

# Activity Book





# What is a Specialty Crop

Specialty crops are defined as fruits, vegetables, tree nuts, dried fruits, horticulture, and nursery crops including floriculture.

Specialty crops are plants that are intensively cultivated. There are many plants that may be collected from wild populations that are considered specialty crops when cultivated. (Example: Blackberries)

Wild plants are not considered specialty crops even though they may be used for the same purpose as cultivated plants.

Oklahoma has several specialty crops. Take a look inside to learn more about the specialty crops and their uses in our state.



Watch images in this magazine come to life with information and videos.

To gain access to this additional content simply download the FREE Aurasma app, available for iOS and Android devices.

Then search for "OAITC" channel within the app and follow us!



For detailed instructions visit:  
<http://www.okagclassroom/ok>





# Apples

AITC Lesson:  
An Apple a Day

Apples are a fruit. They belong to the rose family. Apples come in almost every shade of red, green and yellow.

A bushel of apples weighs 42 pounds and can produce 20-24 quarts of applesauce.

The pilgrims planted the first apple trees in the Massachusetts Colony.

The science of  
apple growing is  
called pomology.

# Asparagus

Asparagus is a vegetable grown for its delicious young shoots. Asparagus can be grown in many soil types, but deep loam or sandy soils with good surface water and air drainage are best.

Water makes up 93% of asparagus' composition. Asparagus is low in calories and is very low in sodium.

Rich in B vitamins, vitamin C, calcium, and iron, asparagus is one of the first crops of spring harvest.



# Beets

Beets are a member of the goosefoot (chenopod) family. In earlier times people just ate the beet greens and not the root. People today eat both.

The wild beet is thought to have originated in North Africa and grew wild along Asian and European seashores.

Beets are a unique source of phytonutrients called betalains. Betalains provide antioxidant, anti-inflammatory and detoxification support.

Since the 16th century beet juice has been used as a natural red dye. The Victorians used beetroot to dye their hair.



AITC Lesson:  
Oklahoma's  
Berry Best



## Berries

Most blackberry  
plants live 15 to  
20 years.

Blackberries grow wild all over Oklahoma. They are very pervasive and grow quickly in our woods, scrub, hillsides and hedgerows. Blackberries are also produced commercially in Oklahoma.



A blackberry is best eaten fresh. They can also be used in preparing jam, jellies, ice cream, cakes and pies.

Blueberries are the most widely grown fruit crop in the US. They are one of the only natural foods that are truly blue in color. Blueberries are rich in vitamins C, manganese and dietary fiber.

Native Americans once called blueberries "star berries," because the five points of blueberry blossoms make a star shape.

Cowpeas provide  
strong yields,  
even in hot and  
dry conditions.  
The plants' roots  
infuse nitrogen  
into the soil.

## Black Eyed Peas

Black Eyed Peas are a minor commodity in Oklahoma. Also called cowpea or southern peas, they have been Oklahoma's number one vegetable crop for several years. The small beige bean has a black circular "eye" at its inner curve.

The mature bean contains 23-25 percent protein, 50-67 percent starch, and B vitamins, including folic acid. It is also rich in essential micro-elements, such as iron, calcium and zinc.



AITC Lesson:  
A Bean is  
a Seed





# Broccoli

Broccoli is a cool season vegetable. It grows well in Oklahoma gardens in early spring and in the fall.

Thomas Jefferson, often called the farmer president, was an avid gardener. He kept a detailed garden diary and recorded his planting of broccoli on May 27, 1767. His was the first recorded planting of broccoli in the US.

In Latin broccoli means "branch," or "arm."

*Ounce for ounce, broccoli has as much calcium as a glass of milk and more vitamin C than an orange!*

## Cauliflower

Cauliflower is a cruciferous vegetable, related to broccoli. It is a cool season crop, grown in Oklahoma gardens early in the spring and in the fall.

Cauliflower is an excellent source of vitamin C, a good source of folacin and a source of potassium.

Purple Cauliflower is wild and is actually better for us. The color is caused by anthocyanins, an antioxidant.



AITC Lesson:  
Bring on the Brassica Veggies



# Cabbage

AITC Lesson:  
Bubbles in the  
Cabbage Juice

Cabbage is a cool weather vegetable that grows fine in Oklahoma gardens, as long as it is planted very early in the spring or in the fall. Cabbage is one of only a few vegetables available fresh in the winter time.

Cabbage heads generally range from one to nine pounds, and can be green, purple and white. Cabbage is an excellent source of vitamin C and vitamin K.

Cabbage is prepared and consumed in many ways. The simplest options include steaming it or eating the vegetable raw. In the United States, cabbage is used primarily for the production of coleslaw, followed by sauerkraut production.

Columbus brought  
cantaloupe with  
him to the New  
World on his  
second voyage.

AITC Lesson:  
Melon Madness

# Cantaloupe



Cantaloupe grows well in Oklahoma.

Cantaloupe is the most popular melon in the United States.

Cantaloupe is an excellent source of vitamins A and C, a very good source of potassium and a good source of B6, folate and dietary fiber.

All cantaloupes are muskmelons, but not all muskmelons are cantaloupes.





# Carrots

AITC Lesson:  
Plant Parts We Eat

Carrots are a taproot, a type of root which grows downwards into the soil and swells. Carrots come in many sizes and shapes. Carrots are very easy to grow.

Carrots are members of the parsley family, characterized by the feathery green leaves. Other members include parsnips, fennel, dill and celery.

Carrots are an excellent source of beta-carotene, which our bodies turn into vitamin A. Carrots provide 30 percent of the vitamin A in the US diet.

Carrots taste best when grown in cool weather. When the weather is too hot, the carrots grow bitter.

# Cucumbers

Cucumbers are a great source of vitamin A, vitamin C, calcium and potassium.

Cucumbers are classified into three main varieties: slicing, pickling, and burpless. The pickling process removes or degrades much of the nutrient content, especially that of vitamin C.

Having an enclosed seed and developing from a flower, botanically speaking cucumbers are classified as accessory fruits. Much like tomatoes and squash they are often also perceived, prepared and eaten as vegetables.

Have you ever heard anyone say "as cool as a cucumber?" Cucumbers are made up of 90% water, making them feel cool inside.





# Grapes

AITC Lesson:  
Good Grapes

About 50 percent  
of the grapes grown  
in the US are  
used to make wine.

Oklahoma's climate and soils are favorable for growing grapes. Several species are native. All kinds of grapes can be grown in Oklahoma, but most of the grapes we find in the grocery store come from California or Chile.

Grapes are full of vitamin K and vitamin C. Grapes also have fiber, iron and calcium.

The grapes used to make raisins are different from table grapes. Another kind of grape is used to make grape juice. Table grapes are still harvested by hand in many places.

Grape-growing is the largest food industry in the world.

# Green Beans



AITC Lesson:  
A Field of Beans

Green beans are found in two major  
groups, bush beans and pole beans.

Green beans are a popular vegetable all around the world. They can grow as a plant in the home garden. They can climb high on trellis or supports. Green beans are also known as string beans or snap beans.

Green beans are marketed canned, frozen, and fresh. Green beans are often steamed, boiled, stir-fried, or baked in casseroles. A dish with green beans popular throughout the US, particularly at Thanksgiving, is green bean casserole.



# The ABC's of Agriculture

Can you name at least one type of crop or commodity grown by farmers for each letter of the alphabet?

