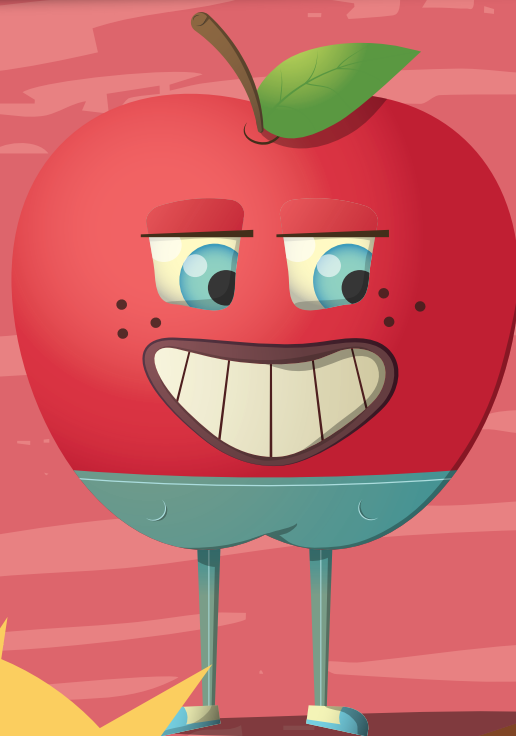


NAME \_\_\_\_\_

DATE \_\_\_\_\_



INCR-EDIBLES  
FRESH FROM THE  
**FARM**  
WORKSHEETS



# APPLES FRESH FROM THE FARM

PUT THESE IN ORDER

Follow the apple's journey from its start in the orchards of Washington to its delicious finish. Preparing for a new growing season starts in the winter. Put these in order by numbering the steps from 1 to 6.



## PACKING

Apples are sorted by color, size and quality before they are shipped. Packed apples are then transported to your grocery store, school and around the world using cold trucks, railcars and ships.



## HARVEST

Apple harvest is August through November. Apples are picked by hand because they bruise easily. They are then carefully placed in large wooden or plastic bins and shipped to a cold warehouse for storage. This keeps the apples fresh and crunchy.



## ENJOY

Keep apples in your refrigerator at home to enjoy. An apple is an excellent choice of fruit for any meal or as a tasty snack because it provides fiber to keep you feeling full.



## THINNING

When apples have grown to the size of golf balls, orchard workers hand-pick the small, misshapen fruit and only the best apples are left to mature. Apples need sun, water and nutrients to continue growing.



## BLOSSOMS

Apple trees bloom in the spring. Buds on the tree turn into leaves and flowers. The flowers are pollinated by bees and will grow into apples.



## PRUNING

Branches on an apple tree are removed to make sure the tree can handle the crop load and the fruit gets plenty of light. Pruning is done during the winter to prepare for the next growing season.

INCREDIBLES  
FRESH FROM THE  
FARM

# WHO KNEW

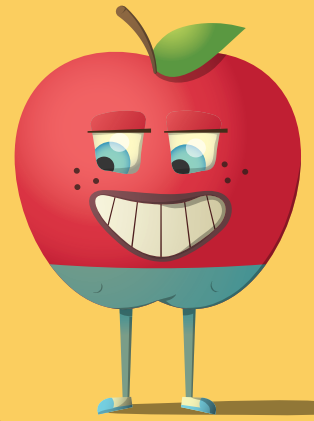
More than 7,500 kinds of apples are grown around the world.

An apple tree takes 4-7 years to reach its full potential.

Washington apples are sold in all 50 states and over 50 countries worldwide.

Apple trees were first brought to North America by European colonists.

Johnny Appleseed introduced apples by planting small apple nurseries on farms throughout Ohio, Pennsylvania, Indiana and Illinois.



## DRAW THE FOUR SEASONS OF AN APPLE TREE



WINTER



SPRING



SUMMER



FALL

## WORDS TO LEARN

CONNECT THE WORD WITH THE MEANING

1. POLLINATION 2. FIBER 3. NUTRIENTS



are substances that provide nourishment essential for growth and the maintenance of life.



is the process where plant pollen is transferred from one apple tree to another leading to fertilization and the beginning of a new seed.



is found in plant foods and our bodies can't digest it. It pushes through our digestive system, absorbing water along the way to help our bodies remove waste.

