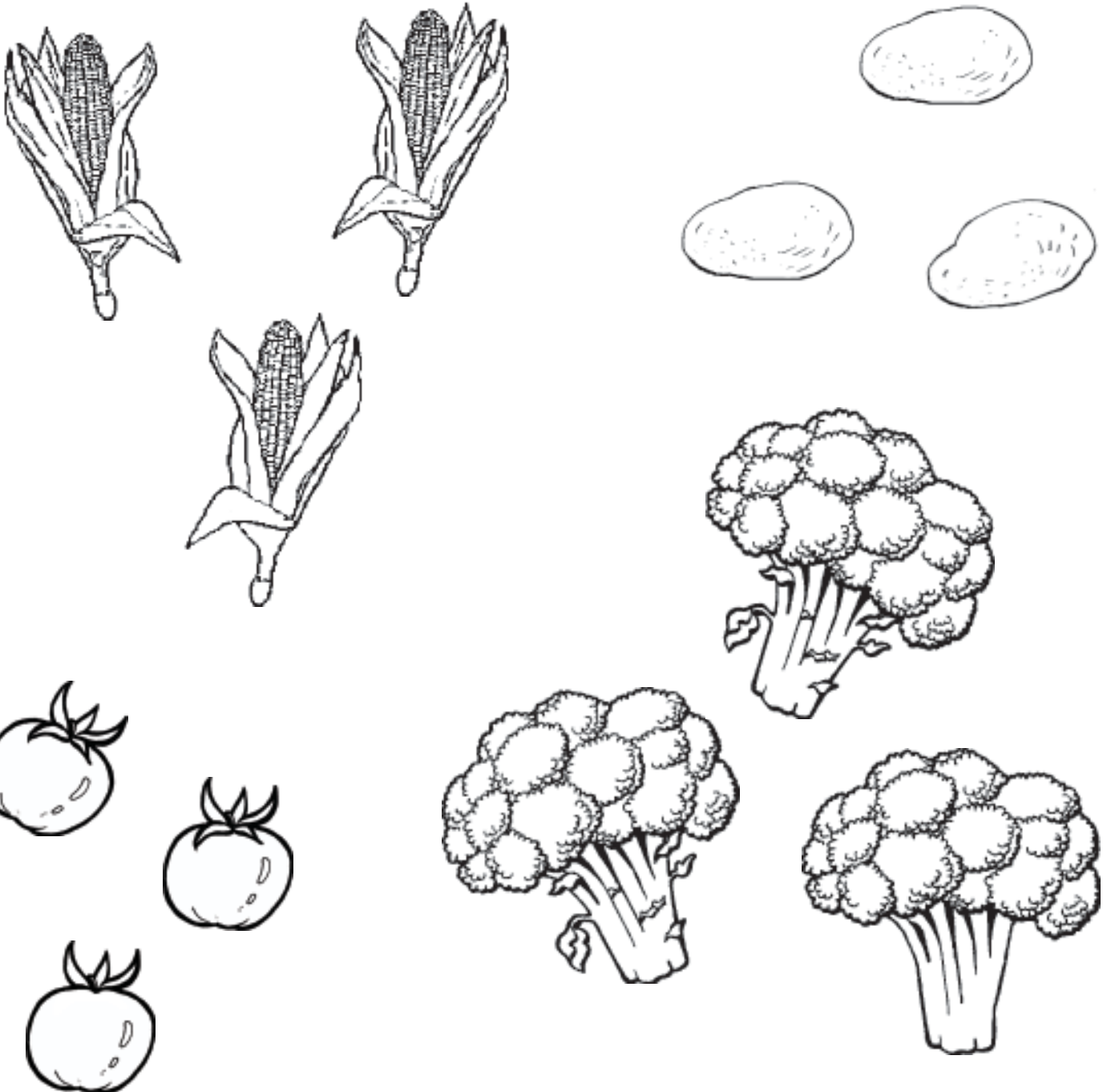
Directions: Follow the maze to get the turf to the ball stadium.



Vegetables

Some areas of our country have the right weather to grow fruits and vegetables. Many vegetables are grown in our country. The top ten vegetables sold in our country are: potatoes, head lettuce, tomatoes, onions, carrots, celery, sweet corn, broccoli, green cabbage, and cucumbers.

Directions: Look at each group of vegetables. Circle the two in each group that are the same. Put an X on the different one.



Nutritional Needs

Eating a wide variety of fruits and vegetables is important. Fruits and vegetables come in many colors. The more colorful the item the greater the nutrition value. A piece of fruit or vegetable is a great snack.

Directions: Draw a fruit or vegetable for each color.

red	yellow
purple	green

Top Ten Fruits

The top ten fruits sold in U.S. stores are: bananas, apples, watermelons, oranges, cantaloupes, grapes, grapefruit, strawberries, peaches, and pears.