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

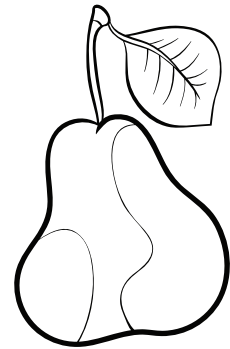
[www.agclassroom.org/ok](http://www.agclassroom.org/ok)

# Crop Cryptogram

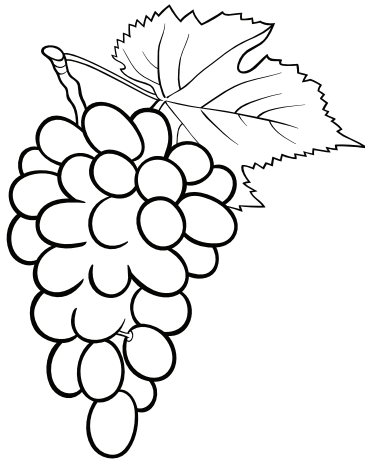
Decode the words by finding each substitute letter.

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

\_ \_ \_ \_ E  
Q F F V M



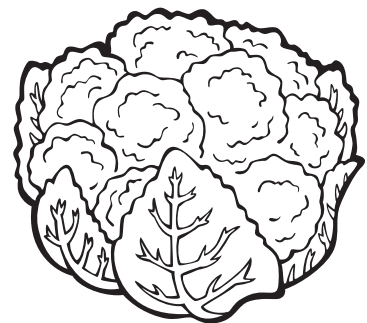
\_ \_ \_ T \_  
R M M J Z



\_ \_ \_ \_ A \_ \_ \_ \_  
S Q D J Q V E K F M

\_ R \_ \_ \_ \_  
A Y Q F M Z

\_ \_ \_ \_ S  
F M Q Y Z

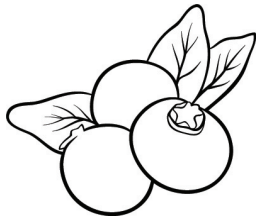


\_ \_ I \_ \_ \_ \_  
Z F C D Q S B

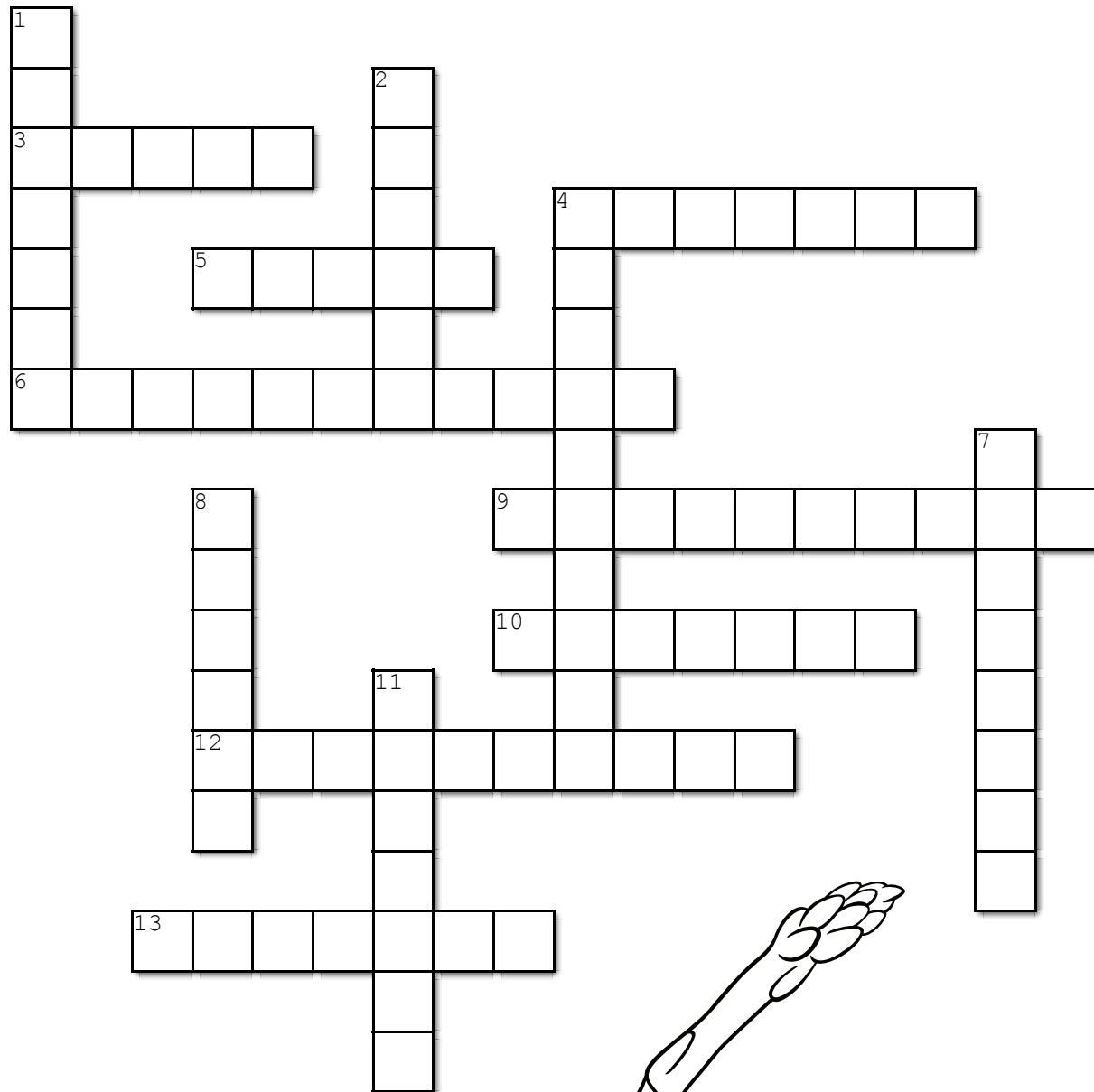


\_ \_ \_ \_ \_ \_ \_ N  
H Q J M Y W M V E D





# Fruit and Veggies Crossword Puzzle

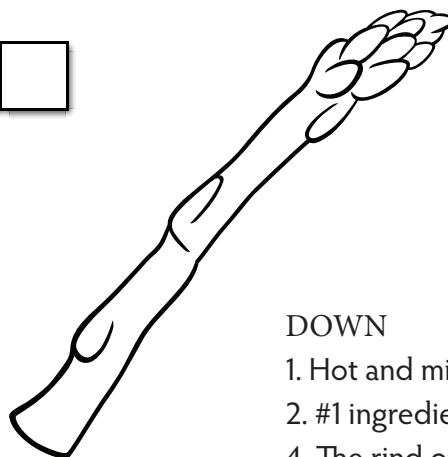


## ACROSS

3. This is a fuzzy stone fruit
4. Dip these into Ranch dressing
5. Tomatoes, cucumber and lettuce make a nice \_\_\_\_\_
6. The opposite of sour potato
9. Jam
10. A large and popular squash at Halloween
12. The seeds are on the outside
13. Popeye's favorite vegetable

