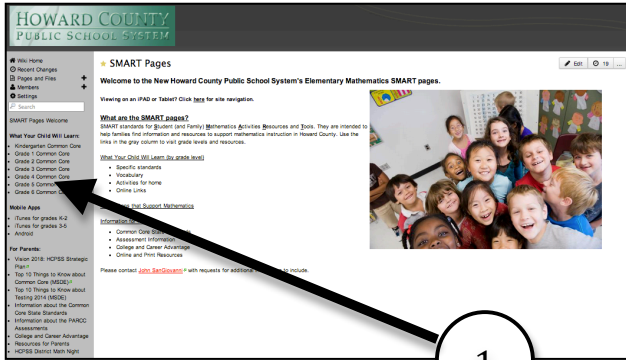


# Supporting Elementary Mathematics with the SMART PAGES

<http://smart.wikispaces.hcps.org>

Select the grade level of your student



Then, select the quarter and topic



Other useful links are appear on the left menu bar including mobile apps and print resources.

## Grade 3 Operations and Algebraic Thinking

### What Your Child Will Learn

Standard	When Is It Taught?	What Does It Look Like? What Does It Mean?
Understand the meaning of multiplication (3.OA.1)	Quarter 1	<a href="#">Lesson Set</a>
Understand the meaning of division (3.OA.2)	Quarter 1	<a href="#">Lesson Set</a>
Solve word problems using multiplication and division (3.OA.3)	Quarter 1 and 2	<a href="#">Lesson Set</a>
Determine the unknown whole number in a multiplication or division problem ( $? \times 8 = 24$ ) (3.OA.4)	Quarter 1, 2, 3, and 4	<a href="#">Lesson Set</a>
Understand the properties of multiplication (3.OA.5)	Quarter 1 and 2	<a href="#">Lesson Set</a>
Understand division as an unknown factor problem (3.OA.6)	Quarter 2	<a href="#">Lesson Set</a>
Fluently multiply and divide within 100 (3.OA.7)	Quarter 1, 2, 3, and 4	<a href="#">Lesson Set</a>
Solve word problems using addition, subtraction, multiplication and/or division (3.OA.8)	Quarter 1, 2, 3, and 4	<a href="#">Lesson Set</a>
Identify and explain arithmetic patterns (3.OA.9)	Quarter 1, 2, 3, and 4	<a href="#">Lesson Set</a>

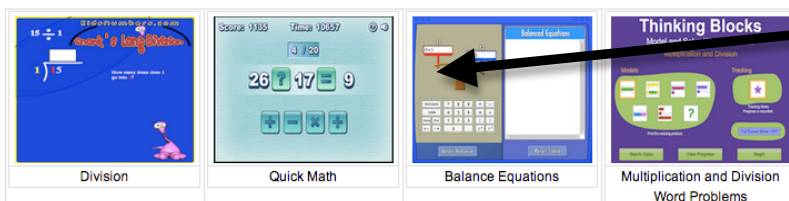
### Vocabulary

<b>Division:</b> to make equal groups	<b>Dividend:</b> a number that is divided by another number
<b>Array:</b> an arrangement that shows objects in columns and rows	<b>Equation:</b> a mathematical statement containing an equal sign, to show that two expressions are equal
<b>Partition:</b> to divide into parts	<b>Product:</b> the result of multiplication
<b>Grouping:</b> dividing things into equal groups (sets)	<b>Quotient:</b> the number, not including the remainder, that results from dividing
<b>Multiple:</b> a product of two whole numbers	<b>Remainder:</b> the amount left over when a whole number cannot be divided into equal whole numbers
<b>Factor:</b> a number that is multiplied by another number to get a product	<b>Subtraction:</b> To find the difference when two groups are compared to find out how many are left when items are taken away from a group.
<b>Addition:</b> To join two or more groups. $2 + 3 = 5$	<b>Addend:</b> A number that is added to another in an addition problem. In $2 + 3 = 5$ , 2 and 3 are addends.
<b>Sum:</b> The answer to an addition problem. In $2 + 3 = 5$ , 5 is the sum.	<b>Difference:</b> The answer to a subtraction problem. In $8 - 3 = 5$ , 5 is the difference.
<b>Estimation:</b> a number close to an exact amount	<b>Mental Computation:</b> the calculation of something mentally

### Activities at Home

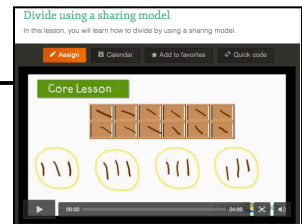
- Make arrays out of household items (e.g., pennies, beans, blocks)
- Select multiplication or division facts to illustrate or write a word problem.
- Hunt for multiple sets of objects in the home. Use repeated addition and multiplication to find the totals.
- Sort coins according to type, count the number of coins and then multiply to find the total value of pennies (x 1), nickels (x 5), dimes (x 10) and quarters (x 25).
- Roll 2 number cubes. Find the products of the factors.
- Count quantities of items by 2's, 3's, 5's, and 10's.
- Roll 2 number cubes to determine the factors. Make an array to find the product.
- Use a calculator to solve word problems using multiplication and division. For example, Callie wants to buy 20 apples that cost \$ .19 each. What is the total cost of her purchase? Michael has 332 quarters. He wants to put them into groups of 4. How many groups will he make?
- Act out division problems with counters. For example, Brad has 12 rabbits. He puts the same number of rabbits into each of 4 cages. How many rabbits does Brad put in each cage?
- Roll 2 number cubes and write the fact families. For example, for rolls of 4 and 6, write:  $4 \times 6 = 24$ ,  $6 \times 4 = 24$ ,  $24 \div 6 = 4$ ,  $24 \div 4 = 6$ .

### Learning Links



## What Your Child Will Learn:

- Specific learning outcomes
- Brief **video links** that show the mathematics



## Vocabulary

- words and definitions for these standards

## Activities At Home

- optional activities to support your child

## Learning Links

- websites to practice mathematics skills/concepts for these standards