## HOW MANY APPLES CAN YOU IDENTIFY?

Each year Washington harvests over 100 million boxes of apples with each box weighing over 40 pounds. The top 6 kinds of apples harvested in Washington are listed to the right. Can you match the names to the pictures?

1. GRANNY SMITH

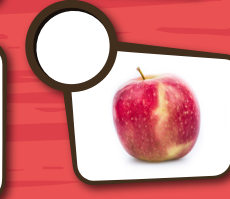
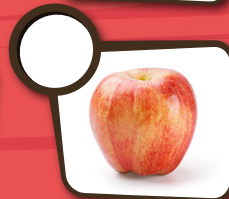
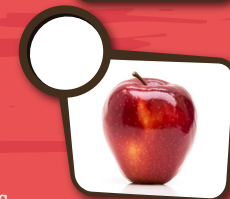
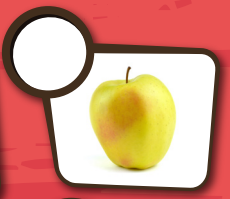
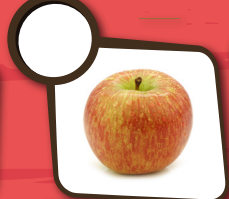
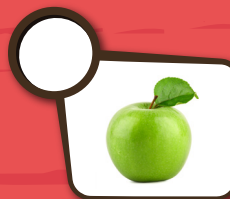
2. PINK LADY

3. RED DELICIOUS

5. GOLDEN DELICIOUS

4. GALA

6. FUJI





# CARROTS FRESH FROM THE FARM

PUT THESE IN ORDER

Follow the carrot's journey from its start in the fields of Washington to its delicious finish. Put these in order by numbering the steps from 1 to 6.



## IRRIGATION

Once the soil has been tested, the farmers will make sure it is a fine texture with good water-holding ability. A regular water supply is needed for good color and growth.

Carrots are watered using sprinklers and need about 1 inch of water per week.



## PACKING

Carrots are washed and inspected when they arrive at the cold storage warehouse. Any damaged or diseased carrots are removed. Carrots are then packed and transported in cold trucks and railcars to grocery stores or processing plants.



## PLANTING

The part of the carrot we eat is the root that grows underground. Carrots are planted as seeds in early spring. The tiny seeds are planted in rows just below the surface.



## ENJOY

Carrots are a sweet snack having more natural sugar than all other vegetables. Carrots are a good source of vitamins A, C, K and fiber.



## HARVESTING

Carrots are ready when they reach the right size. This usually takes less than 3 months. Carrots are harvested using a machine that digs them up or pulls them out by their tops. The tops are cut off right away because carrots can keep growing.



## GROWING

The soil is tested to make sure it is uniform and has the nutrients the carrot needs to grow. As the carrot matures, carotene collects causing the root to change from white to yellow and then to orange.

INCR-EDIBLES  
FRESH FROM THE  
**FARM**



# WHO KNEW

The average American eats 8 pounds of carrots per year.

Thousands of years ago the first carrots were purple and white.

Carrots provide 30% of the vitamin A consumed by Americans.

Most baby carrots are made from larger carrots.

Washington ranks number 2 out of 50 states in carrot production.



## FIND THE CARROTS THAT ARE CHANTENAY

Carrots are grown in both western and eastern Washington. In fact, Washington State leads the nation in the production of "dicer" carrots. Using the "words to learn" section, identify the carrots below you think are Chantenay or "dicers."



## WORDS TO LEARN

CONNECT THE WORD WITH THE MEANING

1. CAROTENE 2. SLICERS 3. DICERS

is found in carrots and protects plant cells from being damaged. The human body converts it into vitamin A.

is another name for the Chantenay carrot. These carrots are short and thick making them popular for processing into frozen meals or soups.