## DOWN

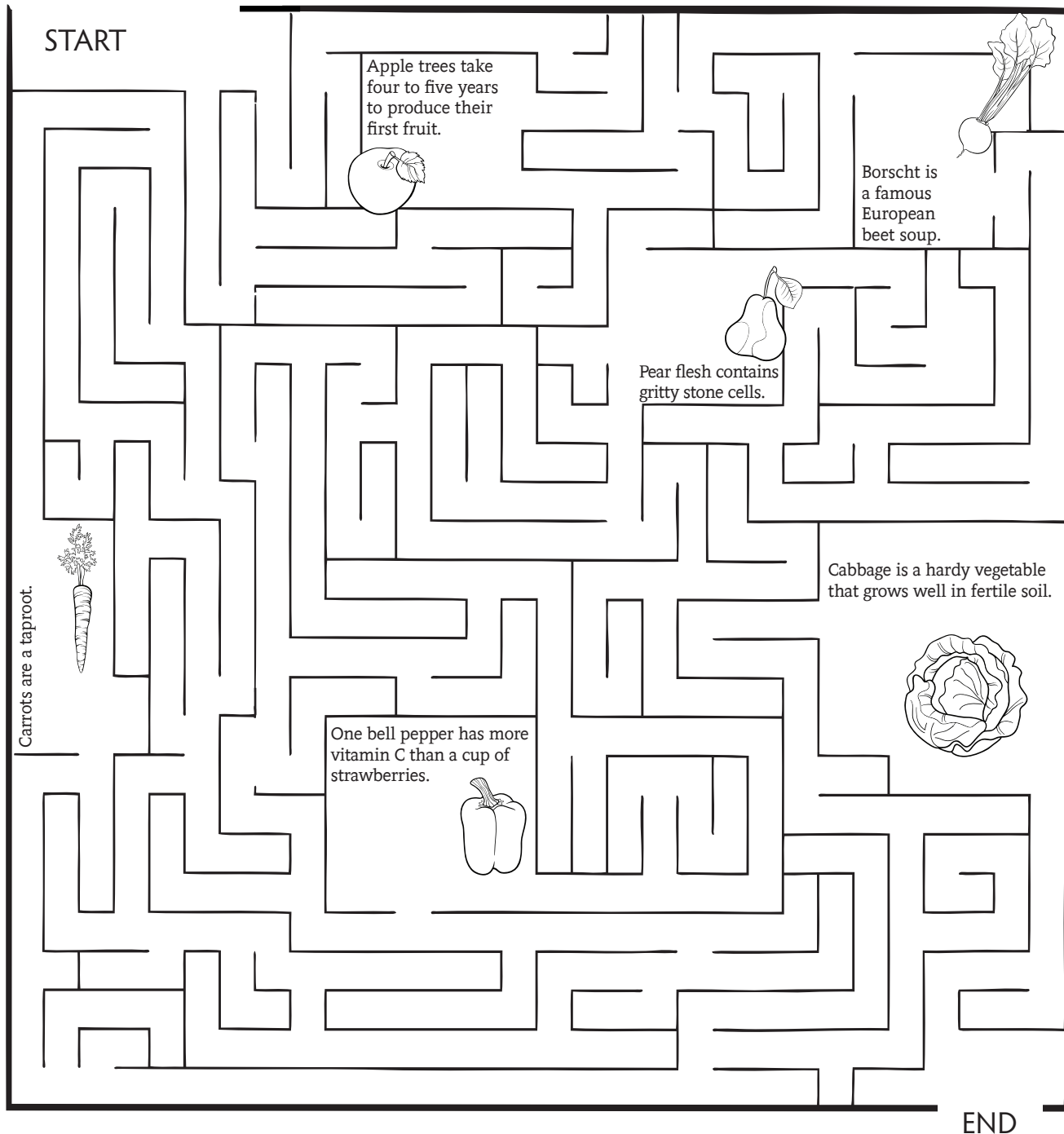
1. Hot and mild
2. #1 ingredient in ketchup
4. The rind of this melon looks like a spider web
7. This vegetable looks like a mini tree
8. Summer and winter
11. Can be purple or green



# A-MAZE-ing Specialty Crops



On average, there are 200 seeds on a strawberry.

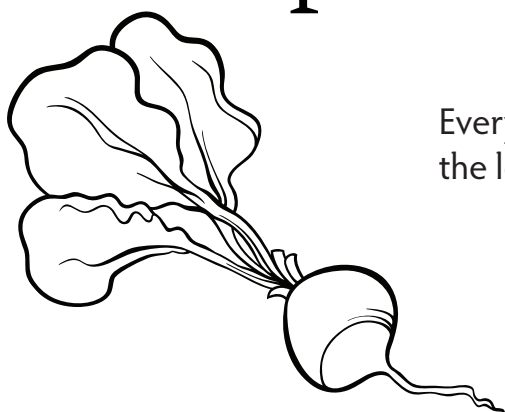


The US is the leading producer of blackberries.





# Specialty Sudoku



Every row, column and mini-grid must contain the letters SPECIALTY. Don't guess - use logic.

		A	L	T	E	Y		
	T	P	Y		C	L	A	
		T		E		P		
C	A	L		P		S	Y	E
		I		S		C		
	L	S	I		A	E	P	
		Y	E	C	S	T		

# Word Search

Read the poem, then find the bold words in the word search.

The **apple**, **pecan**, **pear** and **peach** all grow on trees,  
But what about the **tomato**, **peppers** and **black eyed peas**?

**Sweet potato**, **radish**, and **carrots** are roots,

And **beets** belong to the family goosefoot.

**Cantaloupe**, **squash** and **watermelon** have runners,  
**Cucumber** too, but not **broccoli**, **cabbage** or **cauliflower**.

Spinach is the most popular of the **greens**,

**Asparagus** is the same color but I prefer **green beans**.

Is there **strawberry** or **grape** jelly on a sandwich in your lunch pack?

A bowl of fresh **berries** is a great after school snack.

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



# Oklahoma Ag Trivia

Work the math problem; write your answer in the blank under the problem.  
Then use the letter code to find the letter that goes with your answer and write it in the box. When you're finished, you'll have your trivia answers.

This crop can be grown in Oklahoma's many different soil types.

$3 \times 3$     $24 - 2$     $3 \times 7$     $36 \div 4$     $9 \times 2$     $18 - 9$     $3 \times 4$     $25 \div 5$     $11 + 11$

--	--	--	--	--	--	--	--	--

Oklahoma farmers generally grow these in rows.

$54 \div 9$     $6 + 3$     $12 \times 2$     $14 - 12$     $6 \times 3$     $5 \times 4$     $16 \div 8$     $12 + 7$     $32 \div 8$     $37 - 20$

--	--	--	--	--	--	--	--	--	--

Native Americans once called them star berries.

$64 \div 8$     $11 + 8$     $35 \div 7$     $4 - 2$     $72 \div 9$     $22 - 20$     $36 \div 2$     $27 - 9$     $49 \div 7$

--	--	--	--	--	--	--	--	--

This vegetable grown in Oklahoma is popular all around the world.