Directions: Find and circle the fruits below. One is done for you.

m p a y r r e h c y

e m u o r a n g e s

apple

s t r a w b e r r y

apricot

y r r e b e u l b t

banana

a g p e a r t r z o

blueberry

y r r e b p s a r c

cherry

b a n a n a p q x i

grape

l p h c a e p l j r

orange

s e f d l d i c e p

peach

p i n e a p p l e a

pear

pineapple

~~raspberry~~

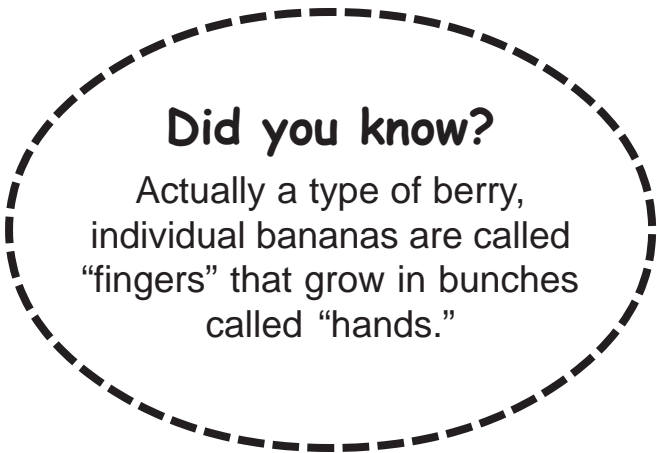
strawberry

Serving Recommendations

We should eat 5 or more servings of fruits and vegetables each day.

Directions: Write out the numbers below.

1	___	___	___	
2	___	___	___	
3	___	___	___	___
4	___	___	___	___
5	___	___	___	___
6	___	___	___	
7	___	___	___	___
8	___	___	___	___
9	___	___	___	___
10	___	___	___	

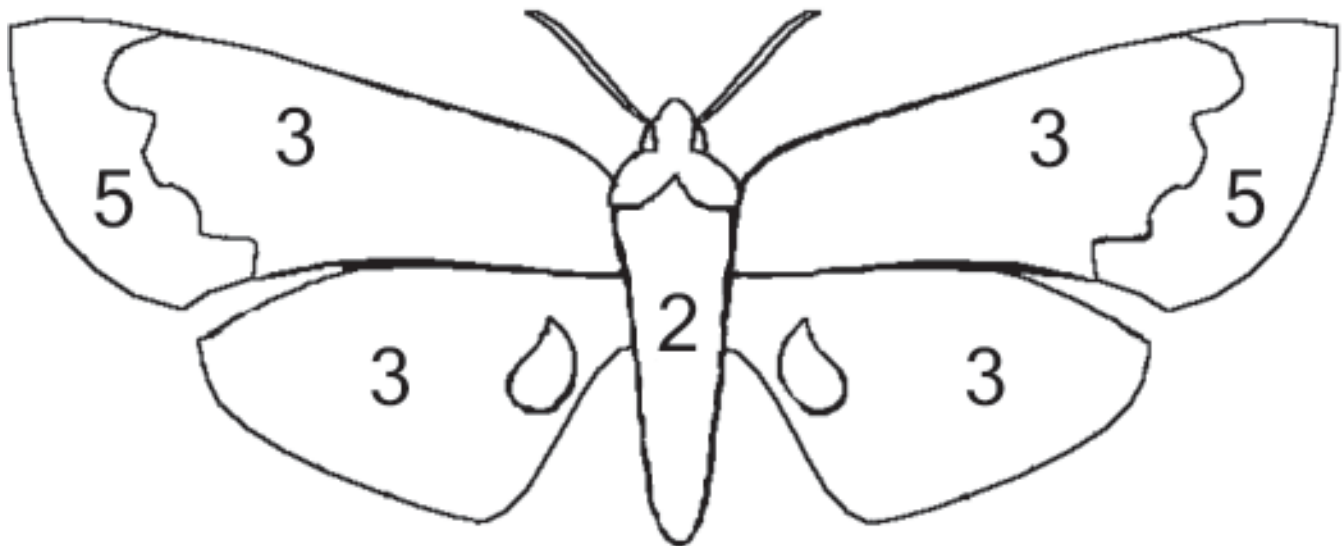
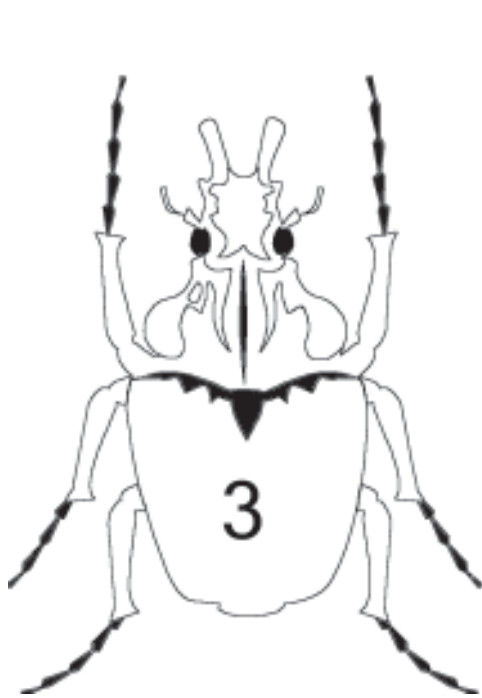


Insects

Some insects help plants and animals, and others can hurt crops and livestock. Farmers use chemical tools to protect crops from harmful insects, diseases, weeds, fungi, and other pests. They are used with care.

Directions: Use the color key to color the insects.

Color Key	
1 -	red
2 -	black
3 -	yellow
4 -	green
5 -	brown



Pollination

Many farms depend on bees. Bees pollinate crops. This lets those plants produce fruits or seeds.

Pollination is taking pollen from one flower to another flower.



Bees can be moved from one field to another field. They use pollen to produce honey in their hive.

A beekeeper takes care of the bees, moves their hives from field to field and collects honey.