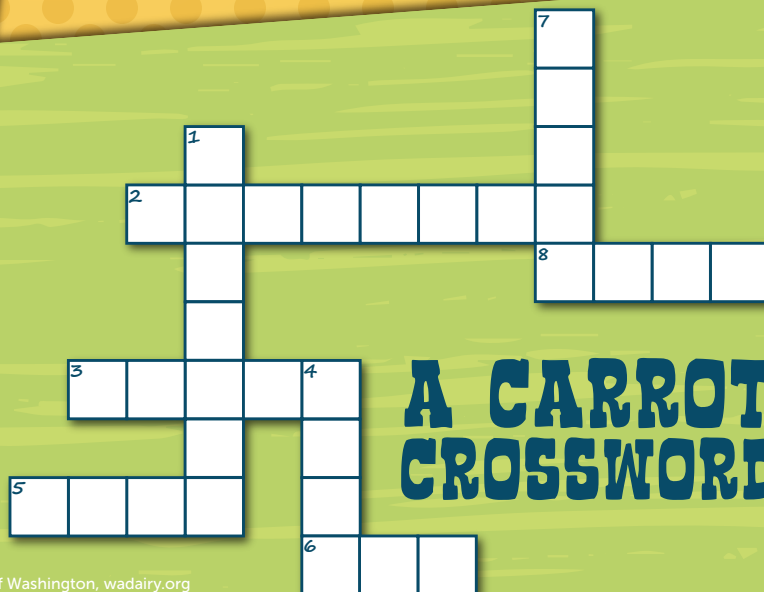
is another name for the Imperator carrot. These carrots have a long skinny root and are usually sold whole at the store. Perfect for slicing at home.

### Across

2. Gives carrots their orange color
3. Gives carrots their sweet flavor
5. Carrots are kept \_\_\_ to keep them fresh
6. This part of the carrot is removed after harvest
8. Seeds are planted in

### Down

1. These carrots are removed after inspection
4. The part of the carrot we eat
7. Carrots are a good source of this



## A CARROT CROSSWORD

# MILK FRESH FROM THE FARM

PUT THESE IN ORDER

Follow milk's journey from its start on a Washington dairy farm to its delicious finish. Put these in order by numbering the steps from 1 to 6.



## MILKING

Cows are milked at least twice a day by a milking machine that gently takes milk from the cow's udder and puts it in a storage tank where it is cooled to keep it fresh.



## TRANSPORTATION

Milk is a fresh and local product. It is tested before it leaves the farm in a cold, sealed tanker truck to travel to a processing plant. Milk takes less than two days to go from the cow to your local grocery store or school.



## HEALTHY COWS

Cows on a dairy eat about 90 pounds of feed per day, including grass, hay, grain, soybean meal, vitamins, minerals and other foods. Dairy farmers take good care of their land and cows because healthy, comfortable cows make high-quality milk.



## PROCESSING

Milk is pasteurized using heat to make sure it is safe before it is packaged or made into other dairy products like cheese and yogurt.



## ENJOY

Delicious, fresh and healthy dairy products should be enjoyed at every meal to get the three servings you need each day. Dairy foods like milk contain 9 nutrients including calcium, which is needed to build strong bones and teeth.



## SAFETY TESTING

At the processing plant, all milk is tested for bacteria to ensure it is pure and safe. 100% of the milk must pass the quality inspection.

INCREDIBLES  
FRESH FROM THE  
FARM

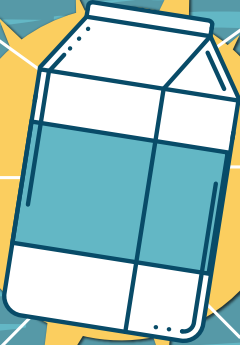


# WHO KNEW

Washington has over 300 dairy farms.

A cow will make 90 glasses of milk a day.

A cow's spots are like your finger prints: no two are the same.



All cows that produce milk are females.

You have one stomach but a cow has four.

Cows produce 90% of the world's milk but you can milk goats, camels, sheep, buffalo and even reindeer.



