# Berries



# 6th Grade





A ½ cup serving of berries is about the size of half of your fist.

### **Healthy and Smart Goals**

- 1. Identify the health benefits of eating berries.
- 2. Say why California is so ideal for growing crops.
- 3. Multiply with percentages.
- 4. Taste berries and make a plan for eating them.

#### 1 servings per container Serving size 1/2 cup (72g) **Amount Per Serving Calories** % Daily Values Total Fat 0g 0% Saturated Fat 0g 0% Trans Fat 0g Cholesterol 0mg 0% Sodium 1mg 0% Total Carbohydrate 7g 3% Dietary Fiber 4g 14% Total Sugars 4g 0% Includes 0g Added Sugars Protein 1g 2% Vitamin D 0mcg 0%

**Nutrition Facts** 

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

2% 4%

4%

4%

25%

20%

Calcium 26mg

Potassium 188mg

Iron 0.54mg

Vitamin A

Vitamin C

Vitamin K



### **Harvest It**

A handful of berries make a great snack. They also make an excellent smoothie. Try combining frozen berries, bananas, orange juice, and low-fat milk in a blender for a healthy and delicious treat. How many berries do you know about? You may have heard of blueberries, blackberries, and raspberries. But have you heard of boysenberries, loganberries and marionberries?

Here are some "berry" important words in Spanish:

- frambuesa (raspberry)
- mora (blackberry)
- arándano (blueberry)

Berries are very healthy for you. Take a look at the Nutrition Facts label. Blackberries contain 20% of the Daily Value of Vitamin K. Your body makes proteins with the help of Vitamin K to make healthy bones. It also makes proteins so that when you bleed, you don't bleed too much.

#### Why are so many fruits and vegetables grown in California?

California is a great place to grow berries and other fruits and vegetables because there is water, rich soil, lots of sun, and a warm climate. Take a look at these facts:

- Fresno, California receives 36% more possible sunshine than Seattle, Washington.
- Blue Canyon, California, receives an average of 241.7 inches of snow a year. Snow melt provides our farms with water. Our nation's capital only receives about 20 inches of snow.
- International Falls, Minnesota averages 198 days of below freezing temperatures. Many of those days are well below freezing. Stockton averages only 22 days when the temperature dips below freezing, which means many more fruits and vegetables can be grown there.

California grows more than 99% of the nation's total of the following crops: Almonds, artichokes, peaches, persimmons, figs, grapes, raisins, dried plums, and walnuts! But what does "percent" really mean? You will learn the answer to that and how to multiply with percent in the Move It activity.



#### Move it

In the sections that follow, you will use percentages to find out about the amount of berries and other fruits grown in California.

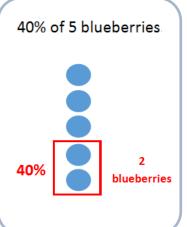
Here in the Move It section, your teacher will demonstrate how to use percent to find the answers to the math problems on flash cards. Then you'll get into groups of different sizes to illustrate different percentages of blueberries.

40% x 5

$$40\% = \frac{40}{100}$$

$$\frac{40}{100} \times 5 \text{ blueberries}$$

$$\frac{40}{100} \times \frac{5 \text{ blueberries}}{1} = \frac{40}{1}$$





#### Link it

California is one of the biggest producers of blueberries in the United States. While it does not grow the most blueberries, because of its excellent growing conditions, in 2014 it grew the most per acre.

In 2014 California grew the most blueberries per acre of any state in the US:

10,700 pounds of blueberries per acre.



**Directions** Find out how many pounds of blueberries California grew in 2014. California grew 10% of the nation's blueberries. Multiply 10% times the total number of berries grown in the United States that year.

10%

California grew about 10% of the nation's blueberries.

500,000 tons

The US grew about 500,000 tons of

10% x 500,000 =

The number of tons of blueberries California grew.

$$10\% = \frac{10}{100}$$

$$\frac{10}{100}$$
 x 500,000 =

$$\frac{10}{100} \times \frac{500,000}{1} = \frac{5,000,000}{100}$$

When you are multiplying by 10 just add a zero on the right.

$$\frac{5,000,000}{100}$$
 = 5,000,000 ÷ 100 = 50,000 tons of blueberries

When you are dividing by 100 just move the decimal point two places to the left.



Since a ton is 2,000 pounds, that means California grew about 100,000,000 pounds of blueberries that year!

50,000 x2000= 100,000,000

**Directions** California produced more than 30% of the approximately 150,000 boxes of oranges grown in the US in 2015. Find out about how many boxes of oranges were from California

$$\frac{30}{100} \times 150,000 = \frac{1}{100} \times \frac{1}{100} = \frac{1}{$$



## Try it

**Directions** California planted more than 75% of the approximately 80,000 acres of carrots in the US in 2015. Find out about how many acres California planted.

$$80\% = \frac{80}{100}$$

$$\overline{100} \times =$$

$$\frac{100}{100} \times \frac{1}{1} = \frac{100}{100}$$

$$\frac{100}{100} = \div 100 = \frac{\text{acres of carrots planted}}{100}$$



### Digest it

The actual figures are closer to 88%! Can you find 88% of 76,000 acres planted in the US?

#### It's time to eat some berries and digest what you've learned!

- Name a nutrient in blackberries and what it does for your body.
- What conditions makes California such a favorable place to grow berries?
- What is 80% of 1,000?
- Taste berries! When will you have berries next? Make a plan.