Directions: Find and circle the words below. One is done for you.

r e w o l f l s
e n s e e b e r
p e p u f o y n
e l e c r o p s
e l a f u h e e
k o w n i y f e
e p o v t e t d
e e e s s s l s
b (h o n e y) l d

beekeeper

bees

crops

field

flower

fruits

hive

~~honey~~

plants

pollen

seeds

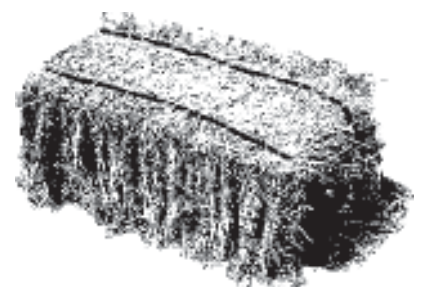
Grasses



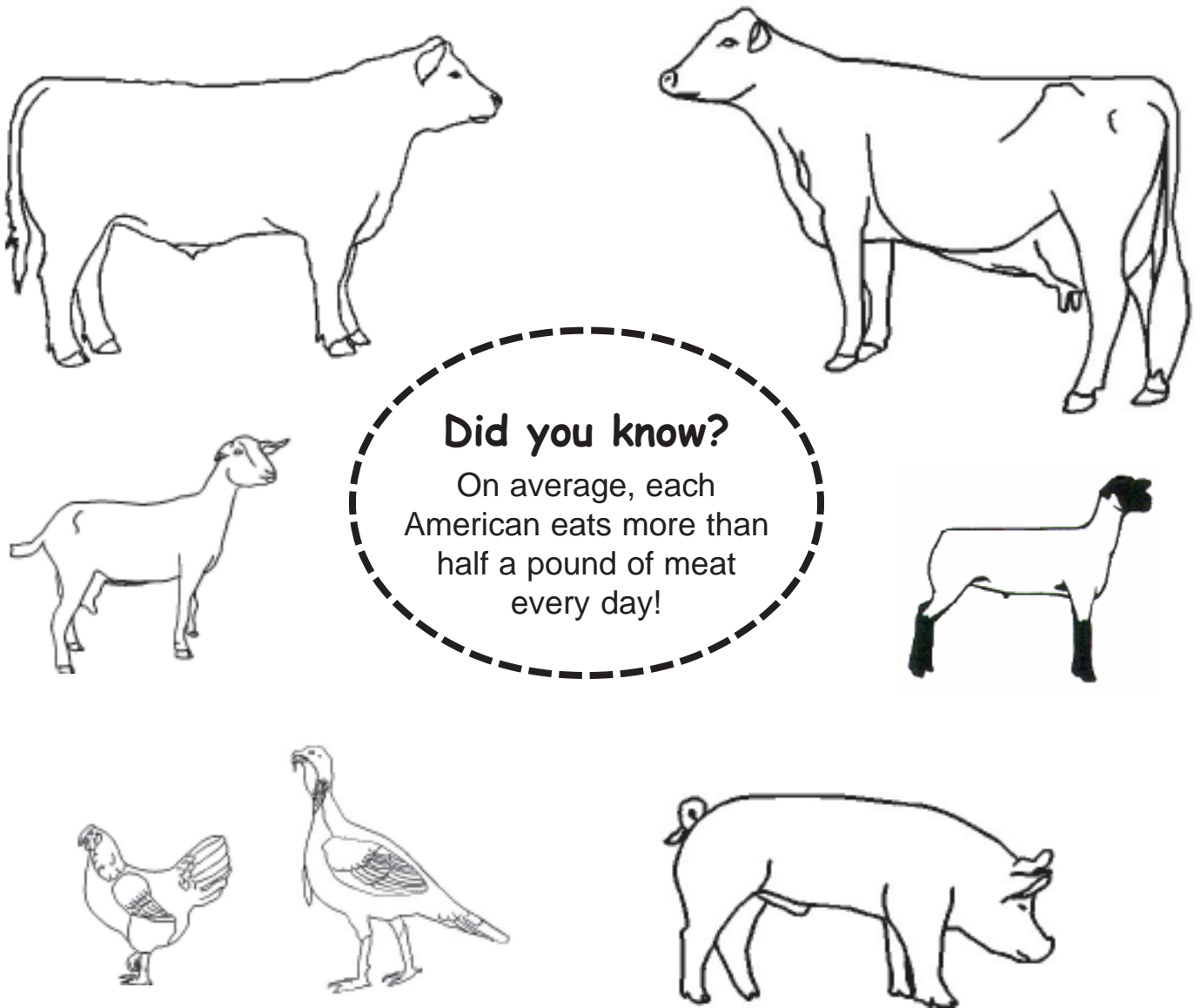
Ranges and pastures are large areas of land that grow grass. Both tame animals, or livestock, and wild animals, or wildlife, feed on these grasses. Wildlife also eat farm crops and drink water from livestock tanks or ponds on the range.

Some range grasses are harvested and stored in bales. Many types of grasses and crops like alfalfa are cut, raked into rows, dried in the sun and then baled. Bales can be round or square, small or large.

The machine that rolls the dried plants is called a baler. It is pulled with a tractor. The baler above makes large round bales. The bale to the right is a small square bale.



Farm Animals



Did you know?

On average, each American eats more than half a pound of meat every day!