## FIND THE DAIRY FOODS WORD SEARCH

### Word Bank

Milk  
Chocolate milk  
Ice cream  
Cheese  
Kefir  
Cream  
Butter  
Whey  
Yogurt

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

## WORDS TO LEARN

CONNECT THE WORD WITH THE MEANING

### 1. PASTEURIZE 2. BACTERIA 3. NUTRIENTS

are everywhere and some are good for you but others can be harmful. Like many other foods, milk is always tested to make sure it's totally safe before it goes to the grocery store.

means to heat milk to 160°F or above for 15 seconds to destroy bacteria and keep milk safe and wholesome.

Your body needs \_\_\_\_\_ to perform at its best. Milk provides calcium, potassium, magnesium, vitamin D, vitamin A, protein, riboflavin, vitamin B12 and niacin.

## DO YOU RECOGNIZE THESE SPOTS?

Washington has dairy farms on both sides of the Cascade Mountains. There are many breeds of dairy cows but the five most common breeds are all milked here in Washington. Look at the different breeds. Check the cows you have seen at a fair or on a farm.



Milking Shorthorn



Holstein



Jersey



Guernsey

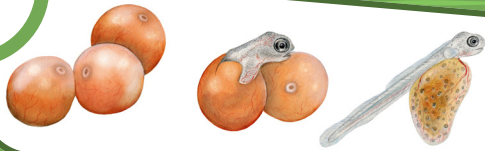


Brown Swiss

# SALMON FRESH FROM THE FARM

PUT THESE IN ORDER

Follow the salmon's journey from its start in a Washington river or stream to its delicious finish. Put these in order by numbering the steps from 1 to 6.



## EGGS TO ALEVIN

Salmon lay their eggs in the gravel for insulation from the cold water and protection from predators.

When an egg hatches, the baby salmon is called an alevin. The alevin stays buried in the gravel living off the food in its yolk sac.



## FISHING

Adult salmon live in the ocean where there is more food and the fish can grow quickly. Commercial fishermen catch adult salmon using nets. About 10% of the salmon caught in Washington are wild while the rest have been raised in hatcheries.



## FRY

The alevin becomes a fry when the yolk sac has been used up. The small fry are not strong enough to spend time in the main current. You can find them in backwater pools and at the edge of the stream where there are places to hide and grow into smolt.



## ENJOY

Salmon is a healthy, local source of lean protein whether it is in a can, frozen or purchased fresh.



## PROCESSING

Once caught, salmon are transported to a processing plant. At the plant the fish is cleaned, inspected, processed and graded. The grade of the salmon will help determine if it will be canned, packaged or sent fresh to your local grocery store.



## SMOLT

As the smolt begins its journey downstream toward the ocean it goes through changes. It loses its dark spots and its gills change so it can breathe in saltwater. Smolt may spend many months growing in an estuary. An estuary is the section of a river where it meets the ocean.

INCREDIBLES  
FRESH FROM THE  
**FARM**



# WHO KNEW

Salmon can get a sunburn.

A female Chinook salmon can carry up to 4,000 eggs.

The largest salmon on record was a Chinook salmon weighing in at 126 lbs.

You should try to have two servings of fish or seafood each week.

Salmon will travel back to the river or stream where they were born using their keen sense of smell.



## ARE THESE SALMON WILD OR NOT?

You can tell the difference between a wild salmon and a hatchery salmon by looking for the adipose fin on the salmon's back. Hatchery fish have their adipose fin removed. Can you tell which salmon was raised in a hatchery and which is wild? Label each salmon below.



1. \_\_\_\_\_



2. \_\_\_\_\_

## FISH SCALES TELL A TALE

You can learn about a salmon's life by studying its scales. If you look at a scale under a magnifying glass, it looks like this. When a fish lives through a season with less food to eat, its growth rings will be spaced closer together. Color in the part of this scale that grew when the fish had less food to eat.

## WORDS TO LEARN

CONNECT THE WORD WITH THE MEANING

1. PROTEIN 2. GRADE 3. COMMERCIAL

means the fish that has been caught is meant to go to market and make a profit.

is the system used to mark the quality of the meat by looking at the handling, odor, eyes, gills, skin and belly.

is found in all cells and is an essential part of our diets for building muscle, skin, hair and cartilage.



