

Family Newsletter

Dear Caregiver/Parent:

Over the next two weeks, your child will be learning about patterns: both repeating patterns and growing or shrinking patterns. The goal will be for your child to identify, describe, extend, and create patterns. For repeating patterns, the focus will be on naming attributes of patterns and how those attributes change. The focus for growing or shrinking patterns will be on the start number and the amount that is added or subtracted each time.

Throughout this time, you and your child may engage in activities such as the following:

- Your child can look around for repeating patterns and create a list of these. They can ask and answer questions about the patterns, such as “What attributes are changing in the pattern?” (for example, colour and size) and “How are those attributes changing?” (for example, colour: blue, purple, blue, purple, repeat; size: small, big, big, small, repeat) and “What is the part that of the pattern that repeats?”
- Your child can decorate items using repeating patterns. For example, they can create their own notepaper or cards by making a repeating pattern around the edge. They can use shapes, names, and colours for these patterns.
- Your child can make and use a 100 chart at home to show growing or shrinking patterns. For example, they can start with an item that costs \$4, then add eleven \$3 items to the “bill.” (They can use the repeat function on a calculator, if possible, to find each new number.) After they mark the numbers on the 100 chart with counters or circles, they can describe the pattern they see and explain the pattern rule.

You may also visit the Nelson Web site at www.nelsonk8math.com for more suggestions to help your child learn mathematics and develop a positive attitude toward learning mathematics, and for books that relate children’s literature to patterns. Also check the Web site for links to other Web sites that provide online tutorials, math problems, and brainteasers.

If your child is using *Nelson Mathematics 3 Workbook*, pages 1 to 8 belong to Chapter 1. There is one page of practice for each lesson as well as two Test Yourself pages. If your child requires assistance, refer to the At-Home Help section on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next three weeks, your child will be working with numbers from 0 to 1000. The student will represent and describe numbers such as 894 in a variety of ways and situations. Relationships among numbers and among digits in numbers will be emphasized as students rename, round, compare, and order numbers, explore number patterns, and develop number sense. Your child will also work with money to estimate, count, and write money amounts up to \$10 and work with bills up to \$100.

Throughout this time, you and your child can practise some at-home activities such as the following:

- You and your child can play a game using two sets of number cards labelled 0 to 9. Shuffle the cards and, without looking, choose 2 cards to form a 2-digit number. Ask your child to say the number, and to write the number in expanded form using numbers and words. For example, 75 can be made from two cards numbered 7 and 5. In expanded form, it is written as $70 + 5$ and in expanded form with words, it is 7 tens 5 ones. After your child has had lots of practise with 2-digit numbers, you can play the same game with 3-digit numbers, using three sets of numbered cards.
- Say aloud various 2- and 3-digit numbers and ask your child to find the cards to make the numbers.
- Choose a book with a large number of pages. Open the book to a random page and ask your child to tell you the numbers 1 greater than, 1 less than, 10 greater than, and 10 less than the page number.
- Your child can count out the amount of money required when making a purchase in a store with you.

You may want to visit the Nelson Web site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and for books that relate children's literature to numbers up to 1000. Also check the Web site for links to other Web sites that provide online tutorials, math problems, and brainteasers.

If your child is using the *Nelson Mathematics 3 Workbook*, pages 9 to 18 belong to Chapter 2. There is a page of practice questions for each of the 9 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help section on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

During the next 2 weeks, your child will design surveys to collect data; sort and organize data using Venn diagrams and tally charts; represent data by creating pictographs and bar graphs with scales of 2, 5, and 10; and describe and interpret bar graphs, pictographs, and circle graphs. Your child will explore what makes a survey question a good one, how best to organize and display a given data set, and what sorts of things a graph can tell us.

Throughout this time, you and your child can practise some activities such as the following:

- Your child can count some items that come in large quantities (e.g., straws) and create a pictograph with a scale of 10 to represent the items.
- Your child can design a question, conduct a survey, tally the results, and display the data in a bar graph. For example, they could ask, “How many of my books do I want to read, or read again: soon, someday, or never?” and then interpret the results.
- Your child could look in the media for examples of bar graphs with scales and tell you 3 or 4 things the graph shows. The scale might be larger than 10; they could discuss why the scale used is appropriate.
- When sharing a circular item, such as a pie, encourage your child to compare the sizes of slices (cut from the centre); this is similar to a circle graph.

