

## Essential Multiplication and Division Skills Checklist

Use this list to track what your child has learned or still needs to practice. You can go through it in order, adding your own practice problems, worksheets, or activities as you go.

### Multiplication Skills

Understand multiplication as repeated addition (e.g.,  $3 + 3 + 3 = 9$  is the same as  $3 \times 3$ )

Understand terms: multiplicand, multiplier, product

Memorize multiplication facts (0–12)

Recognize patterns in times tables (2s, 5s, 10s)

Learn and use the commutative property (e.g.,  $3 \times 4 = 4 \times 3$ )

Learn and use the associative property

Learn and use the distributive property

Practice skip counting and use of the hundred chart to visualize multiplication patterns

Apply multiplication to real-life problems and story problems

Multiply using mental math strategies (e.g.,  $6 \times 7 = 5 \times 7 + 1 \times 7$ )

Practice higher-decade multiplication mentally (e.g.,  $6 \times 40$ )

Practice one-place vertical multiplication (e.g.,  $46 \times 3$ )

Learn the standard algorithm for two-place vertical multiplication

Practice two-place by two-place multiplication (e.g.,  $31 \times 24$ )

Practice multiplication shortcuts (doubling and halving, multiplying by 5, 9s tricks, multiplying by 11, etc.)

### Division Skills

Understand division as the opposite of multiplication

Understand terms: dividend, divisor, quotient

Recognize division as sharing and grouping

Memorize basic division facts (related to multiplication facts)

Identify fact families (e.g.,  $6 \times 4 = 24$ ,  $24 \div 6 = 4$ ,  $24 \div 4 = 6$ )

Understand and apply the Rule of Zero ( $0 \div \text{any number} = 0$ )

Use short division with one-digit divisors (e.g.,  $56 \div 7$ )

Use long division with larger dividends and one-digit divisors

Use mental division with round numbers (e.g.,  $120 \div 6$ )

Divide by 10s and 100s easily (e.g.,  $500 \div 10 = 50$ )

Understand and calculate with remainders

Use estimation to find quotients (trial quotients)

Divide using place value understanding

Use division laws: commutative (not applicable), associative, distributive (e.g.,  $30 \div 2 = (20 \div 2) + (10 \div 2)$ )

Solve real-life division problems (e.g., splitting money, sharing food, dividing chores)