

EDMC 330 – Teaching Mathematics in the Middle Grades
Fraction Circles and Squares

Part I: Using your fraction square or fraction circle pieces, determine the most appropriate fraction name for each color piece:

Red = _____

Light Blue = _____

Pink = _____

Dark Blue = _____

Orange = _____

Purple = _____

Yellow = _____

Black = _____

Green = _____

How did you determine the fraction name of each piece?

What concept about fractions did you use in order to name each piece?

What happens to the size of each piece as the number in the denominator gets larger?

Part II: Use your fraction squares or fraction circle pieces to perform the following activities. Write a fraction number sentence that underneath each example that illustrates the fraction idea being considered.

- How many black pieces would it take to completely cover one orange piece?

Drawing:

Fraction Number Sentence:

- How many dark blue pieces would it take to completely cover one pink piece?

Drawing:

Fraction Number Sentence:

- How many light blue pieces would it take to completely cover one pink AND one orange piece?

Drawing:

Fraction Number Sentence:

Part III: Use your fraction squares or fraction circle pieces to perform the following operations with fractions using the "cover up method" from Part II. Use the space below each fraction problem to draw a representation of the fraction pieces you have used.

$$\frac{1}{4} + \frac{1}{4} = \underline{\hspace{2cm}}$$

$$\frac{1}{4} + \frac{1}{6} = \underline{\hspace{2cm}}$$

$$\frac{1}{2} + \frac{1}{3} = \underline{\hspace{2cm}}$$

$$\frac{1}{5} + \frac{3}{10} = \underline{\hspace{2cm}}$$