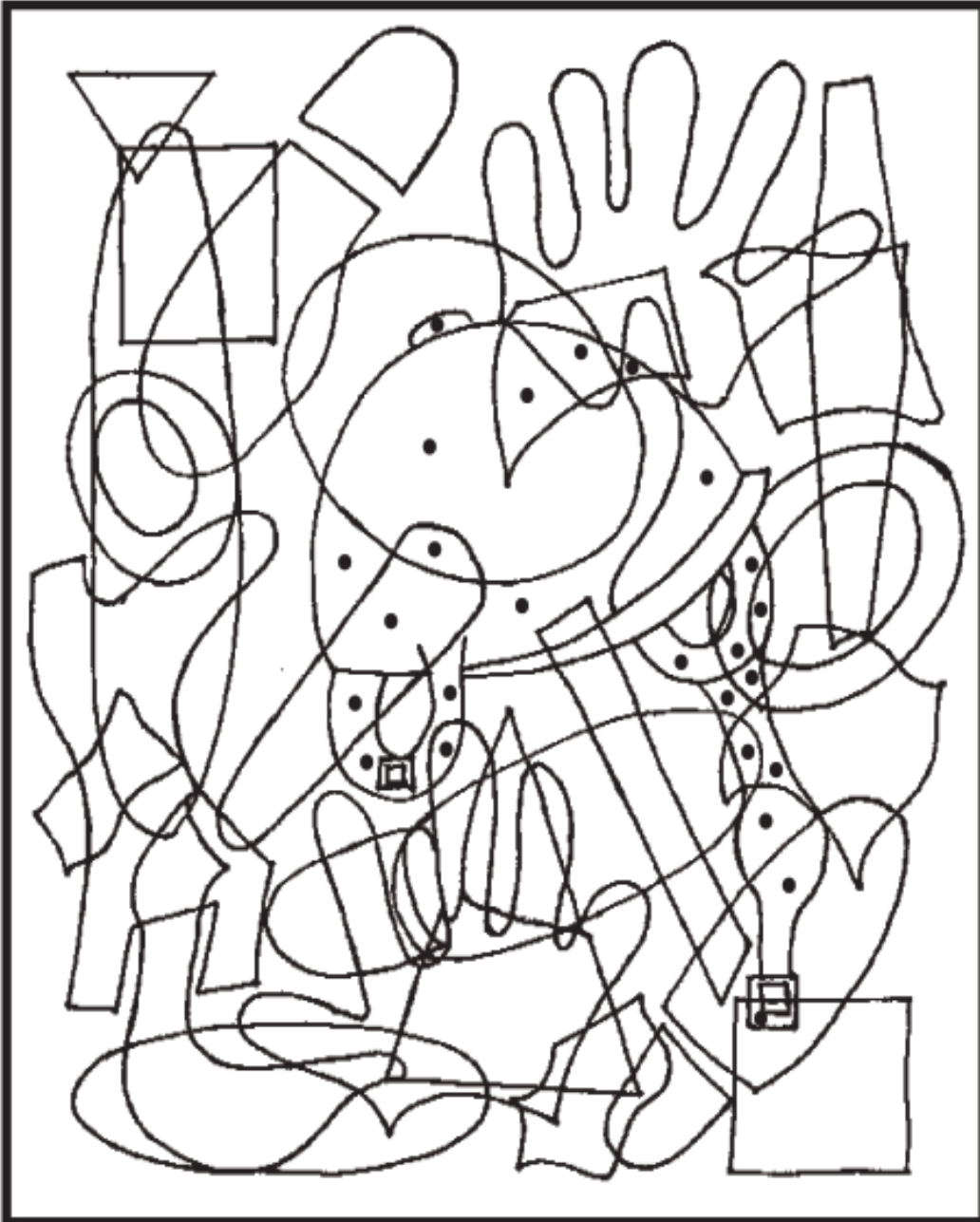
Many animals are grown in our country on farms. They are cared for in pens, or areas of land that have a fence around them. From animals we get many things we use every day.

Food like meat, milk, cheese, and eggs come from animals. Other things like leather, wool, candles, cleaners, and medicines come from animals too.

Personal and Animal Safety

Many people that do not have farms own pets. Pets can be cats, birds, dogs or horses. Be safe around all animals, including pets.

Directions: Use your head and color in all the spaces with dots to find out what you should always wear when riding your horse or bike!



Aquaculture

Aquaculture is how we get lobster, abalone, shrimp, seaweed and many types of fish. Some of these animals are raised in ponds or tanks and some grow in oceans, lakes or rivers.

Directions: Write the word of the number of animals in the picture. One letter is given as a clue in each word.



— n —



t
— — —



— — — e —

Fun Fact

Salmon may swim up to 3,000 miles to return to where they were hatched to lay their eggs.

