

# Do-Anytime Activities for Grade 1

Have your child help create a number line (0–15) outside with sidewalk chalk. Call out a number and have your child jump on that number. Make up directions such as “Hop to the number that is two less” or “Jump to the number that is four more.” Give a few more directions, and then have your child call out directions while you jump. If you don’t have chalk, use paper, crayons, and fingers.

Divide a deck of cards evenly between you and your child and put the cards facedown. For each turn, players flip their top card faceup and decide who has the larger number. That player collects both cards. Continue playing until the deck has been used. Play a second round but have the player with the smaller number take both cards. You may assign points to Aces, Kings, Queens, and Jacks or remove them.

Have your child create tally marks in batches of five until you say “Stop.” Then skip count by 5s to see how many marks were written.

Let your child count the dollars and coins in your wallet. Together, brainstorm the items that you can buy.

Count orally by 2s, 5s, and 10s, sometimes starting at numbers other than 0.

Choose a time “on the hour” (7:00, 2:00), and help your child set an analog clock or watch to that time.

Have your child measure various objects in the house using his or her hand spans (outstretched fingers). Before measuring, estimate how many hand spans it will take to cover the object, then compare the estimate with the actual number.

Practice writing numerals with various objects: pens, markers, crayons, paint, sand. Or form numerals using cotton balls, craft sticks, toothpicks, or rocks.

Have your child create and tell you a number story that goes with a given number sentence, such as  $4 + 2 = 6$ .

Create number stories that involve two or more items. For example, “I want to buy a doughnut for 45 cents and a juice box for 89 cents. How much money do I need?” (\$1.34)

Label each cup of an egg carton with the numbers 0–11. Put two pennies in the carton, close the lid, and shake it up. Using the numbers of the two sections the pennies landed in, make up and solve addition and subtraction problems.

Use Fact Triangles to practice addition by covering the sum. Practice subtraction by covering one of the other numbers.

Look for geometric shapes around the house, in the supermarket, on buildings, and on street signs. Help your child use geometric names for the shapes, such as triangle, square, rhombus, hexagon, and so forth.

Help your child use paper and scissors to make various shapes such as rhombus, hexagon, trapezoid, pentagon, square, or circle. Take turns holding up each shape and naming them. After naming all of the shapes, make a design.

Gather a loonie, a five dollar bill, and lots of change. Name an amount of money, such as "one dollar and 26 cents," and have your child use the real money to show you that amount. Try a few more and then switch roles.

With your child, cut food, such as pizza, celery, carrots, sandwiches, pies, or green beans into halves, thirds, fourths, fifths, and so on. If you are cutting more than one of the same item, look at the pieces to compare the fractional parts. Ask questions such as "Which is bigger: the halves or the thirds?"

Say a 2- or 3-digit number. Have your child identify the actual value of the digit in each place. For example, in the number 952, the value of the 9 is 900; the value of the 5 is 50; and the value of the 2 is two 1s, or 2.

Take out various measuring cups and line them up. Ask your child, "Which holds more:  $\frac{1}{2}$  cup or  $\frac{1}{3}$  cup?  $\frac{1}{4}$  cup or  $\frac{1}{3}$  cup? Which holds less:  $\frac{1}{3}$  cup or  $\frac{2}{3}$  cup?" If your child can't determine which holds more, fill the measuring cups with water and pour the water into clear glasses to compare the amounts.

Pick three single-digit numbers. Ask your child to write the smallest number and largest number using all three digits. For example, using 4, 2, and 7, the smallest number is 247 and the largest number is 742.

Have your child name a temperature that is hot, cold, and mild. Using a map of the Canada, Discuss with your child provinces that are hot, cold, have temperatures in the teens in the winter, have temperatures over 100 degrees in the summer, and so on.

## Do-Anytime Activities for Grade 2

**These activities are easy and fun to do with your child at home, and they will reinforce the skills and concepts your child is learning in school.**

Ask your child to count by certain intervals. For example, "Start at zero and count by 4s."

Use the family calendar to discuss the number of months in a year, weeks in a month, and days in a week. Count how many days, weeks, or months it is until a special event, such as a birthday, holiday, party, or picnic.

Practice turn-around facts with your child such as  $6 + 4 = ?$  Then try  $4 + 6 = ?$  Take turns creating turn-around facts and quizzing each other.

Roll two dice and practice addition and subtraction by adding or subtracting the two numbers. Alternate turns with your child and have him or her check your answers.

Gather a handful of coins with a value less than \$2. Have your child calculate the total value.

Ask the time throughout the day. Encourage alternate ways of naming time, such as *half past two* for 2:30.

