

# Unit 2: Multiplication and the Eraser Store

Content Area: **Mathematics**  
Course(s): **Mathematics 4**  
Time Period: **October**  
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## **Enduring Understandings**

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Computation involves taking apart and combining numbers using a variety of approaches.

Numbers can be classified by attributes.

## **Essential Questions**

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What questions can be answered using multiplication?

How can relationships be expressed symbolically?

## **Content**

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### **Vocabulary**

Array

Column

Divisor

Factor

Division

Vertical line

Variable

Horizontal line

Left over

Remainder

Factor pairs

Bar graph

Chart

Comma

Inverse

Estimate

Multiple

Round

Symbol

Unpacking

[http://www.mathplayground.com/common\\_core\\_state\\_standards\\_for\\_mathematics\\_grade\\_4.html](http://www.mathplayground.com/common_core_state_standards_for_mathematics_grade_4.html)

[Tenmarks.com](http://Tenmarks.com)

[k5learning.com](http://k5learning.com)

<http://www.insidemathematics.org/common-core-resources/mathematical-content-standards/standards-by-grade/4th-grade>

<https://learnzillion.com/resources/17036-math-lesson-plans-4th-grade>

<http://www.mathgoodies.com/standards/alignments/grade4.html>

[Elem Math Assessment schedule.doc](#)

## **Skills**

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Use a variety of strategies to solve problems.

Use data from tables to answer questions.

Discover how many packages can fit in crates in your virtual eraser store.

Determine how orders should be packaged for optimal shipment.

Recognize that a digit on one place represents ten times what it represents in the place to its right.

Solve a simpler problem to solve a given situation.

Compare two multi-digit numbers based on meanings of the digits in each place.

Fluently add multi-digit whole numbers using the standard algorithm.

Multiply a whole number of three digits by a one-digit whole number.

Multiply a whole number of four digits by a one-digit whole number.

Use strategies based on place value.

Use strategies based on properties of operation.

Illustrate and explain calculations.

Use base ten blocks to represent quantities.

Persevere in problem solving.

Find whole-number quotients with one-digit divisors.

Make a table from data.

Use rounding for best real world answers.

## Standards

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CCSS.Math.Content.4.NBT.A	Generalize place value understanding for multi-digit whole numbers.
CCSS.Math.Content.4.NBT.A.1	Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.
CCSS.Math.Content.4.NBT.A.2	Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.
CCSS.Math.Content.4.NBT.A.3	Use place value understanding to round multi-digit whole numbers to any place.
CCSS.Math.Content.4.NBT.B	Use place value understanding and properties of operations to perform multi-digit arithmetic.
CCSS.Math.Content.4.NBT.B.4	Fluently add and subtract multi-digit whole numbers using the standard algorithm.
CCSS.Math.Content.4.NBT.B.5	Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
CCSS.Math.Content.4.NBT.B.6	Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
CCSS.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.
CCSS.Math.Practice.MP4	Model with mathematics.
CCSS.Math.Practice.MP5	Use appropriate tools strategically.
CCSS.Math.Practice.MP7	Look for and make use of structure.
CCSS.Math.Practice.MP8	Look for and express regularity in repeated reasoning.