Food Processing

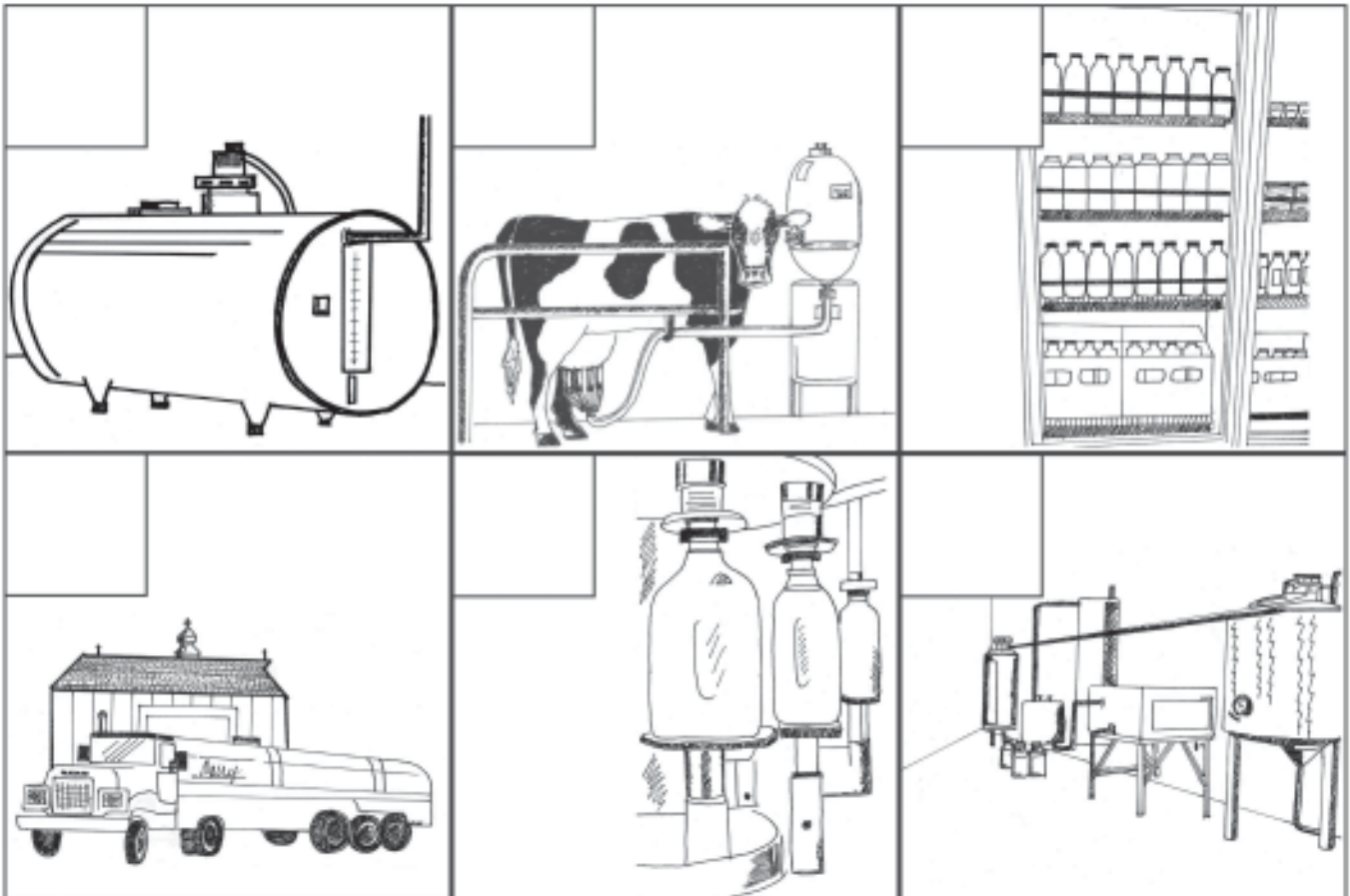
Before most food products get to the grocery store they go through some change.

Fruits and vegetables are washed. Wheat is ground into flour and baked into bread. Meat is cut and cooked.

These steps are important to making food safe and easy to eat.

Directions: Below are pictures showing how milk gets from the cow to the grocery store shelf. Label the pictures from one through six with one being the first step and six the last step.

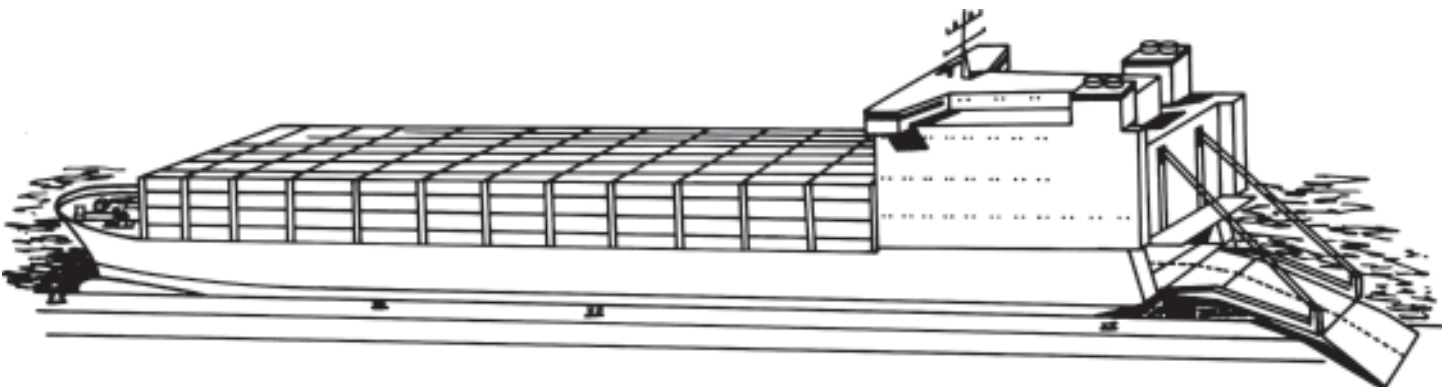
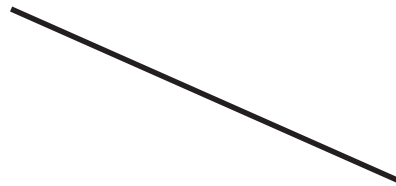
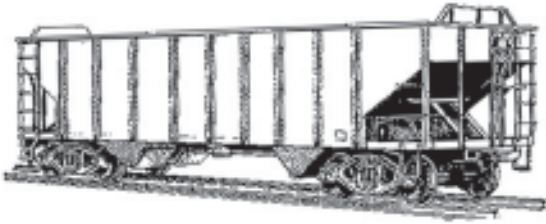
Did you know?
Americans eat 1 1/2 pounds of dairy products every day!



