# Nov. Gr 4 My Math Unit 3: Understanding Mult. \& Div. <br> <div class="inline-tabular"><table id="tabular" data-type="subtable">
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<td style="text-align: left; border-bottom: none !important; border-top: none !important; width: auto; vertical-align: middle; ">Math</td>
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<table-markdown style="display: none">| Content Area: | Math |
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| Course(s): |  |
| Time Period: | November |
| Length: | $\mathbf{4 - 5}$ Weeks |
| Status: | Obsolete |</table-markdown></div> 

## Unit Overview

Students will understand that knowing and being able to use the properties and rules of multiplication and division will help them solve abstract problems more easily.

## Enduring Understandings

We can use rectangular arrays to write multiplication and division sentences.
We can use subtraction to solve division problems.
We can solve comparison problems by drawing a diagram and writing an equation.
We can use properties of multiplication to solve problems.
We can find factor pairs and multiples of whole numbers.

## Essential Questions

How are multiplication and division related?

Instructional Strategies \& Learning Activities

| Lesson | Objective | Material \& Manipulatives | Vocabulary | Standard |
| :---: | :---: | :---: | :---: | :---: |
| Lesson 1 pp. 135-140 Relate Multiplication and Division | Understand how multiplication and division are related. | - empty egg <br> cartons <br> - beans <br> - counters | dividend | 4.NBT.5 |
|  |  |  | divisor | 4.NBT. 6 |
|  |  |  | fact <br> family | Major |
|  |  |  | factor | Cluster |
|  |  |  | product | MP |
|  |  |  | quotient | 2, 3, 4, 6, 7, 8 |
| Lesson 2 pp. 141-146 | Relate division and | - counters | repeated | 4.NBT. 6 |

Relate Division and

## Subtraction

Lesson $3 p p .147-152$ Multiplication as Comparison

Lesson 4 pp. 153-158
Compare to Solve Problems

Lesson 5 pp. 161-166
Multiplication
Properties and
Division Rules
subtraction.

- crayons or subtraction colored pencils - grid paper
Recognize the comparison of
two groups as another
strategy to use when
multiplying.
- sticky notes
- counters multiplying.

Use comparison to solve problems.

- number cube
- index cards

MP
$2,3,4,5,6,8$
4.OA. 1
4.OA. 2

Major
Cluster
MP
$1,2,3,4,5,8$
4.OA. 2

Major
Cluster
MP
$1,2,3,4,6,7$
Major
Cluster
.OA. 2

Use multiplication properties and division rules.

Use the Associative Property
of Multiplication to solve • counters problems.
4.NBT. 5

| Commutative | Major |
| :--- | :--- |
| Property | Cluster |
| Identity Property <br> Zero Property | MP |

$1,2,3,5,6,7$
4.NBT. 5

## Check My Progress

|  | $\mathbf{1 , 2 , 3 , 5 , 6 , 7}$ |
| :--- | :--- |
|  | 4. NBT.5 |
|  |  |
| Associative <br> Property of <br> Multiplication | Major |
|  | MP |

2, 3, 4, 5, 7
4.OA. 4
decompose multiple

Supporting Cluster

Lesson 7 pp. 173-178 Find factors and multiples of
Factors and Multiples whole numbers.

Lesson 6 pp. 167-172
The Associative
Property of
Multiplication

MP
$1,2,3,5,7,8$
4.OA. 2

Major
Cluster
MP
$1,2,3,4,5$

## Integration of Career Readiness, Life Literacies and Key Skills

| WRK.9.2.5.CAP | Career Awareness and Planning |
| :---: | :---: |
| WRK.9.2.5.CAP. 1 | Evaluate personal likes and dislikes and identify careers that might be suited to personal likes. |
| WRK.9.2.5.CAP. 2 | Identify how you might like to earn an income. |
| WRK.9.2.5.CAP. 3 | Identify qualifications needed to pursue traditional and non-traditional careers and occupations. |
| WRK.9.2.5.CAP. 4 | Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements. |
| TECH.9.4.5.CT | Critical Thinking and Problem-solving |
| TECH.9.4.5.CT. 1 | Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2). |
| TECH.9.4.5.CT. 3 | Describe how digital tools and technology may be used to solve problems. |
| TECH.9.4.5.CT. 4 | Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3). |
| TECH.9.4.5.DC. 4 | Model safe, legal, and ethical behavior when using online or offline technology (e.g., 8.1.5.NI.2). |
| TECH.9.4.8.CT | Critical Thinking and Problem-solving |
|  | An essential aspect of problem solving is being able to self-reflect on why possible solutions for solving problems were or were not successful. |
|  | An individual's passions, aptitude and skills can affect his/her employment and earning potential. |
|  | Multiple solutions often exist to solve a problem. |

## Technology and Design Integration

- SMARTboard technology
- Google Applications (documents, forms, spreadsheets, presentation)
- Dreambox
- Online textbook

CS.3-5.8.1.5.DA. 1
CS.3-5.8.1.5.DA. 3

CS.3-5.DA

Collect, organize, and display data in order to highlight relationships or support a claim.
Organize and present collected data visually to communicate insights gained from different views of the data.

Data \& Analysis
Data can be organized, displayed, and presented to highlight relationships.

## Interdisciplinary Connections

[^0]LA.RI.4.1

LA.RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.

LA.SL.4. 1
Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

# Differentiation 

-Reteach Master

-Hands-On Activity

-Enrich Master

## Modifications \& Accommodations

IEP and 504 accommodations will be utilized.
Provide an outline of material to be covered
-Individualized assignments, e.g., length, number, due date, topic
-Allow student to use technology-online textbook
-Use of graphic organizers
-Use highlighter for key information
-Read directions, passages, and word problems aloud as needed-online presentation
-Use of calculator and matrix for multiplication and division
-Provide textbook in audio format
-Demonstrate directions and procedures/give examples

## Benchmark Assessments

## Formative Assessments

## Check My Progress

-My Chapter Review
-Homework Practice
-Independent Practice

## Summative Assessments

Chapter 3 assessment

## Instructional Materials

See instructional materials above.

## Standards

MA.4.OA.A. 1

MA.4.OA.A. 2

MA.4.NBT.B. 5

MA.4.NBT.B. 6

Interpret a multiplication equation as a comparison, e.g., interpret $35=5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5 . Represent verbal statements of multiplicative comparisons as multiplication equations.

Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

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.

Find whole-number quotients and remainders with up to four-digit dividends and onedigit 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.


[^0]:    Leveled readers "Class Project"