You may also want to visit the Nelson Web Site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and develop a positive attitude towards learning mathematics, and for books that relate children’s literature to data management. Also check the Web site for links to other Web sites that provide online tutorials, math problems, and brainteasers.

If your child is using the *Nelson Mathematics 3 Workbook*, pages 19 to 26 belong to Chapter 3. There is a page of practice questions for each of the 6 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help section on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next couple of weeks, your child will be learning about addition and subtraction. We will relate subtraction to addition, use mental math, estimate, and add and subtract to 2-digit numbers. We will be using a variety of strategies and the goal will be for your child to be able to apply a strategy to any task at hand.

Throughout this time, you and your child can practise some activities such as the following:

- Your child could place different numbers of items on a chair and on the floor, then write or tell you all the fact family sentences about each situation. For example, 7 toys on the floor and 6 toys on a chair has the fact family $7 + 6 = 13$, $6 + 7 = 13$, $13 - 7 = 6$, and $13 - 6 = 7$.
- Your child can examine game boards to find ones where strategies for adding and/or subtracting can be readily applied rather than always counting.
- Your child might act out a stair-climbing problem. For example, if you take 3 steps up and 1 step back, how many steps will you take to get to the top of the stairs?
- Your child could measure stuffed animals and other toys. Then, estimate how much space 2 or 3 of them would take if placed end to end and how much space would be left on a 100 cm shelf if different toys were placed on the shelf.
- Your child might set up a “penny sale,” giving various items prices less than \$1. Then they can find the cost of different pairs of items.
- Your child could look up basketball scores in a newspaper and show you how to find the difference between winning and losing teams’ scores.

You may want to visit the Nelson Web Site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and develop a positive attitude toward learning mathematics, and for books that relate children’s literature to addition and subtraction. Also check the Web site for links to other Web sites that provide online tutorials, math problems, and brainteasers.

If your child is using *Nelson Mathematics 3 Workbook*, pages 27 to 34 belong to Chapter 4. There is a page of practice questions for each of the 7 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help section on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next three weeks, your child will be learning how to measure length, time, and temperature. They will estimate and compare lengths in centimetres and metres, and they will learn how long a kilometre is. They will also estimate, measure, and compare perimeters. They will tell time on digital and analog clocks and read thermometers. The problem-solving strategy of using charts is highlighted in this chapter.

Throughout this time, you and your child can do some activities such as:

- Your child can determine his or her age and the ages of family members in years, months, and days.
- Your child can determine the number of weeks and days between family birthdays or other special days throughout the year.
- Your child can estimate and measure various lengths (for example, the height of the refrigerator or another appliance, the perimeter of your living room, or the distance from your house to the street).
- You and your child could use an outdoor thermometer to read the daily temperature and record the information on a chart.

You may want to visit the Nelson Web site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and for books that relate children's literature to area and grids. Also check the Web site for links to other sites that provide online tutorials, math problems, and brainteasers.

If your child is using a *Nelson Mathematics 3 Workbook*, pages 35–45 belong to Chapter 5. There is a page of practice questions for each of the 10 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help box on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next three weeks, your child will be learning about addition and subtraction of greater numbers. The goal will be for your child to estimate sums and differences, add and subtract 2-digit and 3-digit numbers, explain how to solve addition and subtraction problems, and add and subtract with money. A focus will be identifying the most appropriate strategy in a given situation. Your child will use base ten blocks, pencil and paper, mental math, play money, and calculators to develop proficiency in adding and subtracting.