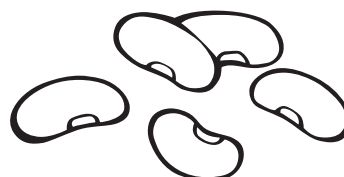
$6 \times 2$     $26 - 8$     $22 \div 11$     $10 - 8$     $12 + 5$     $4 \times 2$     $10 \div 5$     $81 \div 9$     $22 - 5$

--	--	--	--	--	--	--	--	--	--

Secret Letter Code:

1 2 3 4 5 6 7 8 9 10 11 12 13  
C E I O U W Y B A D F G H

14 15 16 17 18 19 20 21 22 23 24 25 26  
Q J K N R L M P S V T Z X



# Reading Nutrition Labels

Spinach, raw

Product Name

Nutrition Facts	
Serving Size 1 cup 30g (30 g)	
Amount Per Serving	
Calories 7	Calories from Fat 1
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat	
Cholesterol 0mg	0%
Sodium 24mg	1%
Total Carbohydrate 1g	0%
Dietary Fiber 1g	3%
Sugars 0g	
Protein 1g	
Vitamin A 56%	Vitamin C 14%
Calcium 3%	Iron 5%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Fiber	25g 30g
Calories per gram:	
Fat 9	Carbohydrate 4 Protein 4

Serving Size

Check Calories

Limit These Nutrients

Get Enough of These Nutrients

5% or less is LOW  
20% or more is HIGH

Footnote

Let's practice reading food labels so we can make smart food choices.

Food labels present nutrient information in two ways -  
QUANTITIES (such as grams or milligrams)  
and in PERCENTAGES of daily values.

Circle nutrients that are 10% or higher.

Asparagus, raw

Nutrition Facts	
Serving Size 1 cup 134g (134 g)	
Amount Per Serving	
Calories 27	Calories from Fat 1
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat	0%
Cholesterol 0mg	0%
Sodium 3mg	2%
Total Carbohydrate 5g	11%
Dietary Fiber 3g	
Sugars 3g	
Protein 3g	13%
Vitamin A 20%	Vitamin C 16%
Calcium 3%	Iron 1%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Fiber	25g 30g
Calories per gram:	
Fat 9	Carbohydrate 4 Protein 4

Beets, raw

Nutrition Facts	
Serving Size 1 cup 136g (136 g)	
Amount Per Serving	
Calories 58	Calories from Fat 2
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat	0%
Cholesterol 0mg	0%
Sodium 106mg	4%
Total Carbohydrate 13g	4%
Dietary Fiber 4g	15%
Sugars 9g	
Protein 2g	11%
Vitamin A 1%	Vitamin C 6%
Calcium 2%	Iron 1%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Fiber	25g 30g
Calories per gram:	
Fat 9	Carbohydrate 4 Protein 4

Carrots, raw

Nutrition Facts	
Serving Size 1 cup chopped 128g (128 g)	
Amount Per Serving	
Calories 52	Calories from Fat 3
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 88mg	4%
Total Carbohydrate 12g	4%
Dietary Fiber 4g	14%
Sugars 6g	
Protein 1g	2%
Vitamin A 428%	Vitamin C 13%
Calcium 4%	Iron 2%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Fiber	25g 30g
Calories per gram:	
Fat 9	Carbohydrate 4 Protein 4

Compare the nutrition labels and answer the following questions.

1. Which food is highest in protein? \_\_\_\_\_
2. Which food is lowest in sugar? \_\_\_\_\_
3. Which food is highest in sugar? \_\_\_\_\_
4. Which food is the best source of vitamin A? \_\_\_\_\_
5. Which foods have the same amount of vitamin C? \_\_\_\_\_
6. Which food has the most calories? \_\_\_\_\_
7. Which food has the fewest calories? \_\_\_\_\_
8. Which food(s) provides more than 100% of the daily recommended value?  
Which nutrient(s)? \_\_\_\_\_
9. Which food contains the highest % of dietary fiber? \_\_\_\_\_
10. Look at the sodium and rank the foods from lowest to highest content.  
\_\_\_\_\_  
\_\_\_\_\_

### Understanding the Percent Daily Diet

On food labels, they base the percentages on a 2,000-calorie adult diet. Nutrition specialists know how much of each one kids and adults should get every day to have a healthy diet. The percent daily value on a food label tells you how this food can help someone meet these daily goals.

Blueberries, raw

Nutrition Facts	
Serving Size 1 cup 148g (148 g)	
Amount Per Serving	
Calories 84	Calories from Fat 4
% Daily Value*	
Total Fat 0g	1%
Saturated Fat 0g	0%
Trans Fat	0%
Cholesterol 0mg	0%
Sodium 1mg	0%
Total Carbohydrate 21g	7%
Dietary Fiber 4g	14%
Sugars 15g	
Protein 1g	
Vitamin A	2% • Vitamin C 24%
Calcium	1% • Iron 2%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Fiber	25g 30g
Calories per gram:	
Fat 9	Carbohydrate 4 • Protein 4

Strawberry, raw

Nutrition Facts	
Serving Size 1 cup, halves 152g (152 g)	
Amount Per Serving	
Calories 49	Calories from Fat 4
% Daily Value*	
Total Fat 0g	1%
Saturated Fat 0g	0%
Trans Fat	0%
Cholesterol 0mg	0%
Sodium 2mg	0%
Total Carbohydrate 12g	4%
Dietary Fiber 3g	12%
Sugars 7g	
Protein 1g	
Vitamin A	0% • Vitamin C 149%
Calcium	2% • Iron 3%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Fiber	25g 30g
Calories per gram:	
Fat 9	Carbohydrate 4 • Protein 4



# Color by Number

Solve the division problems, and color by the code based on the quotients.