Make up number stories involving estimation. For example, pretend that your child has \$2.00 and wants to buy a pencil that is marked \$0.64, a tablet marked \$0.98, and an eraser marked \$0.29. Help your child estimate the total cost of the three items (without tax) to determine if there is enough money to buy all three.

Practice addition and subtraction involving multiples of 10 by asking your child "What is  $20 + 10$ ?  $40 + 50$ ?  $60 - 20$ ?"

Look for 2- and 3-dimensional shapes in your home or neighborhood. Name the shapes and discuss their characteristics.

Use household items (toothpicks and marshmallows, straw and twist-ties) to construct and name shapes. Encourage your child to try combining shapes to make other shapes.

Think of two 2-digit numbers and ask your child to estimate the sum. For example  $23 + 46 = ?$  (Estimate is  $20 + 50 = 70$ .)

Think of a theme (such as animals, shopping, or sports). Take turns making up addition and subtraction number stories related to the theme. Share solution strategies.

Try doubling, tripling, and quadrupling small numbers.

Pick three objects in the house that measure less than a 30 cm. Measure them in centimeters.

Read a recipe, and discuss the fractions in it. For example, ask "How many  $\frac{1}{4}$  cups of sugar would we need to get 1 cup of sugar?"

Have your child compare two fractions and tell which is greater.

Ask questions to help your child visualize the fractions, such as "Which would give you more pizza:  $\frac{1}{8}$  of a pizza or  $\frac{1}{4}$ ?"

Gather a tape measure, metre stick, ruler, cup, litre container, and scale. Discuss which is the best tool for different measurement situations. For example, ask "What would you use to measure the length of a room?" or "Which would you use to find out how much water the bathtub holds?"

Take out a few dollars and lots of coins. Call out an amount of money, such as \$1.45. Ask your child to show you that amount (for example, 1 dollar bill, 1 quarter, and 2 dimes.) Then prompt your child to show several other ways to represent \$1.45. Play again with a new amount.

Say a dollar amount to your child, such as "two dollars and thirty cents." Ask your child to key in that number on the calculator. Check for the correct placement of the decimal. Make up a few more and then switch roles. When your child calls out an amount, make sure he or she always says "and" for the decimal point.

Practice multiplying numbers by 2, 5, and 10.

Use Fact Triangles to practice multiplication by covering the product. Practice division by covering one of the other numbers.

Practice telling time to 5 minutes by helping your child set an analog clock or watch. Some times for your child to try might be 1:05, 3:15, 5:45, and 7:30.

Say a 3- or 4-digit number and have your child identify the actual value of the digit in each place. For example, in the number 3587, the value of the 3 is 3000; the value of the 5 is 500; and so on.

# Do-Anytime Activities for Grade 3

These activities are easy and fun to do with your child at home, and they will reinforce the skills and concepts your child is learning in school.

Draw an analog clock face with the hour and minute hands showing 8 o'clock. Ask your child to write the time shown. Repeat with other times such as 3:30, 11:45, and 7:10. If you don't want to draw a clock face each time, use craft sticks or toothpicks for the hour and minute hands.

Make combinations of bills and coins using money from your wallet or a piggy bank. Have your child write the amount shown using a dollar sign and a decimal point. For example, suggest 4 loonies, 3 dimes, and 2 pennies. Your child would write \$4.32.

Practice addition and subtraction fact extensions, for example,  $6 + 7 = 13$ ;  $60 + 70 = 130$ ;  $600 + 700 = 1300$ .

Use Fact Triangles to practice multiplication by covering the product. Practice division by covering one of the other numbers. Make this brief and fun.

Measure various items with your child with each of you using personal measures, such as paces or hand spans. Discuss why, for example, the width of your living room is only 15 of your paces but 25 of your child's. Talk about why standard units are useful.

Draw three different polygons such as a square, a rectangle, and a triangle. Ask your child to estimate which has the largest and which one has the smallest perimeter. Then, help your child measure the sides with a ruler and determine the exact perimeter of each polygon. Compare your child's estimate with the actual perimeters.

Ask questions that involve multiples of equal groups. For example, say "Pencils are packaged in boxes of 8. There are 3 boxes. How many pencils are there?"

Ask questions that involve equal sharing. For example, say "Seven children share 49 baseball cards. How many cards does each child get? How many cards are left over?"

Write decimals for your child to read aloud, such as 0.32 (thirty-two hundredths) or 0.9 (nine-tenths).

Write down two 4- or 5-digit numbers. Ask your child to tell which is larger and explain why. Try a few more and then switch roles.

