FRACTIONS & NUMBER THEORY

QUICK WRITES

- Why is the number one neither prime nor composite?

- What is prime factorization?

- Why can the greatest common factor also be called the greatest common divisor?

- When is the least common multiple of two numbers the same as one of the numbers?

- How can you tell if two fractions are equivalent?

- When is a fraction in simplest form?

- What is the least common denominator? Why is it helpful when comparing fractions?

VOCABULARY ACTIVITIES

9 Squares

- Put students into groups and assign a vocabulary word from the chapter to define and describe using the 9 Squares guidelines. Students will share their definitions with the class.

Developing My Vocabulary

- Have students keep a running list of vocabulary from this chapter to include the vocabulary words completed by other groups from above.

Vocabulary Terms

prime number, composite number, prime factorization, greatest common factor (greatest common divisor), least common multiple, equivalent fractions, simplest form, least common denominator

Math Behind You

Writing Activities

Role Play

- Pretend you are a prime number. Write a description of yourself beginning with "I have the following qualities…." Your description should be detailed enough to figure out what you are. (Use correct mathematical terminology where appropriate.)
- Pretend you are a composite number. Write a description of yourself beginning with "I have the following qualities…." Your description should be detailed enough to figure out what you are. (Use correct mathematical terminology where appropriate.)

Expository Writing

- Explain the step-by-step process you would use to find the prime factorization of a number. Use an example(s) to support your explanation. Be sure to explain why your solution is correct.

Compare & Contrast

- Use the flow-chart to compare and contrast Greatest Common Factor with Least Common Multiple

Creative Writing

- Write a story that helps to explain the relationship(s) between equivalent fractions, simplest form, & comparing fractions. Be sure to use the vocabulary from the chapter. (You may also include important concepts from earlier in chapter 3).

Example:

Once upon a time, the fraction known as 1/2 happened to come across the fraction known as 3/8. They each thought that they were greater than the other, so they needed to come up with a way to know for sure. Using what they had learned in class…