

Grade 3 Multiplication and Division Fact Fluency Guide

MAFS.3.OA.3.7: Students will fluently multiply and divide within 100 using strategies and properties of operations. By the end of Grade 3*, students will know from memory all products of two one-digit numbers

Approx. Month	Focus Facts	Example	Resources
Foundational Facts Students should recognize that using the commutative property doubles the number of facts that they know, e.g. "If I know the product of $5 \times 6 = 30$ then I also know $6 \times 5 = 30$ "			
Aug.-Sept.	×2 ×5 ×10 ×1 ×0	$3 + 3 = 2 \times 3$ 5, 10, 15, 20, ... $10, 20, 30... (4 \times 10) = (4 \times 5) \times 2$ $1 \times a = a$ (a = any number) $0 \times a = 0$ (a = any number)	Doubles Match-Up , Double Up Points on a Star , ×5 Fact Fish (go fish) Top Tens , ×10 Corners What's The Problem? , ×1 Math Towers My Monster , ×1 ×0 Math Checkers
Derived facts Students use foundational and other known facts along with the distributive property to derive products, e.g. "I know $5 \times 4 = 20$ so 6×4 must be 24 because it is 1 more group of 4"			
Oct.	×3	$3 \times 4 = (2 \times 4) + 4$ "3 groups of 4 is the same as 2 groups of 4 plus one more group."	×3 Fruit Baskets All Lined Up x3
Nov.	×4	$4 \times 6 = (2 \times 6) + (2 \times 6)$ "2 groups of 6 is 12 so 4 groups of 6 is double 12 ($12 + 12 = 24$)."	Double-Double Patterns ×4 Quilt Cover Up
Dec.	×6	$6 \times 7 = (5 \times 7) + 7$ "5 groups of 7 is 35, so 6 groups of 7 is 1 more group of 7, $35 + 7 = 42$ "	×6 All Lined Up ×6 Capture
Jan.	×9	$9 \times 8 = (10 \times 8) - 8$ "I know 10 groups of 8 is 80, so if I have 1 less group, $80 - 8 = 72$ "	×9 Another Way ×9 Condition
Feb.	×8	$8 \times 3 = (4 \times 3) + (4 \times 3)$ "I know 4 groups of 3 is 12, and since 8 is double 4, 2 groups of 12 = 24" -OR- $8 \times 3 = (5 \times 3) + (3 \times 3)$ "I would rather break up 8 as 5 + 3 since I know 5×3 and 3×3 "	×2×4×8 Multiplication Chart ×8 Missing Numbers ×8 Target 80
March	×7	$7 \times 8 = (5 \times 8) + (2 \times 8)$ "I know $5 \times 8 = 40$ and $2 \times 8 = 16$, so together the total would be 56"	×7 Another Way ×7 Capture
Sept.-Mar.	Multiplication All	Apply strategies to quickly recall multiplication facts	Rio and Knock Out! Connecting Products
April	Division	Recognize Division can be represented with a missing factor "To solve $24 \div 4 = ?$, I can think, I know $4 \times 6 = 24$, so $24 \div 4 = 6$ "	Missing Numbers with Multiplication Find the Unknown Number What's Your Number? Using Multiplication to Solve Division
May	Division	Use multiplication to divide Recognize Fact Families	Multiplication and Division Match Cards Homes for Facts
June	Division All	Apply fact families or multiplication to divide	Division Duel Four Quotients Race to the Resort
 i-Ready Learning Games : "Match" & "Pizza" i-Ready Ready Toolbox Resource - "Grade 3: Additional Fluency Practice"			

*Students should be able to work towards fluency at their own pace and should be provided targeted practice based on informal formative assessment data.