


Fluency and Application of Multiplication

| <p style="text-align: center;">Overarching Student Learning Goals</p> <p style="text-align: center;">In this unit, your child will work to build an understanding of the following:</p> | <p style="text-align: center;">Resources/Tasks to support your child at home.</p> | | | | | | | | | | | | | | |
|--|---|----|----|----|----|----|--|----|----|----|----|----|----|----|--|
| <p>Model equal groups of “bundles” or groups of tens</p> <ul style="list-style-type: none"> Students apply their prior knowledge of multiplication as “groups of” to begin by modeling 1-digit groups of multiples of 10’s <div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 20px;"> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td colspan="7" style="padding: 5px;">7</td></tr> <tr><td style="padding: 5px;">60</td><td style="padding: 5px;">60</td><td style="padding: 5px;">60</td><td style="padding: 5px;">60</td><td style="padding: 5px;">60</td><td style="padding: 5px;">60</td><td style="padding: 5px;">60</td></tr> </table> <p style="margin-top: 10px;">7 groups of 6 x 10 = 42 groups of 10 = 420</p> </div> <div style="margin-right: 20px;">  </div> <div> <p>7 groups of 6 x 10 is 42 groups of 10, which is 420</p> </div> </div> | 7 | | | | | | | 60 | 60 | 60 | 60 | 60 | 60 | 60 | <ul style="list-style-type: none"> Florida Student Tutorial: Multiply by Multiples of 10 Part 1 - https://bit.ly/2UIZafy LearnZillion: Multiply by Multiples of Ten Using Base Ten Blocks - https://bit.ly/2CIKpp2 LearnZillion: Multiply by Multiples of Tens Using Number Lines - https://bit.ly/2D954g1 |
| 7 | | | | | | | | | | | | | | | |
| 60 | 60 | 60 | 60 | 60 | 60 | 60 | | | | | | | | | |
| <p>Explain their results using patterns or other justifications</p> <ul style="list-style-type: none"> Students apply their work with modeling of groups of multiples of 10’s to develop an understanding of multiplication with 10’s Students apply their understanding of place value to develop and justify “shortcuts” or patterns to quickly multiply with 10’s <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 60%;"> <p>7 x 6 is 42, so 7 x 60 is 420 because 60 is ten times as much as 6, so 7 x 60 is ten times as much as 7 x 6.</p> </div> <div style="width: 30%; text-align: center;"> $7 \times 60 =$ $7 \times 6 \text{ tens} =$ $42 \text{ tens} =$ 420 </div> </div> | <ul style="list-style-type: none"> Florida Student Tutorial: Multiply by Multiples of 10 Part 2 - https://bit.ly/2U76IV3 Khan Academy: Multiply by Multiples of Tens - https://bit.ly/2X2I5vy Khan Academy: Multiply by Tens Word Problems - https://bit.ly/2KtutHr | | | | | | | | | | | | | | |

Grade 3

Demonstrate fluency of multiplication and division facts

- Students demonstrate fluency of multiplication and division facts they have been working on throughout the year
- Students may use and rely upon multiple strategies they have built upon throughout the school year
- Students can use “recall” for most facts as they work towards memorization of basic multiplication and division facts.

- Memorization with Jo Boaler - <http://tinyurl.com/mmp5t34>
- Matching Cards - <https://nrich.maths.org/1252>
- YouCubed: Math Cards - <https://www.youcubed.org/tasks/math-cards/>
- <http://gregtangmath.com/breakapart>