Answer Key-Fraction & Decimal Tiles Math Kit

Activity #1

Directions

1. Which fraction tile is the smallest? (Trace and label it.)

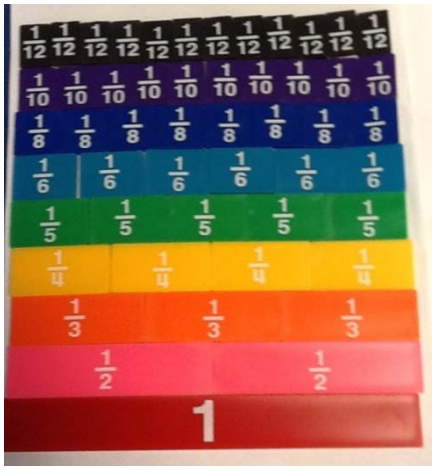
One-twelfth (1/12)

2. Which fraction tile is the largest? (Trace and label it.)

One

3. Organize the fraction bars into 9 rows ordered from least to greatest. What do you notice about the numerator of each fraction?

The numerator of each fraction is always "1".



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What is the relationship between numerator and denominator and the size of the fractional piece?

Possible Answers:

The smaller the fraction the greater the difference is between the numerator and denominator.

The larger the fraction the smaller the difference is between the numerator and denominator.

4. Turn the tiles over so that the decimal side is facing up. Look at the digit in the tenths place. What is the relationship between the digit in the tenths place and the size of the fraction?

Possible Answers:

With the exception of the red tile "1.0", the larger the number in the tenths place is the larger the value and size of the tile.

With the exception of the red tile "1.0", the smaller the number in the tenths place is the smaller the value and size of the tile.

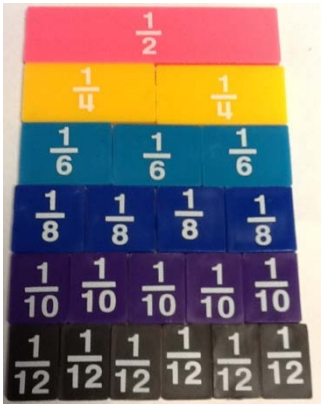
5. How many different ways can you make a half? (Show and draw your thinking.)

Possible Answers:

one (1/2) tile; two (¼) tiles;

three (1/6) tiles; four (1/8) tiles;

five (1/10) tiles; six (1/12) tiles



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6. How many different ways can you make a fourth? (Show and draw your thinking.)

Possible Answers:

one (1/4) tile; two (1/8) tiles;

three (1/12) tiles

7. How many different ways can you make a third? (Show and draw your thinking.)

Possible Answers:

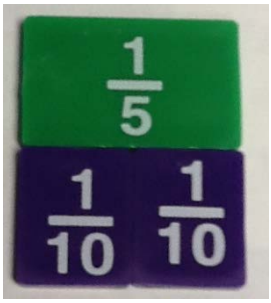
one (1/3) tile; two (1/6) tiles;

four (1/12) tiles

8. How many different ways can you make a fifth? (Show and draw your thinking.)

Possible Answers:

one (1/5) tile; two (1/10) tiles



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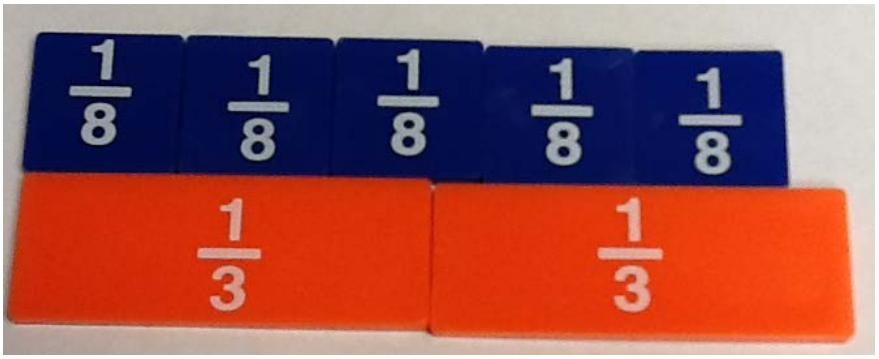
Activity #2

Situation #1

Students in Mrs. Joy's classroom earned an ice cream party. She gave them the option of either having 5/8 of a bowl of ice cream or 2/3 of a bowl of ice cream. Which serving would have more ice cream?