Red

5

Orange

7

Yellow

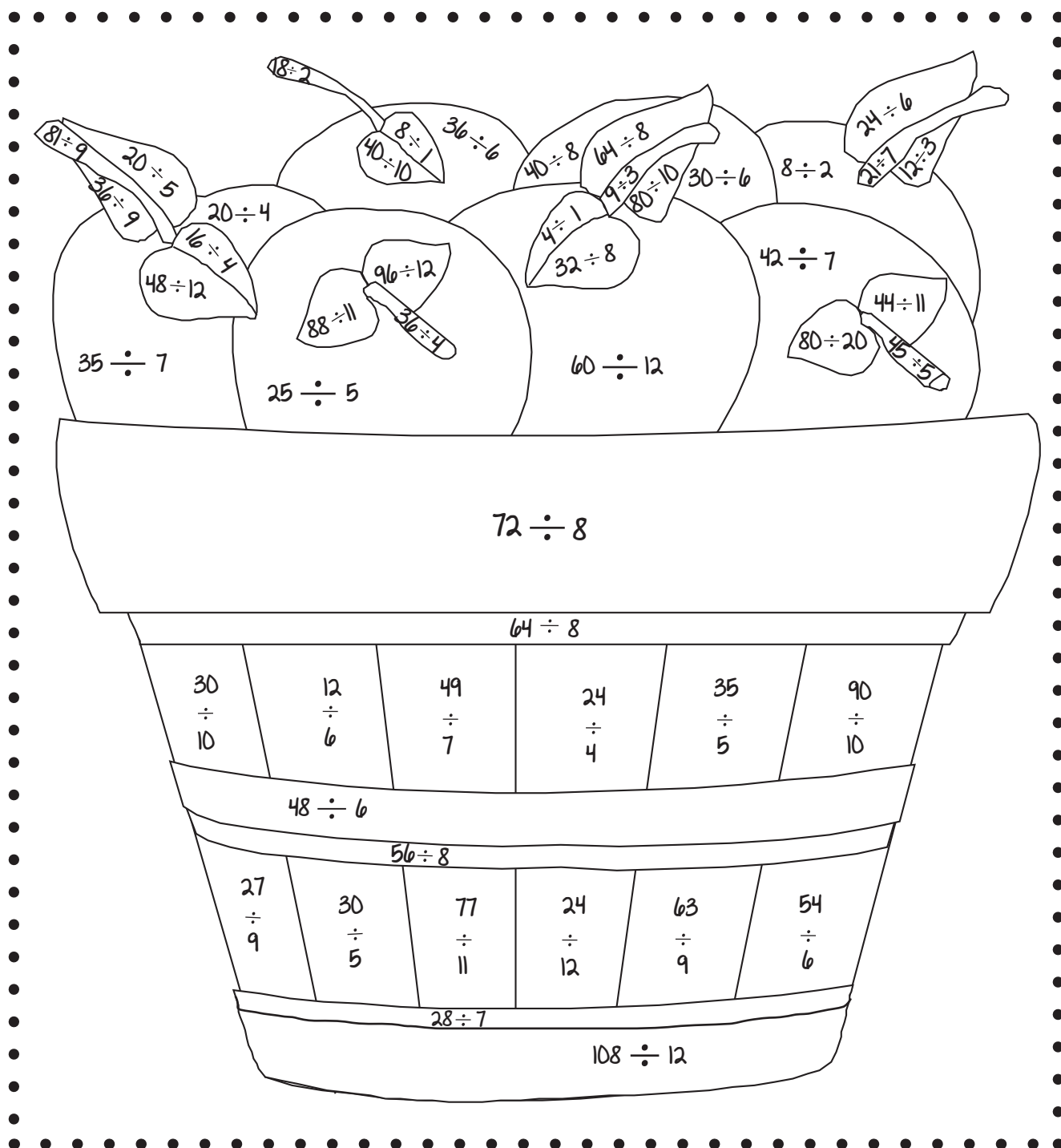
2, 6

Green

4, 8

Brown

3, 9



# Pecan Sudoku

Every row, column and mini-grid must contain the letters P E C A N S. Don't guess - use logic.



S					C
		C	N		
	S	P	C	A	
	C	A	S	N	
		N	E		
A					N

# Be an Editor

## ALT Lesson: Garden Grid

Read the following paragraphs. Look for spelling, punctuation and capitalization mistakes. Use the editing marks below and provide a correction. There are nine errors in the first paragraph, eight in the second, and seven errors in the last paragraph.

≡	Capital letter	✂	Take something out
◦	End punctuation	Ⓢ	Check spelling
/	Change to lower case	^	Add something

Plant's that are crowded do not grow well. They rob one another of the space, fertilizer, water and sun necessary for healthy growth. some plants need more space to grow than others. Squash, Cucumbers and melons, need room to sprawl along the ground. Some gardeners build trellises and train vining plants to climb in order too save space? Radishes require very little space and can be interplanted among Plants that need more room. Good gardiners plan their gardens to make sure every plant has all the space it needs.

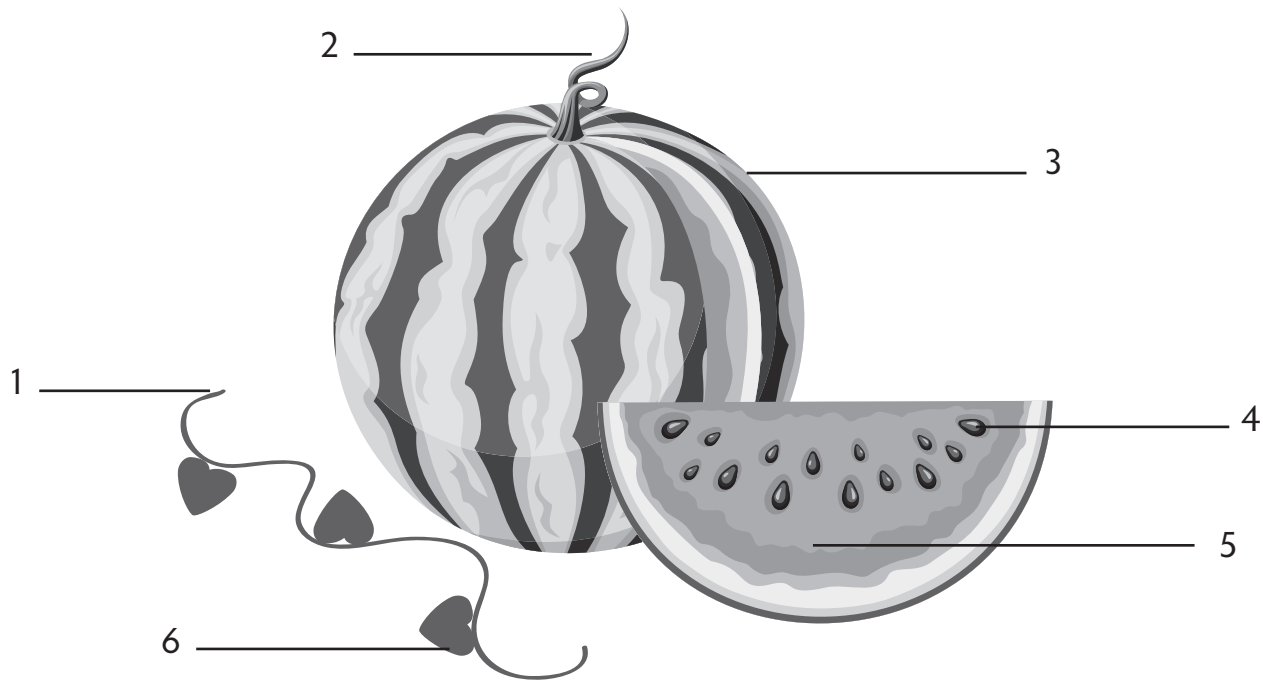
Cantalope needs plenty of space to grow, to. Like the pumpkin, its grows on a vine that spreads out along the ground. Cantaloupe are also called Muskmelon. They need plenty of sun and water and, like carrots, r a very good source of vitamins A and C, Each vine produces three or four fruits. when the fruit is ready it will break of the vine.

Radishes well when the weather is cool. There easily started from seed after the last spring frost. Seeds should be sown three to four inches apart, Radishes produce swollen roots that our white inside. they're bright color and spicy taste make them a fun addition to a tossed Salad. Radishes' are a good source of vitamin C.



# What's in a Watermelon?

Use the words in the wordbank to label the parts of a watermelon.



A rind

C leaf

E tendrils

B flesh

D runner

F seed

Working in pairs, students can make words from the letters that spell "watermelon." Have partners organize their words in columns of two, three, four, and five letter words. Examples below will get their "watermelons" rolling.

Determine which pair made the most words and which group made words that no one else found.

## WATERMELON

2 letters	3 letters	4 letters	5 letters
me	ate	worm	water
to	eat	term	melon
no	mat	torn	wrote

# Garden Scramble

Unscramble the words and use the number code to solve the puzzle.