Product Transportation

Things grown on American farms must be moved to many places. There are three main ways of moving or transporting products. Products are moved by rail, road and water.

Directions: Match the vehicles to what they move on. One is done for you.

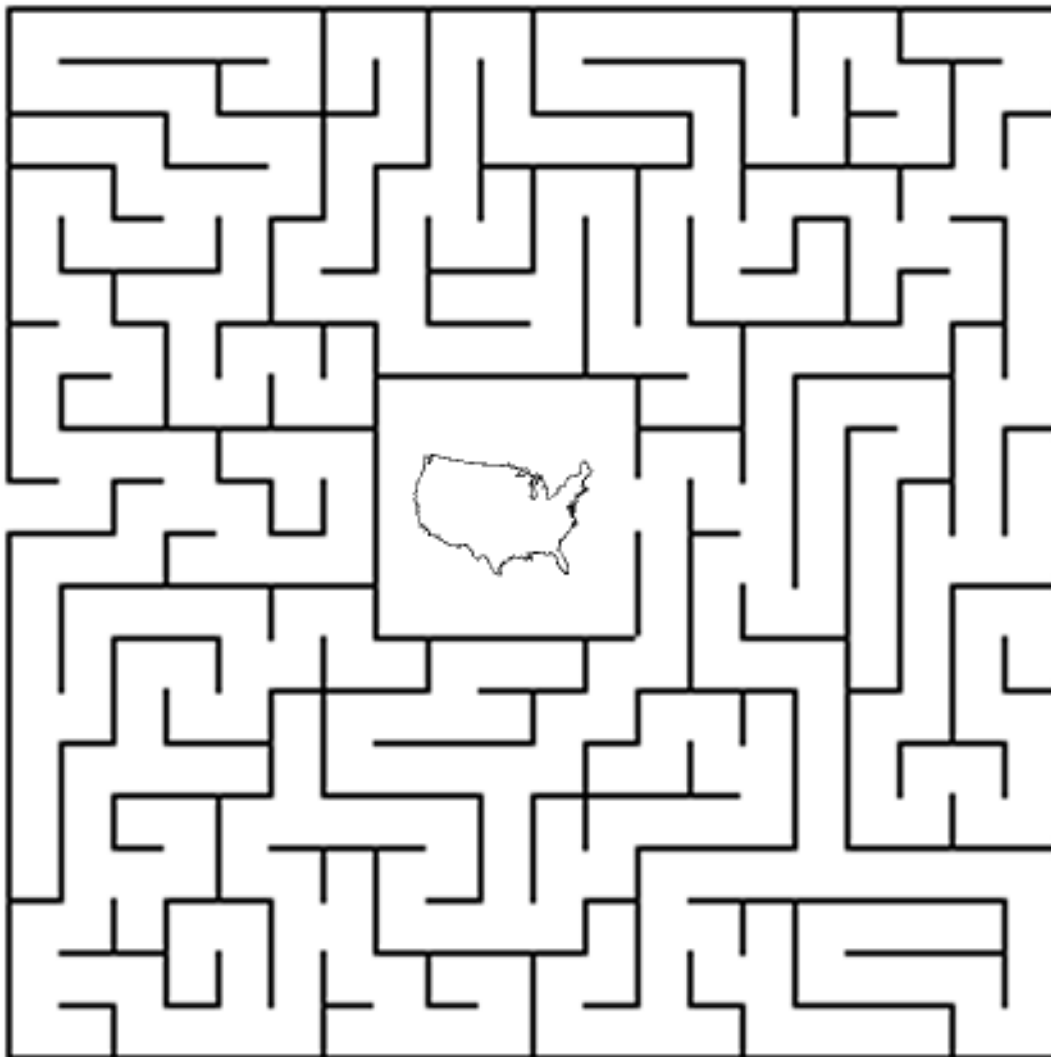


Trade

Some of the food and items made in our country are sold to people in other countries. America also buys food and items from other countries. Buying and selling is called trade.

Without trade with other countries Americans would have no bananas, would eat grapes only in the summer and fall, and would have fewer salads in the winter.

Directions: Find the path through the maze to move food and items out of our country.



Farms Are Important

Farmers of all kinds provide our country with safe and secure food and plentiful items we use every day. Farming is important to small towns. Those small towns have many business people that help farms.

