



# Grade 2 Unit 1

## Extending Base Ten Understanding

Volume 1 Issue 1

### References

#### Helpful Links:

<https://www.illustrativemathematics.org/contentstandards/tasks/144>

<http://www.gamequarium.com/moneymath.html>

<http://www.gamequarium.com/placevalue.html>

<http://www.mathstories.com/>

<http://xtramath.org/>

<http://www.coolmath4kids.com/>

#### Math Grade 2

#### Textbook Connection:

Ch. 1, Lessons 1.1-1.11

Ch. 2, Lesson 2.7

#### Textbook Online:

<http://connected.mcgraw-hill.com/connected/login.do>

Student User ID:

ccsd(student ID)

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. Your student's math class is calling for students to be actively engaged in doing math in order to learn math. 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. Your students will receive a consumable My Math textbook and online access from their teacher.

### Concepts Students will Use and Understand

- Use models, diagrams, and number sentences to represent numbers within 1,000.
- Write numbers in expanded form and standard form using words and numerals.
- Identify a digit's place and value when given a number within 1,000.
- Compare two 3-digit numbers with appropriate symbols (<, =, and >).
- Understand the difference between place and value. Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Know the multiple meanings for addition (combine, join, and count on) and subtraction (take away, remove, count back, and compare)
- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Understand how addition and subtraction affect quantities and are related to each other.
- Know the multiple meanings for addition (combine, join, and count on) and subtraction (take away, remove, count back, and compare)
- Use the inverse operation to check that they have correctly solved the problem.
- Solve word problems using dimes, nickels and pennies.

### Vocabulary

**Expanded form:** A multi-digit number is expressed in expanded form when it is written as a sum of single-digit multiples of powers of ten. For example,  $643 = 600 + 40 + 3$ .

**Base ten blocks:** A manipulative used to build numbers and to help with addition and subtraction at the conceptual level.

**Hundred:** A whole number that can be thought of as a bundle of ten tens.

**Thousand:** A whole number than be thought of as a bundle of ten hundreds.

**Place value:** The value of a digit based on its place in a number.

**Greater than (>):** More than- shows the relationship between numbers.

**Less than (<):** Less than- shows the relationship between numbers.

**symbols:** +, -, =, >, <

**Total:** The number when sets are combined.

**Sum:** The total when numbers are added.

**Difference** The result when one number is subtracted from another.

**Equation:** A mathematical expression where one part is equal to the other part. Example:  $50 + 26 = 70 + 6$ .

**Fluently is accurately and efficiently.**

Try <http://intermath.coe.uga.edu/dictionary/homepg.asp> or <http://www.amathsdictionaryforkids.com/> for further examples.

## Symbols

+ addition

- subtraction

> greater than

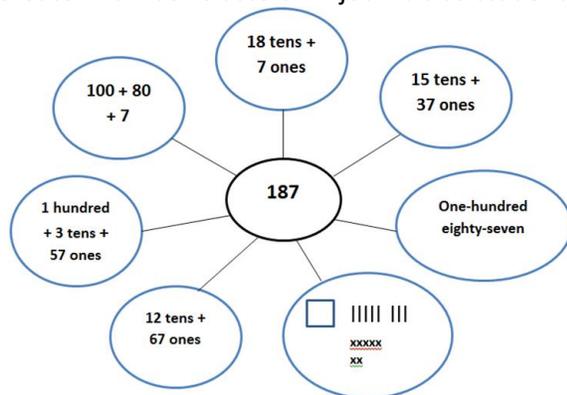
< less than

## Example 1

Ask students to build two and three-digit numbers using base ten block paper. Have them write the number in standard form and expanded form and talk to you about the size of the digits.

## Example 2

Create “Number Clusters” in journals so students can practice number fluency and flexibility.



## Example 3

Ask students if 14 tens and 8 ones have the same value as 1 hundred 3 tens and 18 ones? Explain your thinking?

## Example 4

Have students represent amounts of money less than one dollar using dimes, nickels and pennies. Try to connect to real-world scenarios.

## Activities at Home

- Encourage your child to skip count by 2's, 5's, and 10's.
- Lay cards numbered from 0-9 face down on the table. Have your child pick out 3 of the cards and make the largest number that they can. Then have them make the lowest number that they can.
- Have your child study how numbers are related to 5 and 10 so they can apply relationships by knowing  $5 + 4$  or  $8 + 3$ . They might picture  $5 + 4$  on a ten-frame to mentally see 9 as the answer. For remembering  $8 + 7$ , they might think 8 is 2 away from 10, take 2 away from 7 to make  $10 + 5 = 15$ .