

# Second Grade Math Review, Master, and Extend

## Dear Parents,

Summer presents a great opportunity to continue learning from home. Students can review standards learned in Second Grade, ensure mastery of key standards, and preview standards for Third Grade. The Second Grade focus was to:

- Add and subtract within 20 from memory
- Add and subtract within 1000
- Solve 1 and 2-step word problems

## Concepts students may preview for 3<sup>rd</sup> Grade

- Interpret multiplication with arrays
- Interpret division with arrays

### Vocabulary

Factors: two or more whole numbers multiplied together to get a given number

called the product

**Product**: the result of multiplication

**Array:** the arrangement of objects in equal rows

#### Example:

| 6 |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 2 | • | • | • | • | • | • |
|   | • | • | • | • | • | • |

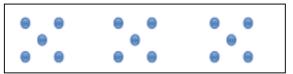
Quotient: the result of division

**Dividend**: number being divided; total amount being divided into groups. Ex.  $24 \div 8 = 3$ ; 24 is the dividend, 8 is the divisor, and 3 is the quotient

**Divisor**: number dividing into the total; may be the number of groups or the number

of items in a specific number of groups

#### Example 1

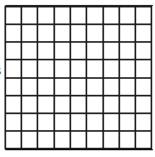


This shows multiplication using grouping with 3 groups of 5 objects and can be written as 3 × 5.

Once students understand the concept of repeated addition, they move to understanding how arrays represent

multiplication facts.

This grid shows an 8 x 9 array. Students soon recognize that facts can be made up of smaller facts.



#### Example 2

15 ÷ 3 = 5

This shows division using grouping of 15 dots made up of 3 groups of 5 dots and 5 groups of 3 dots.

#### Home Activities

- A Fair Share: give your child the responsibility of sharing a box of markers, a bag of candy etc. between 2-4 people. Begin with problems that do not have remainders.
- Using playing cards ask your child draw 2 cards and have them create an array from the two numbers. Have your child explain to you the multiplication of the array and relationships to division (take the total array and divide by one of the numbers).

#### **Internet Resources**

## Textbook Online: connected.mcgraw-hill.com

| Textbook    | Print and/or consumable | Online Access                     |
|-------------|-------------------------|-----------------------------------|
| Publisher   |                         |                                   |
| My Math     | Consumable Workbook     | http://connected.mcgraw-          |
| McGraw-Hill |                         | hill.com/connected/login.do       |
| 2013        |                         |                                   |
|             |                         | Student User ID: ccsd(student ID) |
|             |                         | Password: cobbmath1               |

Learning Links to build background knowledge and to preview 3<sup>rd</sup> Grade:

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|--|--|--|--|--|--|
| Skill &<br>Concept   | Website  | Link   |  |  |  |
| Early Math   | Getting started is simple: Click Start Mission, Create a New Account, sign up using either gmail, facebook or email address. Enter your name and birthdate, follow the link that is sent to your account, and finish by signing up with a username and password. | https://www.khanacademy.org/math/early-<br>math                                      |  |  |  |
| Solve division problems: using arrays  | LearnZillion   | https://learnzillion.com/lesson_plans/6841-<br>represent-multiplication-using-arrays |  |  |  |
| Solve division problems: using arrays  | LearnZillion   | https://learnzillion.com/lesson_plans/5215-<br>solve-division-problems-using-array   |  |  |  |



Arrays, Multiplication and Division

http://nrich.maths.org/8773