Directions: Find and circle the careers important to farming below. One is done for you.

n c m k q r r t b a
d a l x e e t a c r
a m i y h r n c r e
l z w c u f o x o t
r a a c i u k y t s
l e k b n t u u i e
t e t t c h e f d r
r v a c z t f i e o
v n r e k n a b d f
t r o l e s n u o c

accountant

banker

chef

~~counselor~~

dietician

editor

forester

lawyer

teacher

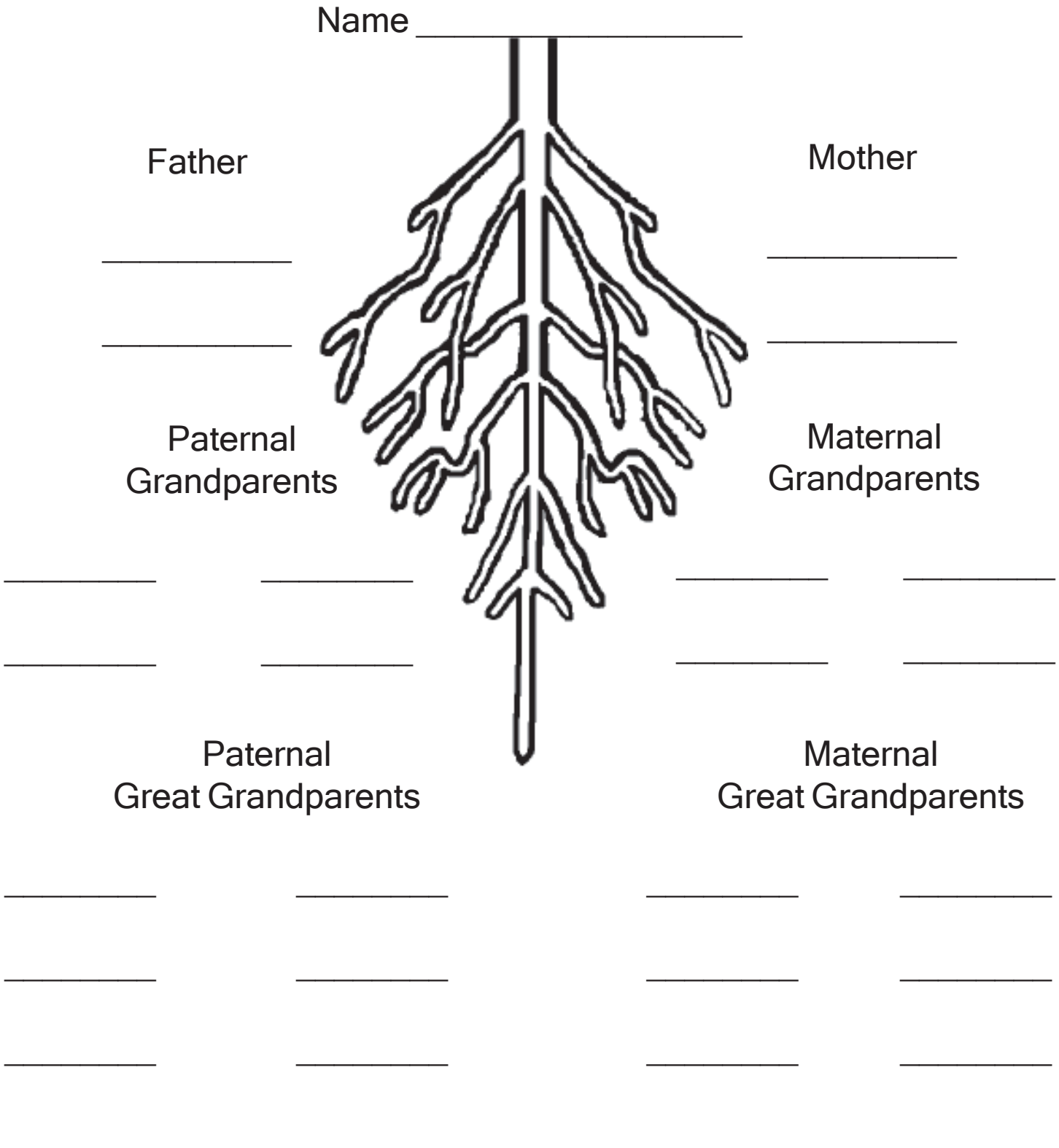
trucker

Fun Fact

One in six jobs in our country is related to agriculture!

Farming Heritage

Do you have roots on a farm? Have your parents help you fill out the diagram with names of your family and their jobs. Ask them if you have roots on the farm!



Glossary

Word	Definition
Abalone	A shellfish with a soft body and a single oval shell. The body is used as food, and the shell is used in jewelry.
Accountant	A person whose work is keeping or checking business financial records.
Agriculture	The work and science of growing crops and raising animals for food, fiber, energy and other products.
Alfalfa	A type of legume plant used mostly as feed for farm animals.
Aquaculture	The work and science of producing food that grows in water.
Banker	A person who owns or works in a bank. Banks lend money to people.
Bookbinding	The cover and materials that hold a book together.
Business	The work or trade in which a person is engaged.
Canola	A variety of rapeseed from the mustard family of plants produced for oilseeds used for food oils, industrial oils and energy production.
Chef	A cook, especially the head cook at a restaurant or hotel. Their job is to prepare food for people to eat.
Chemical Sprayer	Some farmers used chemicals to kill weeds and harmful bugs to help plants grow. Some farmers apply (put on) chemicals as a mist of tiny drops to fields by pulling a chemical sprayer behind a tractor.
Counselor	A person who gives advice.
Dairy Products	Foods including drinking milk and foods made from milk such as cheese, ice cream and yogurt.
Dietician	A person who specializes in the study of nutrition as it relates to health.
Diseases	A sickness or specific illness in plants and animals as well as humans.
Drought	A long period of dry weather with little or no rain.
Editor	A person who prepares pieces of writing ready for printing, by arranging, correcting, or changing what has been written.
Electricity	Electricity is a form of energy that comes from the movement of negative and positive charges that are in everything. Electricity is the power that lights lamps and makes appliances work.
Energy	The power of certain forces in nature to do work. Everything needs energy to work or move. Two types of energy are electrical and mechanical energy. Food is a source of energy for people. Animals also eat food to supply them with energy. Ethanol, made from corn, is a form of energy that is used to power cars. Biodiesel from soybeans is also used to power vehicles.
Equipment	All the special things that are needed for some special purpose. Farm equipment includes machinery used for tilling (digging), planting, harvesting, processing and transporting crops.
Farm	Farms are where plants are grown and animals are raised. Some farms have only plants, some farms have only animals, and some farms have both.
Farmer	Farmers produce food by growing plants and tending animals.
Feed	1. When animals feed, they eat. 2. Food for animals.

