



Summer Mathematics Activities to Do at Home

Incoming Grade 4

Number Sense - Operations in Base 10

- Practice addition and subtraction facts
- Locate numbers in catalogs or newspapers, then practice rounding them to the nearest tens and hundreds
- Roll two or three number cubes or dice and practice adding them together
- Roll a number cube and practice multiplying that number by ten. After mastery, try with two number cubes
- Practice adding and subtracting two and three-digit numbers

Operations and Algebraic Thinking

- Practice multiplication and division facts
- Show your child various numbers of dimes and have your child practice counting the amount of money (4 dimes \times 10 cents = 40 cents)
- Select multiplication or division facts to illustrate or write a word problem
- Hunt for multiple sets of objects in the home. Use repeated addition and multiplication to find the totals
- Sort coins according to type, count the number of coins and then multiply to find the total value of pennies (\times 1), nickels (\times 5), dimes (\times 10) and quarters (\times 25).
- Count quantities of items by 2's, 3's, 5's, and 10's
- Use a calculator to solve word problems using multiplication and division. For example, Callie wants to buy 20 apples that cost \$.19 each. What is the total cost of her purchase? Michael has 332 quarters. He wants to put them into groups of 4. How many groups will he make?
- Act out division problems with counters. For example, Brad has 12 rabbits. He puts the same number of rabbits into each of 4 cages. How many rabbits does Brad put in each cage?
- Ask your child to find the missing factor. For example, $5 \times$ what number? = 75?

Measurement

- Share and discuss tables and graphs found in newspapers and magazines

- Conduct a survey among family members or friends and construct a bar graph or pictograph
- Make records of important times of the day (wake-up, dinner, going to school, getting home from school, etc.) and practice telling how long between activities
- Calculate elapsed time by finding out how long it takes to complete daily activities (soccer practice, homework, take a shower, etc.)
- Use a ruler to measure objects around the house in inches or centimeters
- Measure the perimeter (distance around) of the rooms in your home to determine which rooms are the smallest and largest

Number and Operations- Fractions

- Go on a fraction hunt! Look for household items that are divided into equal parts (fractions of a whole and fractions of a set). Record the fractions
- Identify fractions at meal times. For example, you ate $\frac{1}{2}$ of an apple, $\frac{3}{4}$ stalk of celery, 1 whole tuna sandwich, and $\frac{2}{3}$ of a glass of milk

Geometry

- Use grid paper to create congruent shapes
- Identify, describe, and classify different household objects as solid figures
- Identify angles that are less than, equal to and greater than right angles
- Use tangrams to make plane figures
- Cut pieces of yarn to make line segments. Measure each segment in inches (to the nearest quarter inch) and centimeters
- Go stargazing and make imaginary line segments by connecting the stars (points). Create geometric shapes
- Go on a shape hunt! Look for geometric shapes in your home and community. Create a chart to show your findings

Suggested Websites:

<http://www.multiplication.com/games>

This website has arcade style practice for basic math operations including +, -, x and ÷. Great for fact fluency!

<https://www.khanacademy.org/math>

This website can be used to learn, practice, or review math concepts by grade through video clips and questions.

<https://www.prodigygame.com/Play/>

This website practices math in an anime style. An initial assessment will determine which skills need practice and which skills are mastered. The program will individualize practice problems and level students based on their success.

<https://www.ixl.com/math/>

On IXL, math is more than just numbers. With unlimited questions, engaging item types, and real-world scenarios, IXL helps learners experience math at its most mesmerizing!

<https://www.aaamath.com/>

AAA Math features a comprehensive set of thousands of interactive arithmetic lessons.