Search for geometric figures with your child. Identify figures by name, if possible, and talk about their characteristics. For example, a stop sign is an octagon, with 8 sides and 8 angles. A brick is a rectangular prism, where all faces are rectangles.

Have your child use a protractor to draw a design using only acute angles (between  $90^\circ$  and  $180^\circ$ ) and right angles ( $90^\circ$ ).

Provide your child with problems with missing factors for multiplication practice. For example, ask "6 times what number equals 18?"

Help your child find fractions in the everyday world—in advertisements, on measuring tools, in recipes, and so on.

Have your child trace around an object such as a deck of cards, a box, a plate, a cup, a can, and so on. Divide the figure equally into 4 parts. Ask your child to color  $\frac{3}{4}$  of the shape. Try a few more using different figures and dividing them into different fractional parts. Instead of tracing around an object, draw figures such as squares, rectangles, and circles.

Ask your child how many 10s are in 30, 50, 100, 1,000 and so on.

Take out different objects such as buttons, counters, pennies, and paperclips. Divide them into 3 equal groups. How many are in each group? How many are left over?

Name items around the house that weigh less than 1 kilogram, 2 kilograms, 5 kilograms. If you have a scale, place the items on the scale to check your guesses.

Use the weather as a springboard to discuss probability. Begin by noting the chance (percentage) for rain, and then ask your child if it seems likely or unlikely that it will rain.

Make a number line from  $-6$  through  $6$ , leaving off some of the numbers. Ask your child to fill in the missing numbers. Try another number line with a different range of numbers and blank spaces. Then switch roles, and have your child create a number line, leaving off some labels for you to fill in.

# Do-Anytime Activities for Grade 4

**These activities are easy and fun to do with your child at home, and they will reinforce the skills and concepts your child is learning in school.**

Help your child identify real-world examples of right angles (the corner of a book) and parallel lines (railroad tracks).

Have your child compile a shapes scrapbook or create a collage of labeled shapes. Images can be taken from newspapers, magazines, and photographs.

Help your child look up the population and land area of the province and city in which you live, and compare these facts with those of other provinces and cities.

Make up number sentences with correct and incorrect answers. Ask your child to put next to the sentence a "T" if the answer is correct and an "F" if the answer is incorrect. For example, try  $5 * 6 = 35$  (F);  $6 * 2 + 4 = 16$  (T);  $4 * (2 + 5) = 13$  (F).

Continue practicing multiplication and division facts by using Fact Triangles and fact families or by playing games from the *Student Reference Book*.

Gather money from piggy banks or wallets. Ask your child to show you two different amounts, such as \$1.33 and \$4.20. Practice adding or subtracting the amounts. Your child can use a calculator to check the answers.

Have your child write numbers through the millions and billions and practice reading them. Then select two and ask your child to tell which one is the greater number.

Practice extended facts with your child. Start with  $3 * 30$ ,  $3 * 300$ , and then try  $3 * 3,000$ . Have your child make up extended facts for you to calculate.

Hide an object in a room of your house, and give your child directions for finding it. Your child can move only according to your directions, and the directions can be given only in fractions or degrees. For example, say "Make a  $\frac{1}{4}$ -turn and walk  $3 \frac{1}{2}$  steps. Now, turn  $180^\circ$  and walk 4 steps." Switch roles and have your child hide an object and give you directions to find it.

Make a game of identifying and classifying angles: acute (less than  $90^\circ$ ), obtuse (between  $90^\circ$  and  $180^\circ$ ), right ( $90^\circ$ ), straight ( $180^\circ$ ), and reflex (between  $180^\circ$  and  $360^\circ$ ) in everyday things (buildings, bridges, ramps, furniture).

Encourage your child to recognize how probability is used in everyday situations, such as weather reports. Have your child make a list of things that could *never happen*, things that *might happen*, and things that are *sure to happen*.

Have your child measure the perimeters of rooms in your house or of household objects. Then have him or her find the areas of the objects.

Help your child draw a scale map of your city, town, neighborhood, or have your child do a scale drawing of the floor plan of your home.



Have your child look for everyday uses of fractions and percents. Look in games, grocery stores, cookbooks, measuring cups, and newspapers. When finding fractions, decimals, or percents, ask your child to change them from one form to another. For example, if you see "1/4 off", ask your child to tell what percent is equal to  $\frac{1}{4}$  (25%).

Write whole numbers and decimals for your child to read, such as 650.02 (*six hundred fifty and two-hundredths*). Ask your child to identify the digits in the various places in the numbers—hundreds place, tens place, ones place, tenths place, and so on.