EKLA

--	--	--	--

10

SERNEG

--	--	--	--	--	--

11 7

SIRHAD

--	--	--	--	--	--

8 19

ORCBOILC

--	--	--	--	--	--	--	--

4 2

RCEUBCMU

--	--	--	--	--	--	--	--

3 5 17

RYSRTERBAW

--	--	--	--	--	--	--	--	--	--

18 12 1

SISWS HACDR

--	--	--	--	--	--	--	--	--	--

6 20 24 13

RCEAWUOLFLI

--	--	--	--	--	--	--	--	--	--	--

21 16 14

ESTEWS AOPTOT

--	--	--	--	--	--	--	--	--	--	--

9 22 15 23

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

1 2 3 4 5 6 7 8 6 9 10 11 10 12 13 14 7

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

1 15 16 17 18 19 15 16 11 19 18 20 21 17 22

--	--	--	--	--	--	--	--

23 24 22 9 14 22 13 20

# Answer Key

## Crop Cryptogram

Decode the words by finding each substitute letter.

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

APPLE  
QFFVM

BEETS  
RMMJZ

CANTALOUPE  
SQDJQVEKFM

GRAPES  
AYQFMZ

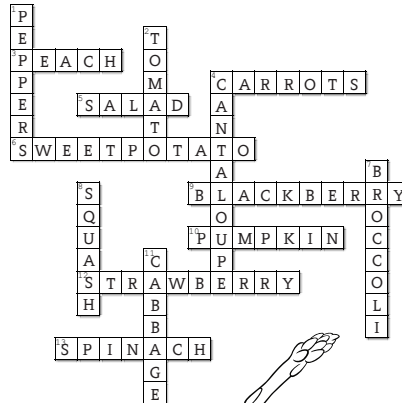
PEARS  
FMQYZ

SPINACH  
ZFCDAQSB

WATERMELON  
HQMZYWMVED



## Fruit and Veggies Crossword Puzzle

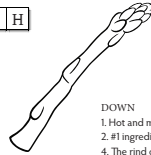


ACROSS

- This is a fuzzy stone fruit
- Dip these into Ranch dressing
- Tomatoes, cucumber and lettuce make a nice \_\_\_\_\_
- The opposite of sour potato
- Jam
- A large and popular squash at Halloween
- The seeds are on the outside
- Popeye's favorite vegetable

DOWN

- Hot and mild
- #1 ingredient in ketchup
- The rind of this melon looks like a spider web
- This vegetable looks like a mini tree
- Summer and winter
- Can be purple or green



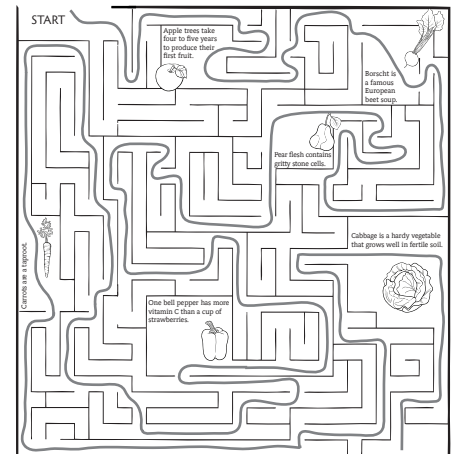
page 10

page 11

## A-MAZE-ing Specialty Crops



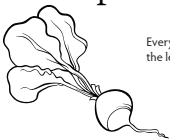
On average, there are 200 seeds on a strawberry.



The US is the leading producer of blackberries.

page 12

## Specialty Sudoku



Every row, column and mini-grid must contain the letters SPECIALTY. Don't guess - use logic.

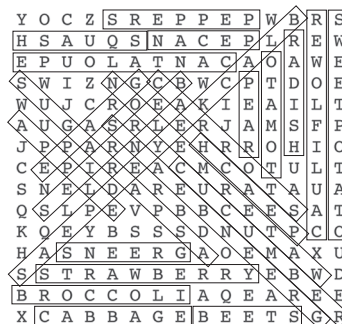
S	I	A	L	T	E	Y	C	P
L	Y	C	S	A	P	I	E	T
E	T	P	Y	I	C	L	A	S
Y	S	T	C	E	L	P	I	A
C	A	L	T	P	I	S	Y	E
P	E	I	A	S	Y	C	T	L
T	L	S	I	Y	A	E	P	C
I	C	E	P	L	T	A	S	Y
A	P	Y	E	C	S	T	L	I

page 13

## Word Search

Read the poem, then find the bold words in the word search.

The **apple**, **pecan**, **pear** and **peach** all grow on trees,  
But what about the **tomato**, **peppers** and **black eyed peas**?  
**Sweet potato**, **radish**, and **carrots** are roots,  
And **beets** belong to the family goosetoot.  
**Cantaloupe**, **squash** and **watermelon** have runners,  
**Cucumber** too, but not **broccoli**, **cabbage** or **cauliflower**.  
Spinach is the most popular of the **greens**,  
**Asparagus** is the same color but I prefer **green beans**.  
Is there **strawberry** or **grape** jelly on a sandwich in your lunch pack?  
A bowl of fresh **berries** is a great after school snack.



page 14

## Oklahoma Ag Trivia

Work the math problem; write your answer in the blank under the problem. Then use the letter code to find the letter that goes with your answer and write it in the box. When you're finished, you'll have your trivia answers.

This crop can be grown in Oklahoma's many different soil types.

3x3	24-2	3x7	36:4	9x2	18-9	3x4	25:5	11+11
9	22	21	9	18	9	12	5	22
A	S	P	A	R	A	G	U	S

Oklahoma farmers generally grow these in rows.

54:9	6+3	12x2	14-12	6x3	5x4	16:8	12+7	32:8	37-20
6	9	24	2	18	20	2	19	4	17
W	A	T	E	R	M	E	L	O	N

Native Americans once called them star berries.

64:8	11+8	35:7	4-2	72:9	22-20	36:2	27-9	49:7
8	19	5	2	8	2	18	18	7
B	L	U	E	B	E	R	R	Y

This vegetable grown in Oklahoma is popular all around the world.

6x2	26-8	22:11	10-8	12+5	4x2	10:5	81:9	22-5
12	18	2	2	17	8	2	9	17
G	R	E	E	N	B	E	A	N

Secret Letter Code:

1 2 3 4 5 6 7 8 9 10 11 12 13  
C E I O U W Y B A D F G H  
14 15 16 17 18 19 20 21 22 23 24 25 26  
Q J K N R L M P S V T Z X



page 15



# Answer Key

Compare the nutrition labels and answer the following questions.

- Which food is highest in protein? Asparagus
- Which food is lowest in sugar? Spinach
- Which food is highest in sugar? Blueberries
- Which food is the best source of vitamin A? Carrots
- Which foods have the same amount of vitamin C? Asparagus and Carrots
- Which food has the most calories? Blueberries
- Which food has the fewest calories? Spinach
- Which food(s) provides more than 100% of the daily recommended value? Which nutrient(s)? Carrots, vitamin A and Strawberries, vitamin C
- Which food contains the highest % of dietary fiber? Beets
- Look at the sodium and rank the foods from lowest to highest content. Blueberries, Strawberry, Asparagus, Spinach, Carrots, Beets

**Understanding the Percent Daily Diet**  
On food labels, they base the percentages on a 2,000-calorie adult diet. Nutrition specialists know how much of each one kids and adults should get every day to have a healthy diet. The percent daily value on a food label tells you how this food can help someone meet these daily goals.