# WHEAT FRESH FROM THE FARM

PUT THESE IN ORDER

Follow wheat's journey from its start in the fields of Washington to its delicious finish. Put these in order by numbering the steps from 1 to 6.



## HARVESTING

When the wheat kernel is hardened, it is ready for harvest. Wheat is always harvested in the summer months using a machine called a combine. The farmer will adjust the combine to get the largest amount of wheat kernels.



## PLANTING

Before planting the seeds, wheat farmers test the soil to make sure all the nutrients are there for a healthy crop. Seeds are planted 2-3 inches below the surface and should be evenly spaced throughout the field. Wheat is usually planted in the spring and fall.



## GROWING

Most of the wheat grown in the Northwest is found on the east side of the Cascade Mountains. About 80% of this crop is soft white wheat which is made into flour and used to make cookies, crackers and cakes.



## MILLING

At the mill wheat kernels are cleaned and inspected. The outer bran layer is left on the kernel to make whole grain products or removed by soaking it in water. The wheat is then run through the mill, where it is broken into pieces and sifted into different types of flour.



## ENJOY

Wheat is used in all types of grain products and provides about 20% of the world's overall calorie intake. Whole wheat has more protein, fiber and B vitamins, so try to eat more whole wheat foods than those made from processed flour.



## IRRIGATION

Compared to other crops, wheat needs little water to grow but this depends on the type of wheat, climate and rainfall. Most wheat needs between 18 and 21 inches of water from seed to harvest.

INCREDIBLES  
FRESH FROM THE  
FARM



# WHO KNEW

One bushel of wheat weighs 60 pounds...

...Which makes 42 pounds of flour...

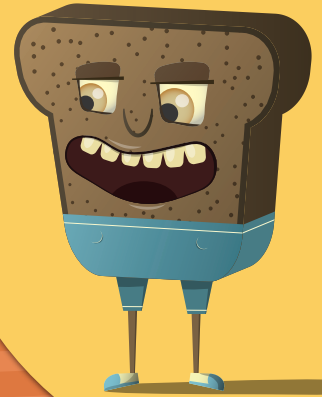
...And 90 one-pound loaves of whole wheat bread.



There are 6 types of wheat used to make different products.

Washington State produces over 100 million bushels of wheat a year.

Our ancestors were farming wheat as early as 10,000 years ago in what is now the country of Turkey.



## HOW HEAVY IS YOUR BUSHEL?

You have just finished harvesting your wheat for the season. You are happy to have two bushels of wheat that you would like to make into whole wheat bread. Using what you have learned in the "Who Knew" section, answer the questions below.

How many pounds of wheat do you have? \_\_\_\_\_

How many pounds of flour will you have? \_\_\_\_\_

How many loaves of whole wheat bread can you make? \_\_\_\_\_

## WORDS TO LEARN

CONNECT THE WORD WITH THE MEANING

1. B VITAMINS 2. CLIMATE 3. WHOLE GRAIN

is the usual weather patterns and conditions in a place or region.

are a class of vitamins that play important roles in the breakdown of substances to make energy.

products are made from 100% of the original kernel – all of the bran, germ and endosperm – must be present.

## ANATOMY OF A WHOLE GRAIN

Draw your own whole wheat kernel and label the three parts.

A whole wheat kernel has three parts.

**Bran**  
Protective outer shell. High in fiber and B vitamins.

**Endosperm**  
Contains starch, protein and some vitamins and minerals.

**Germ**  
The seed for a new plant. Contains B vitamins, some protein, minerals and healthy oils.



# INCR-EDIBLES FRESH FROM THE FARM

## 5 FOOD GROUP WORD SEARCH

### DAIRY

Cheddar  
Chocolate Milk  
Swiss cheese  
Milk  
Ice cream  
Yogurt

### VEGETABLES

Asparagus  
Corn  
Peas  
Carrot  
Onion  
Potato

### FRUITS

Apple  
Cherries  
Raspberry  
Pear  
Grapes  
Plum

### GRAINS

Wheat  
Graham crackers  
Oatmeal  
Tortilla  
Barley  
Pasta

### PROTEIN

Chicken  
Hazelnuts  
Salmon  
Beef  
Lentil  
Egg

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

