CCGPS Math 67 Unit 1
Number System Fluency

References

Helpful Links:

http://thinkingblocks.com

http://www.khanacademy.org

http://www.arcademicskillbuilders.com

http://hoodamath.com

http://www.learner.org/courses/learningmath/number/session9/part_a/area_division.html

http://www.purplemath.com/modules/lcm_gcf.htm

http://www.fun4thebrain.com/beyondfacts/lcmsnowball.html

http://www.sheppardsoftware.com/mathgames/fractions/GreatestCommonFactor.htm

Textbook Connection:

Glencoe Georgia Math Grade 6 Plus, Volume 1

Chapter 1

Textbook Online

Username:
ccsd(student ID)
Example: ccsd123456

Password: cobbmath1

Dear Parents,

Welcome to the new school year! We are eager to work with you and your students as we learn new mathematical concepts. In the classroom, students will frequently work on tasks and activities to discover and apply mathematical thinking. Students will be expected to explain or justify their answers and to write clearly and properly.

Concepts Students will Use and Understand

- Find the greatest common factor of two whole numbers less than or equal to 100
- Find the least common multiple of two whole numbers less than or equal to 12
- Solve least common multiple real-world problems
- Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor.
- Interpret and compute quotients of fractions
- Solve word problems involving division of fractions by fractions using visual fraction models and equations to represent the problem.
- **Fluently** divide multi-digit numbers using the standard algorithm
- **Fluently** add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

Vocabulary

Algorithm: a step-by-step solution to a problem.
Difference: The amount left after one number is subtracted from another number.
Distributive Property: The sum of two addends multiplied by a number is the sum of the product of each addend and the number.
Dividend: A number that is divided by another number.
Divisor: A number by which another number is to be divided.
Factor: When two or more integers are multiplied, each number is a factor of the product. "To factor" means to write the number or term as a product of its factors.
Greatest Common Factor: The largest factor that two or more numbers have in common.
Least Common Multiple: The smallest multiple (other than zero) that two or more numbers have in common.
Minuend: The number that is to be subtracted from.
Multiple: The product of a given whole number and an integer.
Quotient: A number that is the result of division.
Reciprocal: Two numbers whose product is 1.
Sum: The number you get by adding two or more numbers together
Subtrahend: The number that is to be subtracted.
Product: A number that is the result of multiplication.
Try http://intermath.coe.uga.edu/dictnary/homepg.asp or http://www.amathsdictionaryforkids.com/ for further examples.

Symbols

+ : addition

- : subtraction

× or • : multiplication

÷ : division

Example 1

Henry plans to purchase 39 spinning tops that cost $6.70 each. Henry determined that he would need $80.40. Review Henry's calculations to determine what error he made.

```
        2
        6
        6   7
    ×   3   9
    6   0   3
+   2   0   1
    8   0   4
```

A basic fact mistake
B error in regrouping
C error in addition
D place value error

Example 2

A bag contains 504 lollipops. If twenty four students share the bag of lollipops, how many lollipops will each student get?

Example 3

Six friends share ¾ of a cake. How much of the cake does each friend get?

Example 4

Two students are having a pool party. They want to make treat bags for their guests. They want each bag to be identical with nothing leftover. They have 18 water frisbees and 24 pieces of bubble gum to put in the bags. What is the greatest number of treat bags they can make and how many of each item will be in each treat bag?

Key

Example 1
D) place value error – Henry did not place a zero in the ones column when multiplying by the second digit.

Example 2

```
      21
24 ) 504
    -48
      24
     -24
       0
```

Solution: Each student will get 21 lollipops.

Example 3
Six friends share ¾ of a cake. How much of the cake does each friend get?

¾ cake

6 ÷ ¾ cake = 1/8 piece of cake

Solution: Each friend gets 1/8 piece of the cake.

Example 4
18 + 24 = 6(3 + 4)
Solution: The two friends can make 6 treat bags with three water Frisbees and four pieces of bubble gum in each.