CHILI PARLOR ACTIVITY III

**MATHEMATICS:** Division of fractions
SCIENCE: Measurement

AIM: Students divide fractions, choose appropriate measuring tools, and determine equivalent fractions.

BACKGROUND: To complete this activity, students need to remember how to convert mixed numbers to improper fractions and how to divide fractions. Remind students of the rules for dividing fractions. As a class, discuss how dividing is equivalent to multiplying by the inverse. Write several examples on the board and go through each example step by step.

BEFORE PLAYING
Discussion: Ask students if they have ever had to share a snack with a brother, sister, or friend. How did they share? Did they divide the snack evenly? How did they know that they divided the portions equally? Next, ask students how would they divide a glass of lemonade between two people so that they knew for sure the portions were equal. Have students write down their responses and then discuss them as a class. (Answers will vary. One way would be to pour the lemonade from the glass into a measuring cup to see how much lemonade there is. Then divide that measurement in half and pour that amount into two glasses.)
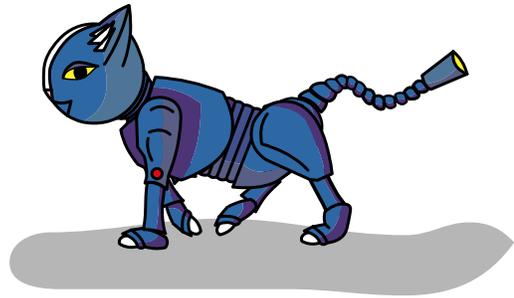
AFTER PLAYING
Activity: Choose one recipe from the student-generated recipes in the **Before Playing Discussion** from **Chili Parlor Activity I**. Write the recipe on the board and tell students what the serving size is. Have students use math to cut the recipe in half.

ASSESSMENT: Check students' answers on the After Playing Worksheet.

TA-3c.1

CHILI PARLOR ACTIVITY III

RESOURCES
**<u>40 Fun-tabulous Puzzles for Multiplication, Division, Decimals, Fractions, &
More</u>**, by Bob Olenych (Scholastic, 2000, $9.95, ISBN 0-43919-941-7). With these
puzzles, your students will hardly realize they are practicing their math skills!
Students use basic operations as they solve puzzle problems with whole numbers,
decimals, fractions, and more. To order, call 1-800-SCHOLASTIC.

http://school.discovery.com/brainboosters/index.html#number
Encourage your students to expand their math skills with the Discovery Channel's
web site. Here they can practice lateral thinking, logic, reasoning, and spatial
awareness with fun math games.

ANSWERS
Before Playing, Worksheet: (1.g, **2.**d, **3.**c, **4.**j, **5.**f, **6.**a, **7.**i, **8.**e, **9.**h, **10.**b.)
After Playing, Worksheet: (**Monday**—4, **Tuesday**—1/2, **Wednesday**—3/5,
Thursday—2/3, **Friday**—1/3.)
Site Seeking in Chicago, Worksheet: (8a. 4 1/2. **8b.** 1 1/2.)

TA-3c.2

CHILI PARLOR ACTIVITY III

CONNECT TO YOUR CURRICULUM

This activity can help you meet these National Standards:

Mathematics:

- Recognize equivalent representations for the same number and generate them by decomposing and composing numbers
- Develop understanding of fractions as parts of unit wholes, as parts of a collection, as locations on number lines, and as divisions of whole numbers
- Use models, benchmarks, and equivalent forms to judge the size of fractions
- Understand the effects of multiplying and dividing whole numbers
- Identify and use relationships between operations, such as division as the inverse of multiplication, to solve problems
- Understand such attributes as length, area, weight, volume, and size of angle and select the appropriate type of unit for measuring each attribute
- Understand the need for measuring with standard units and become familiar with standard units in the customary and metric systems
- Select and apply appropriate standard units and tools to measure length, area, volume, weight, time, temperature, and the size of angles

Science:

- Systems, order, and organization
- Change, constancy, and measurement
- Abilities necessary to do scientific inquiry

CURRICULUM AREAS

Math: division of fractions, equivalent fractions, mixed numbers, problem solving.
Science: measuring.
Technology: computer science.

TA-3c.3

CHILI PARLOR ACTIVITY III
(Before Playing)

Name:_____

Date:_____

Divide the following bowls of chili evenly between four customers. Draw a line from the bowl to the correct answer.

1.) 9 cups

2.) 3 cups

3.) 6 cups

4.) 13 cups

5.) 12 cups

6.) 2 cups

7.) 10 cups

8.) 7 cups

9.) 5 cups

10.) 14 cups

* **a.)** 1/2 cup

* **b.)** 3 1/2 cups

* **c.)** 1 1/2 cups

* **d.)** 3/4 cup

* **e.)** 1 3/4 cups

* **f.)** 3 cups

* **g.)** 2 1/4 cups

* **h.)** 1 1/4 cups

* **i.)** 2 1/2 cups

* **j.)** 3 1/4 cups

SA-3c.1

CHILI PARLOR ACTIVITY III
(After Playing Worksheet)

Name:_____

Date:_____

You're having a pizza party every day after school next week. Count the slices of pizza below and divide them so you and your friends all get the same amount of pizza. Reduce.

Example:
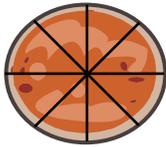
Two friends are coming over. (Plus you, makes 3!)
Think: 8/3 = ?
Everyone gets _2 2/3 slices.

Monday:
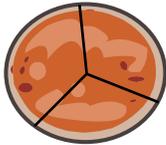
Three friends are joining you for pizza.
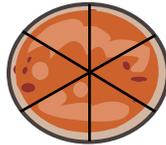
All four of you eat _____ slices.

Tuesday:

Five friends want to share your pizza with you.

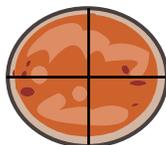The six of you chomp away at _____ slice.

Wednesday:

Nine of your friends are coming over.

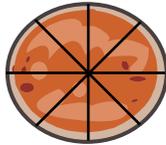Divide the pizza so the ten of you eat _____ slice.

Thursday:

Six friends accepted your invitation for pizza.

Give everyone (including you!) _____ slice.

Friday:

Make room! 23 friends are here for pizza.

The 24 of you eat _____ slice each.

SA-3c.2