Have your child look for repeating borders or frieze patterns (a design made of shapes that are in a line or lined up) on buildings, rugs, and floors. Your child may want to sketch the friezes or draw original patterns.

Use sidewalk chalk to make a number line with positive and negative numbers. Have your child solve addition and subtraction problems by walking on the number line. For example: to solve  $-2 + 6$ , your child would start on -2 and walk to the right six numbers to find the sum. Switch roles. For an inside activity, use paper, pencil, and fingers.

Have your child find the volume of various rectangular prisms around your house, such as shoe boxes and fish tanks.

During trips in the car, let your child know how far you will be traveling and the approximate speed you'll be moving at. Ask your child to estimate about how long it will take to get to your destination.

When grocery shopping, ask your child to help you find the "best buy" by comparing the cost per unit (ounce, gram, each) of different package sizes. For example, compare the cost of a family-size box of cereal with the cost of a regular-size box.



# Do-Anytime Activities for Grade 5

**These activities are easy and fun to do with your child at home, and they will reinforce the skills and concepts your child is learning in school.**

Ask your child to name as many factors as possible for a given number such as 24 (1, 24, 6, 4, 12, 2, 8, 3). To make sure the factors are correct, your child can multiply them with a calculator.

Practice extending multiplication facts. Write each set of problems so that you child may recognize a pattern. Set A:  $6 \times 10$   $6 \times 100$   $6 \times 1000$ ; Set B:  $5 \times 10$   $5 \times 100$   $5 \times 1000$

When your child adds or subtracts multi-digit numbers, talk about the strategy that works best for him or her. Try not to impose the strategy that works best for you! Here are some problems to try:  $467 + 343$ ;  $761 + 79$ ;  $894 - 444$ ;  $842 - 59$ .

To learn more about population data and its uses, visit the Web site for statistical enquiry at [www.censusatschool.ca](http://www.censusatschool.ca). Have your child write three interesting pieces of information that he or she learned.

Draw various angles: acute (less than  $90^\circ$ ), obtuse (between  $90^\circ$  and  $180^\circ$ ), and right ( $90^\circ$ ). Ask your child to estimate each angle measurement and then use a protractor to find the actual measurement. Compare the results. Switch roles, letting your child draw angles for you to estimate and measure.

Find a map of your province and ask your child to use the scale to find the distance from a particular city to another city.

Identify percents used in stores, newspapers, and magazines. Help your child find the sale price of an item that is discounted by a percent. For example, a \$40 shirt discounted by 25% will cost \$30.

Practice writing numbers as a fraction and then as a decimal. Try one-fourth ( $\frac{1}{4}$ , 0.25), three-tenths ( $\frac{1}{3}$ , 0.3) and so on.

Have your child practice adding fractional parts of an hour with a digital clock. Ask questions, such as "What time will it be an hour and a half from now? What was the time a quarter of an hour ago?"

Practice adding and subtracting fractions with the same denominator.

Create a number sentence that includes at least three numbers, several different operations, and parentheses. Have your child solve the number sentence. Then change the problem by placing the parentheses around different numbers. Ask your child to solve the new problem and explain how it changed according to the order of operations, for example,  $(6 \times 5) - 3 = 27$  and  $6 \times (5 - 3) = 12$ .

Think of two numbers with exponents such as  $2^5$  and  $3^5$ . Ask your child to determine which number is greater. If you like, check your child's answer on a calculator. Switch roles.

Use a deck of cards to practice comparing fractions. Use only the number cards 2 through 9. Each player is dealt two cards and creates a fraction using one card as the numerator and one card as the denominator. The player with the greater fraction takes all four cards.

When at a store, reinforce percents by pointing out discounts and asking your child to figure out the sale price. If, for example, a sign shows "40% off", select an item, round the price to the nearest dollar, and help your child calculate the savings.

Have your child draw a picture using rectangles, parallelograms, and triangles. Once completed, work together to find the area of each shape, and write it inside each shape. Ask your child, "What do you notice about the size of the area and the size of the shape?"

Draw several circles and ask your child to find the radius, diameter, and circumference of each. Cut them out and make a design.

Practice evaluating simple algebraic expressions by asking your child, "If  $y$  is equal to 4 what is ...  $y + y$ ,  $3 + y$ ,  $y \times 2$  and so on.

Find two real world 3-dimensional shapes and guess which will have the greatest and the least volumes. Then find the volume of each one and check to see if your guess was correct.

Reinforce ratios with a deck of cards. Ask your child, "What is the ratio of 3s to the whole deck?" (4 to 52 or 1 to 13); "Jacks to Aces and Queens?" (4 to 8 or 1 to 2); "Hearts to the whole deck?" (14 to 52 or 7 to 26).

