DOINGWHATWORKS

SAMPLE MATERIAL

Grade 2 Student Work: Writing About Fractions

Worthington Hooker School, Connecticut

Topic: National Math Panel: Critical Foundations for Algebra

Practice: Mathematics Preparation for Algebra

Teacher Kathy Lembo's math assignments include opportunities for her second-grade students to write about fractions, develop story problems involving fractions, and solve multi-step problems. An example of a student's work on a second grade significant task is included, along with examples of the explanations that second-grade students provide and the problems they develop to demonstrate their understanding of fractions.

Fraction Stories

80 people were graduating from college. Their teacher told them to split into 4 even groups. How many people are in each group? 20 people. Then another 80 people came. Now how many are in each group 40 people.

50 kids came to the carnival. There were 10 rides available. And each ride takes 1 group. How many kids are in each group? 5 kids are in the groups.

At Verna's birthday she ordered 6 larg cakes. At her party she had 24 kids. How many pieces are all the cakes cut in? 4 pieces.

Max brought 1 candy bar. He went to his friend's house to share it with him. Max cut the candy bar in half. His friend's brother and sister wanted a piece too. Max cut it into 4 pieces. They all took a piece.

Name: _____ _____

Sharing Pizza with Friends

SCENARIO:

Part A: Your mom told you that she would like to have pizza at your upcoming birthday party. However, she needs to know a few things. She needs to know: <u>How many people will be invited?</u> She knows that you would like to invite 15 of your friends from school and 10 of your neighborhood friends. Let your mom know how many of your friends you would like to invite. Show your work and write your answer in the box below. You can use your circles to help you.

15 friends from School
10 from street

25 al together

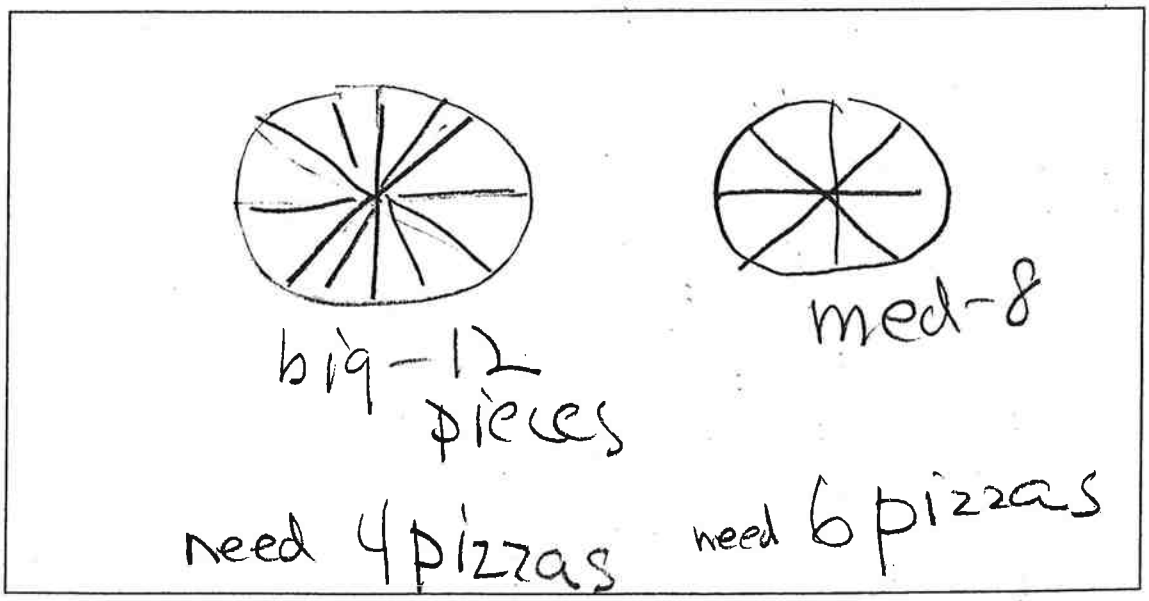
Name:_____

Sharing Pizza with Friends

Part B:
Your mom just invited 15 additional friends and some family members. 1) You want to know about how many people will be invited. Estimate the sum of the new friends and your list. 2) But your dad wants to know the exact number. So, now find exactly how many people will be at your party now? Show your work and write your answers in the box below.

25 other page 15 more 40 8 family 48	About 50 altogether

Part C: Your mom has to order the pizzas. The large pizzas are cut into 12 pieces. The medium pizzas are cut into 8 pieces. Show your mom two different ways she can order pizzas so that everyone gets at least one slice of pizza. Label the pieces of the pizza using fractions. Show your work in the box below.



We need fractional parts when we're building. For example, if you need to install a window and you need to cut the glass six ft and three quarters. You might make it seven feet, then the glass would break, you might make it six feet, then cold air would come in. That is one reason we need fractions. Here's another: If you're baking a cake and it says to put in two thirds of a cup of flour, you'll say that's about a cup and dump that in, and then your cake would be a disaster. If you're having a birthday party, and you want each person to have two pieces and there are 16 kids, you'll need fractions. Fractions are parts. There are halves, thirds, fourths, eighths, and more. They're great.