Glossary

Word	Definition
Fiber	Any of the parts like threads that form the tissue of animals and plants. Cotton fibers are spun into yarn. Fibers from trees are used for paper or wood. Fibers from sheep, wool, is used for clothing.
Flax	A plant with blue flowers and long leaves that produces oil and fiber used to make linen.
Forester	Someone who is trained in the maintaining and developing of forests.
Fuel	Something that is burned to give heat or power. Coal, gas, ethanol, biodiesel, oil, and wood are fuels.
Fungi	A type of plant that has no leaves, flowers or roots. Examples are mushrooms and mold. Many are extremely poisonous. Fungi is plural of fungus.
Grains	Cereal plants from the grass family. Feed grains include seeds, leaves, and stems such as corn and oats that are consumed by animals. Food grain seeds such as wheat, corn and rice are used for humans. Energy grain such as corn can use all parts of the plants to produce energy.
Hail	Small, round pieces of ice that sometimes fall during a thunderstorm.
Harvest	To gather or collect once a crop is mature. Grain is harvested from a field.
Hatched	When an egg is hatched, a baby bird or reptile breaks out of the shell.
Heritage	Valuable or important traditions handed down from generation to generation.
Lawyer	A person whose profession is giving others advice on law or representing them in a court of law.
Leather	A material made from the skin of cows, pigs, goats, or other animals by cleaning and tanning it.
Legume	A plant with seeds that grows in pods. Peas, beans. Lentils, peanuts and alfalfa are legumes.
Lightning	A flash of light in the sky. It is produced when electricity passes from one cloud to another or between a cloud and the earth.
Livestock Tank	A large container to hold drinking water for animals.
Lobster	A large shellfish that has five pairs of legs. The front pair of leg ends in large pincers. People eat lobsters.
Machine	A machine is made up of fixed and moving parts, for doing some type of work. A mower is a machine for cutting grass. Machinery is the plural word.
Milled	1. Grind grain into flour or meal. 2. Processed into textiles, wood, paper, steel, etc.
Minerals	A solid substance that was never an animal or a plant and that was formed in the earth by nature. Iron, granite, and salt are minerals.
Nutrients	Any substance or matter that is needed for the life and growth of plants, animals, or people. Proteins, minerals and vitamins are nutrients.
Particle	A very small piece.
Peanuts	A nutlike seed that grows in underground pods, eaten roasted, used for food oils, made into peanut butter and cooking oil.
Pest	Any creature that causes serious interference with human activity.

Glossary

Word	Definition
Planted	To put a plant or seed in the ground so that it can grow.
Plentiful	Existing in a great quantity. Much.
Pollen	Tiny yellow grains produced in the center part of a flower
Produce	Verb: to make or bring forth. The apple tree produces apples.
Products	Something produced by human or mechanical effort or by a natural process. Farm products include milk, meat, and grains for animals and people.
Provide	To make available.
Raked	Collected grasses or plants put together in rows by a machine called a rake.
Ranch	A large farm, especially in the western part of the U.S., where cattle horses, sheep or other animals or crops are raised.
Recycle	To put something through a special process so that it can be used again.
Scientist	A person who studies nature and the physical world by testing, experimenting and measuring.
Seaweed	A plant that lives and grows in the ocean.
Shelter	Something that provides cover or protections, as from the weather. A barn is a shelter on a farm. A house is a shelter for people.
Shrimp	A small shellfish with a long tail. People eat shrimp.
Shrub	A plant or bush with woody stems that branch out at or near the ground.
Soil	The top layer of earth in which plants grow.
Temperature	A measurement of how hot or cold something is and measured by a thermometer.
Toolbox	Tools are stored or carried in a toolbox.
Tools	Tools help us do work and make things. Farmers use hand tools like wrenches and hammers to fix things on the farm.
Transport	To move something from one place to another.
Turf	Surface or top layer of grass and soil on a lawn or playing field.
Variety	A different type of the same thing as in a new variety of apples.
Wall Covering	A common name used is wallpaper. Some products also use vinyl, grasses and metallic materials in addition to paper.
Weed	A plant that is useless or harmful and growing where it is not wanted.
Wind	A strong current of air.
Wool	The soft, curly hair of sheep, or the hair of some other animals, such as goat or llama. Clothing can be made out of wool.

My Farm Pictures

Use this page to draw and color what you would like to see at a farm.

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