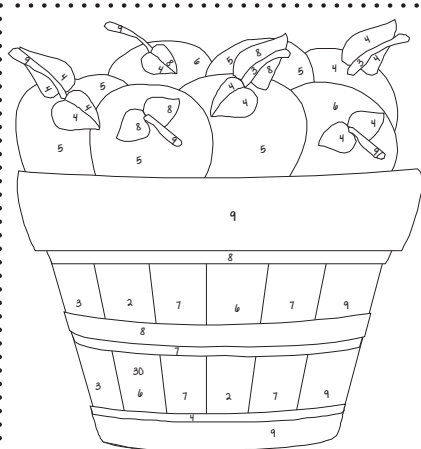
Blueberries, raw		Strawberry, raw	
Nutrition Facts		Nutrition Facts	
Serving Size: 1 cup (144 g)		Serving Size: 1 cup (160 g)	
Calories 80		Calories 40	
Amount Per Serving		Amount Per Serving	
Total Fat 0g		Total Fat 0g	
Saturated Fat 0g		Saturated Fat 0g	
Trans Fat 0g		Trans Fat 0g	
Cholesterol 0mg		Cholesterol 0mg	
Sodium 0mg		Sodium 0mg	
Total Carbohydrate 21g		Total Carbohydrate 12g	
Dietary Fiber 2g		Dietary Fiber 2g	
Sugars 15g		Sugars 7g	
Protein 1g		Protein 1g	
Vitamin A 20% • Vitamin C 24%		Vitamin A 20% • Vitamin C 149%	

page 17

## Color by Number

Solve the division problems, and color by the code based on the quotients.

Red 5	Orange 7	Yellow 2, 6	Green 4, 8	Brown 3, 9
----------	-------------	----------------	---------------	---------------



page 18

## Pecan Sudoku

Every row, column and mini-grid must contain the letters P E C A N S. Don't guess - use logic.



S	N	E	A	P	C
P	A	C	N	E	S
N	S	P	C	A	E
E	C	A	S	N	P
C	P	N	E	S	A
A	E	S	P	C	N

page 19

## Be an Editor

ATC Lesson: Garden Care

Read the following paragraphs. Look for spelling, punctuation and capitalization mistakes. Use the editing marks below and provide a correction. There are nine errors in the first paragraph, eight in the second, and seven errors in the last paragraph.

- Capital letter
- End punctuation
- Change to lower case
- Take something out
- Check spelling
- Add something

Plants that are crowded do not grow well. They rob one another of the space, fertilizer, water and sun necessary for healthy growth. Some plants need more space to grow than others. Squash, cucumbers and melons need room to sprawl along the ground. Some gardeners build trellises and train vining plants to climb in order to save space. Radishes require very little space and can be interplanted among plants that need more room. Good gardeners plan their gardens to make sure every plant has all the space it needs.

Cantaloupes need plenty of space to grow. Like the pumpkin, they grow on a vine that spreads out along the ground. Cantaloupe are also called muskmelon. They need plenty of sun and water and, like carrots, are a very good source of vitamins A and C. Each vine produces three or four fruits. When the fruit is ready it will break off the vine.

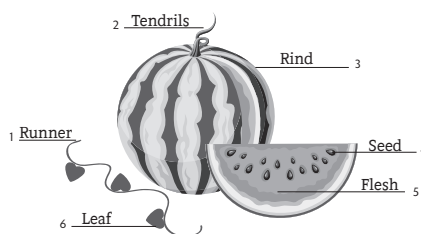
Radishes grow well when the weather is cool. They are easily started from seed after the last spring frost. Seeds should be sown three to four inches apart. Radishes produce swollen roots that are white inside. They are a bright color and spicy taste make them a fun addition to a tossed salad.

Radishes are a good source of vitamin C.

page 20

## What's in a Watermelon?

Use the words in the wordbank to label the parts of a watermelon.



A rind	C leaf	E tendrils
B flesh	D runner	F seed

Working in pairs, students can make words from the letters that spell "watermelon." Have partners organize their words in columns of two, three, four, and five letter words. Examples below will get their "watermelons" rolling.

Determine which pair made the most words and which group made words that no one else found.

### WATERMELON

2 letters	3 letters	4 letters	5 letters
me	ate	worm	water
to	eat	term	melon
no	mat	torn	wrote

page 21

## Garden Scramble

Unscramble the words and use the number code to solve the puzzle.

EKLA	K A L E
SERNEG	G R E E N S
SIRHAD	R A D I S H
ORCBOILC	B R O C C O L I
RCEUBCMU	C U C U M B E R
RYSRTERBAW	S T R A W B E R R Y
SISWS HACDR	S W I S S C H A R D
RCEAWUOLFLI	C A U L I F L O W E R
ESTEWA OOPTOT	S W E E T P O T A T O
Y O U R M I N D I S A G A R D E N	
Y O U R T H O U G H T S A R E	
T H E S E E D S	

page 22

# Greens

Spinach is probably the best known of the greens, but there are many others, including young dandelion greens!

Spinach contributes to healthy bones, eyes and teeth. Spinach has a high nutritional value, especially when fresh, frozen, steamed, or quickly boiled. It is high in iron, vitamin K and C.

Some other greens are collard greens, kale and an assortment of Oriental greens. Swiss chard grows very well in Oklahoma as do mustard and beet greens.

Collard greens are a popular Southern US cuisine. They are often prepared with other similar green leaf vegetables, such as kale, spinach, and mustard greens in "mixed greens".

Swiss Chard was identified by a Swiss botanist and is most popular in Mediterranean countries.

AITC Lesson:  
Oklahoma's  
Roots and  
Leafy Greens

Mustard grows fast,  
so you can begin  
picking leaves in about  
4 weeks, when the  
leaves are 6 to 8  
inches long.



Kale is very high in beta carotene,  
vitamin K, vitamin C, and rich in calcium.

AITC Lesson:  
Just Peachy

## Peaches

A large peach has fewer than 70 calories and contains 3 grams of fiber. It's also a good source of vitamins A and C.

Peaches – along with cherries, plums, and apricots – are stone fruits. Typical peach cultivars begin bearing fruit in their third year and have a lifespan of about 12 years.

Many of the tribes located in Indian Territory were growing peaches well before Oklahoma statehood. Most of the peaches grown in Oklahoma are consumed within the state and are hand harvested.

The two basic types of peaches are clingstone and freestone. In clingstone peaches, the flesh “clings” to the “stone” of the peach, making it difficult to separate. This type is more suitable for processing. The pit of freestone peaches “freely” separates from the flesh, making it ideal for fresh consumption.



## Pears

AITC Lesson:  
Pairing up with  
Pears

The fruit of a pear tree is a pome, juicier than the apple, and varying from apple-shaped to teardrop-shaped.

Pears are gathered from the trees before they are completely ripe and are allowed to ripen in storage. Cold delays ripening, and heat speeds it. Pears are eaten fresh and canned.

Pear wood is used to make furniture, musical instruments, and wood carvings. Architect's rulers are made from pear wood because it doesn't warp.

There are over 3,000 varieties of pears grown around the world.





# Peppers

AITC Lesson:  
The Nightshades

Peppers love warm soil and cannot tolerate frost. Peppers thrive in a well drained, fertile soil that is well supplied with moisture.

Most often bell peppers are green, yellow, orange, and red. Green peppers are less sweet and slightly more bitter than yellow or orange peppers, with red bell peppers being the sweetest.

