Learning Progression for Multiplication and Division

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| **Grade 2** | **Grades 3-4** | **Grades 5-7** |
| **Grade 2**  **2.OA.3,4** – Work with equal groups of objects to gain foundations for multiplication  **2.OA.3** – Determine whether a group of objects has an odd or even number of members  **2.OA.4** – Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns | **Grade 3**  **3.OA.1** – Interpret products of whole numbers  **3.OA.2** – Interpret whole-number quotients of whole numbers  **3.OA.3** – Use multiplication and division within 100 to solve word problems  **3.OA.5** – Apply properties of operations as strategies to multiply and divide  **3.OA.6** – Understand division as an unknown-factor problem  **3.OA.7** – Fluently multiply and divide within 100  **3.NBT.3** – Multiply one-digit whole numbers by multiples of 10 in the range of 10-90 using strategies based on place value and properties of operations  **Grade 4**  **4.OA.1** – Interpret a multiplication equation as a comparison  **4.OA.4** – Gain familiarity with factors and multiples  **4.NBT.5** – Multiply a whole number of up to four digits by a one-digit number and multiply two two-digit numbers using strategies based on place value and properties of operations  **4.NBT.6** – Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors using strategies based on place value and properties of operations | **Grade 5**  **5.NBT.5** – Fluently multiply multi-digit whole numbers using the standard algorithm  **5.NBT.6** – Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors  **5.NBT.7** – Add, subtract, multiply decimals to hundredths using models, drawings, place value and the properties of operations  **Grade 6**  **6.NS.2** – Fluently divide multi-digit numbers using the standard algorithm  **6.NS.3** – Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation  **6.NS.4** – Find common factors and multiples  **Grade 7**  **7.NS.2** – Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers |

Christinson, J., Wiggs, M.D., Lassiter, C.J., & Cook, L. (2012). *Navigating the mathematics Common Core State Standards*. Englewood, CO: Leadership and Learning Center.