Home Support for Math

Parents/Guardians,
Student math skills can be supported both at school and at home. Here are some ideas of what you can do at home to support your student's math skills.
Thank you for your support,

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Online Math Games for All Grades

- **Math Playground - Over 300 free games covering everything from basic addition/subtraction to fractions, logic, word problems.**
- **Mathgames.com** - Very clear, simple interface; supports counting, shapes, addition/subtraction. Videos & worksheets.
- **Khan Academy** - Standards-aligned lessons and practice; video + exercises; good for remediation or getting ahead. Entirely free.
- **Zearn Math** - Digital lessons with visual models, built for deep conceptual understanding, supports students and teachers.
- **XtraMath** - Focused specifically on building fluency with basic facts (addition, subtraction, etc.). Short daily practice.
- **Coolmath4Kids** - Mix of fun games, brain teasers, lessons, quizzes. Also manipulatives and visual supports.
- **Funbrain** - A variety of simple math games, interactive stories, arcade style to build math thinking in a playful way.
- **Math Learning Center – "Math At Home" & Free Apps** - Activities & downloadable practice pages, virtual manipulatives, visual models, many tools/apps for geometric thinking, number pieces, fraction tools.

Great Article for Parents:

Thinking beyond 'math people': How can schools make math more accessible? - https://www.k12dive.com/news/many-adults-wish-they-learned-more-math-how-can-schools-improve-engagement/751076/

Hands on Games to Play at Home - by Grade

Kindergarten

Focus: Counting, number recognition, addition to 10, comparing

1. **Roll & Count Race** – Roll a die, move that many spaces on a homemade number line board. First to 20 wins.
2. **Number Match Memory** – Make cards with numerals on half, dots/pictures on the other. Play games like memory.
3. **Build It with Blocks** – Roll 2 dice, build a tower with that many blocks, compare towers ("Which is taller?").
4. **Shake & Spill** – Shake 5–10 counters in a cup, spill them, sort into two groups, and say the equation (3 red + 2 yellow = 5).
5. **Grab & Compare** – Each player grabs a handful of small objects. Count & compare: "greater than/less than."
6. **Number Hunt** – Hide cards (0–10) around the room; kids find and put them in order.
7. **What's Missing?** – Line up numbers (0–10), remove one secretly, the child guesses which is missing.

1st Grade

Focus: Addition/subtraction to 20, number bonds, place value, simple measurement

1. **Race to 20** – Each player rolls 1 die, adds to their total, first to 20 wins. Extension: subtraction to "Race to 0."
2. **Make Ten Go Fish** – Instead of matching pairs, find pairs that add to 10.
3. **Domino Addition War** – Turn over dominoes, add both sides. Highest sum wins the round.
4. **Place Value Build** – Roll 2 dice; first is tens, second is ones. Build the number with sticks/cubes. Compare who made the larger number.
5. **Fact Family Triangles** – On index cards, write 3 numbers (e.g., 2, 3, 5). Kids build all addition/subtraction facts.

6. **Measurement Hunt** – Use a paperclip or spoon to measure items at home. Record which is longer/shorter.

7. **Spin & Subtract** – Make a spinner (1–10). Start at 20. Spin and subtract until you reach zero.

2nd Grade

Focus: Addition/subtraction within 100, even/odd, intro to arrays, money, time

1. **Double-Digit Race** – Roll 2 dice, make a 2-digit number, add it to your score. First to 200 wins.

2. **Money Store** – Set up a pretend shop. Kids use coins to "buy" items, making change.

3. **Even/Odd Sort** – Roll dice, add them, decide if the result is even or odd. Keep a tally chart.

4. **Array Builders** – Use cereal, buttons, or Legos to build arrays (3 rows of 4). Write the multiplication sentence.

5. **Clock Match** – Make pairs of cards: one with digital times, one with clock faces. Play memory.

6. **Tens & Ones War** – Use playing cards (face cards = 0). Draw 2 cards, make a 2-digit number. The largest number wins.

7. **Near Doubles Race** – Flip a card (1–9). Players must say the double and near-double fact (e.g., 6 → 6+6=12; 6+7=13).

3rd Grade

Focus: Multiplication/division facts, fractions, area/perimeter, larger place value

1. **Multiplication War** – Each player flips 2 cards, multiplies them. Higher product wins.

2. **Fraction Pizza** – Cut paper circles into halves, thirds, fourths, sixths. Call out "show 3/4" and kids build with pieces.

3. **Area & Perimeter Design** – Use graph paper. Roll 2 dice for side lengths, draw the rectangle, label area and perimeter.

4. **Division Capture** – Roll 2 dice, multiply. The opponent divides by a chosen number to "capture" the answer.

5. **Skip Count Jump** – Draw a number line on the floor with tape. Call out skip count by 4s, 6s, etc. Kids jump along.

6. **Place Value Race to 1,000** – Each player rolls 3 dice to make a 3-digit number. Compare who is closer to 1,000.

7. **Fraction War** – Flip 2 cards to make fractions (e.g., 3/8 vs 5/6). The larger fraction wins.

4th Grade

Focus: Multi-digit multiplication/division, equivalent fractions, decimals, geometry

1. **Factor Bingo** – Players write numbers 1–36 on a board. Caller says a number (like 6). Kids cover any multiple or factor.

2. **Multi-Digit Multiplication Race** – Roll 2 dice (tens and ones). Multiply 2-digit × 1-digit or 2-digit × 2-digit.

3. **Decimal War** – Each player flips 3 cards to make a decimal (tenths/hundredths). Highest wins.

4. **Fraction Compare with Dice** – Roll dice for numerator and denominator. Compare fractions; discuss equivalence.

5. **Geometry Scavenger Hunt** – Find real objects with parallel lines, right angles, symmetry.

6. **Perimeter/Area Challenge** – Use string to outline rectangles on the floor. Measure & calculate perimeter and area.

7. **Division Remainder Race** – Roll 2 dice (dividend ÷ divisor). Record quotient & remainder. First to 10 correct wins.

8. **Equivalent Fraction Dominoes** – Make cards with fractions (2/4, 1/2, etc.). Match equivalents domino-style.