Chilies can make foods safer by reducing harmful bacteria. The substances that give chili peppers their intensity when ingested or applied topically are capsaicin.

A mature jalapeño fruit is 2 - 4 inches long, and is commonly picked and consumed while still green, but occasionally it is allowed to fully ripen and turn red.

Although the jalapeño is one of the most well-known of the spicy peppers, the hottest pepper is the Trinidad Moruga Scorpion.

Jalapeños thrive in a number of soil types and temperatures, as long as they have adequate water.

# Pecans

The pecan is a kind of hickory nut native to the US. It originated in the Mississippi River Valley and was a valuable food to early settlers there. Pecans are high in polyunsaturated fat, the kind of fat that is not bad for you. They are also a good source of vitamins, calcium, phosphorus and iron.

The pecan tree is a member of the hickory family. Pecan trees like to grow together in clusters, or groves. They can grow from 70 to 100 feet tall, and their branches will spread from 50 to 100 feet wide. Their roots grow deep.

All along the Red River and a line from Ardmore to Tulsa is Oklahoma's major pecan-producing region.



AITC Lesson:  
Pecan Fingerprints



# Radish

ALTC Lesson:  
Garden Grid

The radish is an edible root vegetable. Radishes are a common garden crop in the U.S., and their fast harvest cycle makes them a popular choice for children's gardens. Garden radishes can be grown wherever there is sun and moist, fertile soil, even on the smallest city lot. Radishes are grown and consumed throughout the world, being mostly eaten raw as a crunchy salad vegetable.

Radishes can be useful as companion plants for many other crops. Their pungent odor deters aphids, cucumber beetles, tomato hornworms, squash bugs and ants.

# Strawberries



ALTC Lesson:  
In Strawberry Fields

Strawberries will grow almost anywhere in Oklahoma. Many people raise strawberries in their home gardens because they are easy to grow and produce fruit earlier than other fruits.

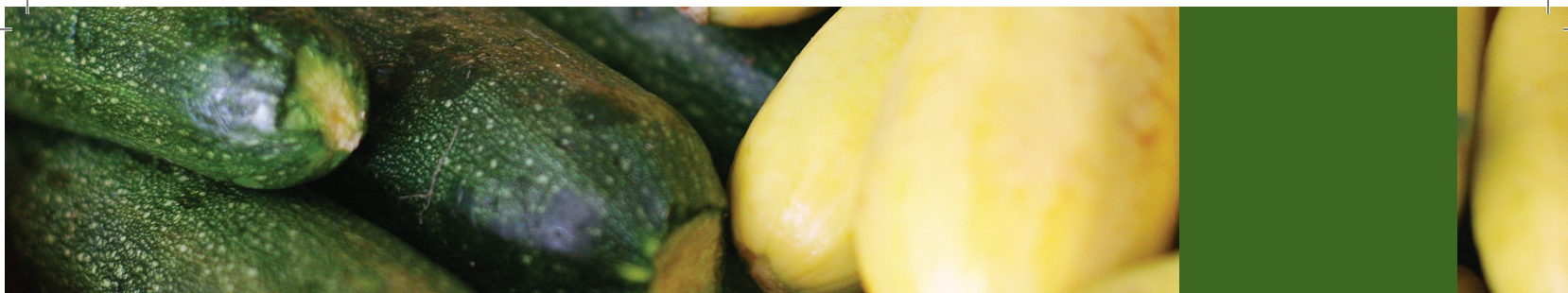
Strawberries are one of the most popular fruits in the US. Strawberries are eaten by 94 percent of Americans. They are the only fruit with their seeds on the outside.

One cup of strawberries is only 55 calories. Eight strawberries will provide 140 percent of the recommended daily intake of vitamin C for kids.

The flavor of a strawberry is influenced by weather, the variety and stage of ripeness when harvested.

Oklahoma's state fruit is the  
strawberry!





# Squash

American Indians shared many varieties of squash with the European settlers, who took the seeds back to their countries. Today, squash is grown all over the world.

The colonists of New England adopted the name squash, a word derived from several Native American words for the vegetable which meant "green thing eaten green."

Summer squash can be grilled, steamed, boiled, sauteed, fried or used in stir fry recipes. They mix well with onions, tomatoes and okra in vegetable medleys.

AITC Lesson:  
Pumpkins, Squash  
and Other Cucurbits

Summer squash is  
very low in calories  
and high in fiber.

# Sweet Potato

A sweet potato is a root tuber, a fleshy root that stores food for a plant. Sweet potatoes are members of the morning glory family and native to the American tropics.

Although it is sometimes called a yam in North America, the sweet potato is not in the yam family, nor is it closely related to the common potato. The first Europeans to taste sweet potatoes were members of Columbus' expedition in 1492.

Sweet potatoes are an important source of beta carotene, an organic compound that helps to prevent vitamin A deficiency.

Sweet potatoes  
are a winter crop,  
so they provide  
fresh vegetables  
when many other  
vegetables are  
unavailable.



AITC Lesson:  
Yam and Eggs



# Tomatoes

The heaviest tomato on record weighed 7 pounds 12 ounces!

93% of US gardening households grow tomatoes.

The tomato belongs to the nightshade family, Solanaceae. According to the USDA there are 25,000 tomato varieties. They are grown in every state in the US.

The tomato is consumed in diverse ways, including raw, as an ingredient in many dishes, sauces, salads, and drinks. While it is botanically a fruit, it is considered a vegetable for culinary purposes.

Tomatoes are acidic, making them especially easy to preserve in home canning whole, in pieces, as tomato sauce or paste. They can also be preserved by drying, often in the sun, and sold either in bags or in jars with oil.

# Watermelon

Melons are warm season crops that thrive in Oklahoma's long growing season. All kinds of melons grow in Oklahoma, but our watermelon crop is the most profitable.

Farmers generally grow watermelon in rows. The rind of a watermelon is not as tough as it looks, so it is still handpicked.

Watermelon is the natural sports drink. It is rich in the electrolytes (sodium + potassium) that we lose when we sweat.

Watermelon is 92% water. Early explorers used them as canteens.

The first recorded watermelon harvest occurred nearly 5,000 years ago in Egypt.



AITC Lesson:  
Working Watermelon





## For more information contact:

Oklahoma Department of Agriculture, Food, and Forestry

P.O. Box 528804 • Oklahoma City, OK 73152

Dana Bessinger | Cell (405) 795-0121 | [dana.bessinger@ag.ok.gov](mailto:dana.bessinger@ag.ok.gov)

Cheri Long | Cell (405) 249-9234 | [cheri.long@ag.ok.gov](mailto:cheri.long@ag.ok.gov)

Audrey Harmon | Cell (405) 740-0160 | [audrey.harmon@ag.ok.gov](mailto:audrey.harmon@ag.ok.gov)

Pat Thompson | (405) 744-8889 | [pat.thompson@okstate.edu](mailto:pat.thompson@okstate.edu)

[www.agclassroom.org/ok](http://www.agclassroom.org/ok)





This publication, printed by Paragon Press, Oklahoma City, OK, is produced by the Oklahoma Department of Agriculture, Food, and Forestry as authorized by Jim Reese, Secretary of Agriculture. 30,000 copies have been prepared at a cost of \$9,668.00. Twenty-five copies have been deposited with the Oklahoma Dept of Libraries. 5/15

This is funded by the USDA Specialty Crop Block Grant.