

Name _____

Developing understanding of fractions, especially unit fractions (fractions with numerator 1)

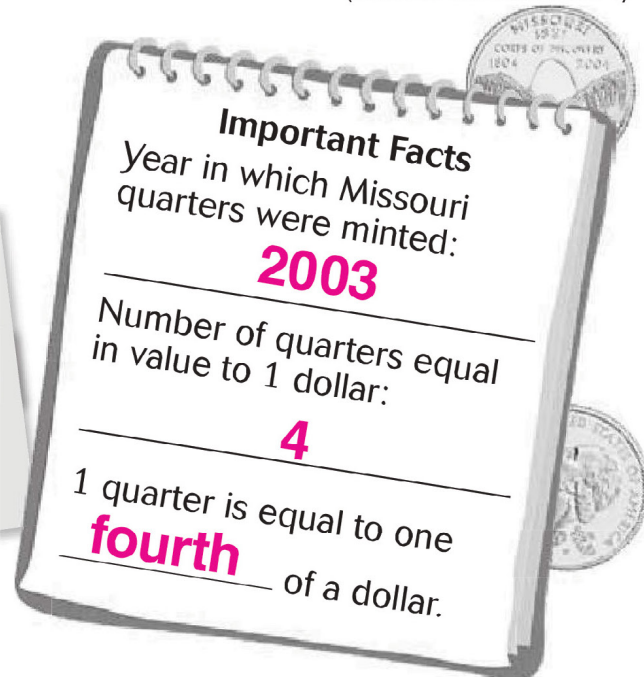
Project

Coins in the U.S.

1

Plan

- Find the year in which Missouri quarters were minted.
- Use the information on page 304 in your math book to help you.
- Complete the Important Facts first.



2

Put It Together

- Find another way to say *1 out of 4*, or one fourth.
- Write fractions to show what part of a dollar the coins represent.

Write 1 out of 4 as a **fraction**.

quarter → $\frac{1}{4}$
4 quarters → $\frac{4}{4}$

The fraction means that a quarter is 1 out of 4, or one fourth, of a dollar.

Most American coins are worth a *fraction* of other amounts.



Two quarters are equal to *two fourths* of a dollar.

Write the fraction for two fourths.

$$\frac{2}{4}$$

How many nickels are equal in value to 1 dime? 2

1 nickel is equal to $\frac{1}{2}$ of a dime.

2 nickels are equal in value to 1 dime.

Two nickels are equal to *two halves* of a dime.

Write the fraction for two halves.

$$\frac{2}{2}$$

3

Reflect

In 2009, quarters were minted to honor the District of Columbia and five U.S. Territories: Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the Northern Mariana Islands. How many different quarters were minted under this program? Explain how you know.

6; Possible answer: 1 for the District of Columbia and 5 for the U.S. Territories; $1 + 5 = 6$

What if you had one of each of the different quarters minted in 2009? What fraction of your set of coins does the Puerto Rico quarter represent? Explain how you know.

$\frac{1}{6}$; Possible explanation: there are 6 different coins. 1 out of 6 is $\frac{1}{6}$.

4

Go Beyond

In 2003, state quarters were minted to honor Illinois, Alabama, Maine, Missouri, and Arkansas. Suppose you had one of each of the different state quarters minted in 2003. Find the fraction of your set of coins the Missouri quarter would represent.

How many different quarters were minted in all in 2003? **5**

The Missouri quarter represents one *fifth* of the quarters.

Write the fraction one fifth. **$\frac{1}{5}$**