Build a model using the fraction/decimal tiles to show how much ice cream a person would get for each option. Once you have found your solution, trace the pieces to show your work for others to see.



If a person wanted more ice cream, then they should choose two-thirds of a bowl. Five-eighths of a bowl of ice cream is less than two-thirds of a bowl of ice cream. So 2/3 is greater than 5/8.

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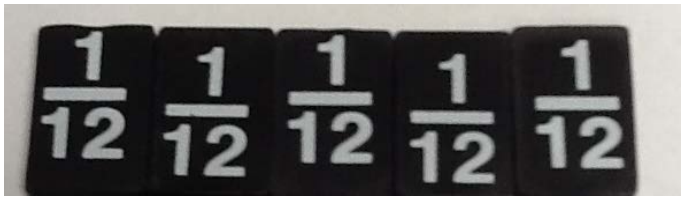
Situation #2

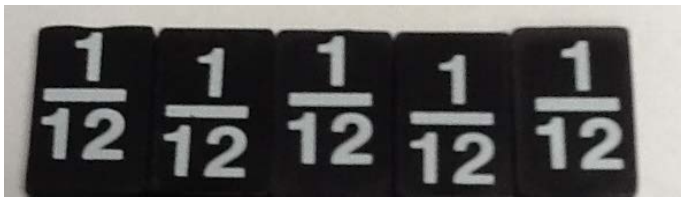
Students in Mr. Villar's class are making bowls out of clay. The class has been equally divided into 10 teams. Each team has 3 students. If each student needs 5/12 of a pound of clay, how many pounds of clay does Mr. Villar need per team? Write your solution as a fraction and decimal.

Build a model using the fraction/decimal tiles to match the story. Once you have found your solution, trace the pieces to show your work for others to see.

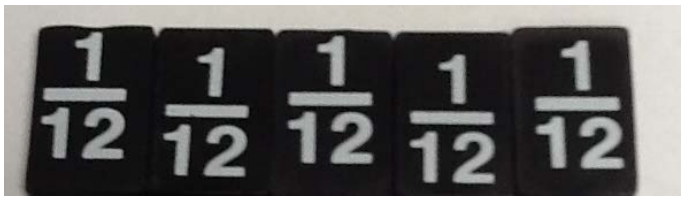
Student 1



Student 2



Student 3



Mr. Villar needs fifteen-twelfths of a pound for each group.

$$\frac{15}{12} = 1\frac{3}{12} = 1\frac{1}{4} = 1.25$$

Activity #3

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Reflect and respond to at least two prompts below.

- I learned _____ about _____.
- Fraction/Decimal tiles helped me show my thinking by...
- I worked with equivalent fractions today and learned....
- A repeating decimal is_____. We can show a number is a repeating decimal because _____.

Student reflections will vary. The main purpose of this activity is to have students think about what they just learned and practiced.

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Activity #4

Technology Connection

Melvin's Make a Match

http://pbskids.kids.us/games/equivalentfractions/equivalent_fractions.swf

Bridge Builders: A Gecko's Journey through the Land of Fractions

http://www.mathplayground.com/FractionGame/GuideGecko_Secure.swf

Tony Fraction's Pizza Shop

http://www.mrnussbaum.com/pizza_game/tonyfractionfinal.swf

Dolphin Racing

http://www.matematicasdivertidas.com/Zonaflash/juegosflash/Delfin.swf

Santa Clara County Office of Education

Curriculum and Instruction Math Team

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