In a parking lot, select a row or section and count the number of cars parked in that section. Ask how many of those cars in that section are red. Have your child determine the ratio of red cars to the number of cars parked in that section.

## Do-Anytime Activities for Grade 6

**These activities are easy and fun to do with your child at home, and they will reinforce the skills and concepts your child is learning in school.**

Scan the paper or magazines for graphs, and discuss with your child whether the information presented seems accurate or intentionally misleading. Analyze and discuss the statistics with your child to make it more meaningful.

Ask your child to draw squares with an area of 12 square centimetres, of 8 square centimetres, and of 20 square centimetres.

Have your child mentally calculate a tip from a restaurant bill. For example, if the bill is \$25 and you intend to tip 15%, have your child go through the following mental algorithm: 10% of \$25 is \$2.50. Half of \$2.50 (5%) is \$1.25. \$2.50 (10%) + \$1.25 (5%) would be a tip of \$3.75 (15%). The total amount to pay would be \$28.75.

Look through the paper for examples of number-and-word notation such as 7.5 million or 1.5 trillion, and ask your child to write the number in standard notation (7,500,000 or 1,500,000,000). If you can't find examples in the paper, make up some of your own.

Create algebraic expressions that contain at least one variable. For example, you might say "John is 4 centimetres taller than his brother Sam." Ask your child to write the algebraic sentence which represents John's height ( $S + 4$ ). Use family examples to make the expressions more meaningful.

Name some fractions, decimals, or whole numbers, and have your child find the reciprocal of each. Remind your child to think "What times the number equals 1?" Try  $4$  ( $\frac{1}{4}$ ),  $0.3$  ( $\frac{10}{3}$ ), and  $1\frac{1}{3}$  ( $\frac{3}{4}$ ).

When cooking in large quantities, ask your child to double or triple the amounts in your recipes. Watch to make sure that your child does the math for every ingredient. Or, halve a recipe if you need to make a smaller amount.

Ask your child to find examples of right angles ( $90^\circ$ ), acute angles (less than  $90^\circ$ ), and obtuse angles (between  $90^\circ$  and  $180^\circ$ ). Guide your child to look particularly at bridge supports for a variety of angles.

While driving in the car together, direct your child to look for congruent figures (two or more figures with the same size and shape). Windows in office buildings, circles on stop lights, and so on, can all represent congruent figures.

Draw a number line from -5 to 5 with sidewalk chalk outside. Give your child addition or subtraction problems with positive and negative numbers. Have your child solve the problems by walking to the numbers while explaining his or her thinking.

Make up true and false number sentences. Ask your child to tell you whether each one is true or false and explain why. For example, try  $30 * (4 - 2) > 60$  (false, because the answer is exactly 60) and  $36/4 * 4/2 = 18$  (true, because they equal each other). Switch roles.

While playing a game that uses a die, keep a tally sheet of the total number of times you roll the die and how many times a certain number is rolled. For example, find how many times during the game that the number 5 comes up. Have your child write the probability for the chosen number. The probability is the number of times the chosen number came up over the number of times the die was rolled during the game. The probability will be close to  $1/6$ . Try with your child to identify events that occur without dependence on any other event. Guide your child to see the difference between *dependent* events and *random* events. For example, "Will Uncle Mike come for dinner?" depends on whether or not he got his car fixed. However, "Will I get HEADS when I flip this coin?" depends on no other event.

Use graph paper to practice drawing shapes that are similar (exact shape but different size).

Encourage your child to read nutrition labels. Have him or her calculate the percent of fat in an item.

$$\frac{\text{Fat calories}}{\text{Total calories}} = \frac{\text{percent of fat}}{100\%}$$

Your child should use cross-multiplication to solve the problem.

Using a ruler to draw a rectangle, a triangle, and a parallelogram. With your child, recall the formula for finding the area of each shape: rectangle ( $A = l * w$ ), triangle ( $A = \frac{1}{2} b * h$ ), and parallelogram ( $A = b * h$ ). Find the area of each shape in square centimetres.

Use graph paper to draw polygons with given areas. For example, see if your child can draw a trapezoid with an area of 20.5 square centimetres or a rectangle with an area of 30 square centimetres and a perimeter of 15 centimetres.

Review tessellations with your child. Encourage your child to name the *regular* tessellations and to draw and name the eight *semiregular* tessellations. Challenge your child to create *nonpolygonal Escher-type translation* tessellations. You may want to go to the library first and show your child examples of Escher's work.