

Name \_\_\_\_\_

## Project



Extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations

### In the Chef's Kitchen

#### Plan

- You need to adjust a recipe that makes 100 servings to make just 25 servings.
- Decide which math operation to use to change 100 to 25.
- Use the Important Facts to help you plan.

#### Put It Together

- Read the recipe in your math book for 100 servings of Apple Dumplings.
- Decide which ingredients you can divide easily. Write the amount of each in the recipe for 25 servings.
- The flour, baking powder, and walnuts do not divide evenly without a remainder. Talk to your partner about how to divide the leftover amounts into 4 equal parts.

I would use these ingredients to make 25 servings:

**25 baking apples**

**18 tablespoons sugar**

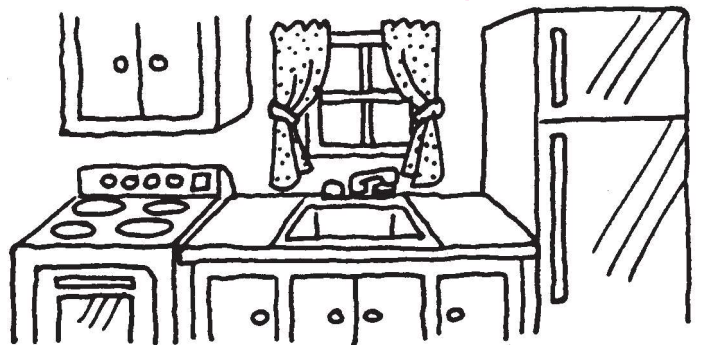
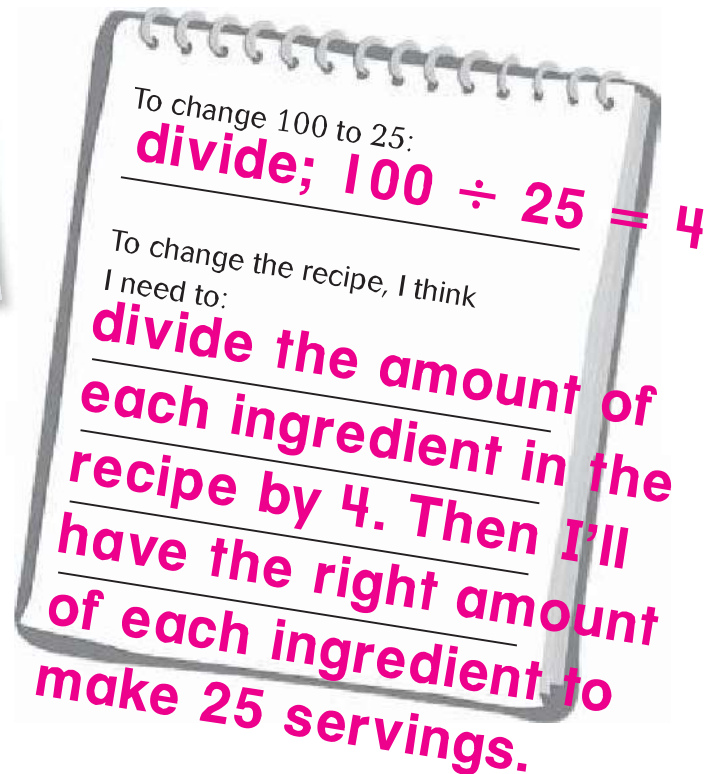
**3.5, or  $3\frac{1}{2}$  cups all-purpose flour**

**1.5, or  $1\frac{1}{2}$  teaspoons baking powder**

**6 eggs**

**20 tablespoons butter**

**12.5, or  $12\frac{1}{2}$  tablespoons chopped walnuts**



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### Reflect

How many eggs did you decide you would need for 25 servings? How did you decide on this amount?

How did you decide how many cups of all-purpose flour you would need?

**Possible answer: 6 eggs;  $100 \text{ servings} \div 4 = 25$  servings, so I should divide the amounts by 4.**

**$24 \text{ eggs} \div 4 = 6 \text{ eggs}$**

**For the all-purpose flour, I know that  $14 \div 4$  is 3 r2. I can write the remainder as a decimal, 3.5, or as a fraction,  $3\frac{2}{4}$ , or  $3\frac{1}{2}$  cups.**

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### Go Beyond

Here are the ingredients for a recipe that feeds 100 people:

- 20 lb of thin spaghetti
- 6 lb of ground beef
- 20 large cans of tomatoes
- 12 six-ounce cans of tomato paste

Decide how to adjust this recipe to feed just 10 people.

If you wanted to make this spaghetti recipe for your family, what amount of each ingredient would you need?



**Possible answer: Since  $100 \div 10 = 10$ , divide the amount of each ingredient by 10. To make 10 servings I would need 2 lb thin spaghetti, 0.6, or  $\frac{3}{5}$  lb ground beef, 2 large cans of tomatoes, 1.2, or  $1\frac{1}{5}$  six-ounce cans of tomato paste.**  
**Answers will vary.**