Throughout this time, you and your child can practise some At-Home activities, such as the following:

- Your child can estimate the total amount in 2 or 3 items (e.g., drinks) that come in quantities of 3-digit numbers (e.g., 225 mL).
- Your child can compare the number of items in packages containing different numbers of items (e.g., a box of 24 crackers and a box of 60).
- In planning a trip, your child can look at a map and determine partial distances; estimate, then add, to find the total distance; and subtract to compare distances.
- In shopping for 2 or 3 items, your child can estimate the combined cost, and then calculate the amount of change.

You may also want to visit the Nelson Web site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and develop a positive attitude toward learning mathematics, and for books that relate children's literature to addition and subtraction of greater numbers. Also check the Web site for links to other Web sites that provide online tutorials, math problems, and brainteasers.

If your child is using *Nelson Mathematics 3 Workbook*, pages 46 to 56 belong to Chapter 6. There is one page of practice for each lesson and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help section on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

For the next two weeks, your child will be learning about 2-D shapes. The goals will be for your child to use shapes to make other shapes, to identify shapes that are congruent (the same size and shape), and to recognize symmetry in shapes. These skills will help your child to understand that many shapes are related to one another and that shapes can be sorted and given the same name, such as a set of parallelograms or a set of triangles. Your child should begin to notice interesting geometric designs in his or her world. You might talk to your child about how these designs have been created. At the end of the chapter, your child will be using knowledge of shapes to create geometric designs. Throughout the two weeks, you and your child may engage in activities such as:

- Your child can look for shape puzzles at home. Look in resources such as newspapers and puzzle books. Your child could bring a puzzle to school to display on a class bulletin board or puzzle table.
- Your child can find and list things around the house that have more than one line of symmetry, and sketch at least 4 of these items and show the lines of symmetry.
- Your child could plan a symmetrical design for one wall of a bedroom or some other room in the house. This might include the placement of pictures or posters on the wall. Your child can draw a sketch of the symmetrical design, draw the line of symmetry, and describe how the design was created.
- Your child can find something at home, such as a rug, a vase, or a bedspread, that has an interesting geometric pattern. Have your child draw the pattern and describe attributes such as congruent shapes, lines of symmetry, and colour. Your child should then describe how the pattern was made. This is called the pattern rule. Your child might take the real object or a drawing of the object to class to share with others.

You may want to visit www.mathk8.nelson.com for more suggestions to help your child learn mathematics and for books that relate children's literature to 2-D geometry. Also check the Web site for links to other sites that provide online tutorials, math problems, and brainteasers.

If your child is using a *Mathematics 3 Workbook*, pages 57–63 belong to Chapter 7. There is a page of practice questions for each of the 6 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help box on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next three weeks, your child will be working with area and grids. The students will estimate and measure the area of shapes using nonstandard units, such as stickers or big squares. They will compare and order shapes by area, solve area problems using models, and work with grids to describe locations and movements.

Throughout this time, you and your child can do some activities such as:

- You and your child can use playing cards or index cards to cover the top of different rectangular surfaces in your home, such as tables, dressers, and counters. Have your child estimate how many cards she or he thinks will be needed to cover the space. You and your child can then measure the surface by covering it with the cards. Compare the areas of all the rectangular surfaces you measure.
- Have your child use stamps or stickers to estimate and then measure the area of various sizes of envelopes.
- Have your child choose a nonstandard unit to measure the light switch plates in your home.
- You and your child can play games, such as Snakes and Ladders or checkers, that involve moving playing pieces on a grid. As you play, talk about the movements and any strategies that could help either of you win the game.
- You and your child can play BINGO, a game that requires your child to locate a number under a specific letter on a grid.

You may want to visit the Nelson Web site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and develop a positive attitude toward learning mathematics, and for books that relate children's literature to area and grids. Also check the Web site for links to other sites that provide online tutorials, math problems, and brainteasers.

If your child is using a *Nelson Mathematics 3 Workbook*, pages 64 to 69 belong to Chapter 8. There is one page of practice questions for each of the 5 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help box on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next two weeks, your child will be learning about multiplication. Students will use skip counting and repeated addition to develop an understanding of the multiplication facts up to 7×7 . Since multiplication is new to students in Grade 3, it is important that they understand what it means to group items before they are asked to memorize multiplication facts. Once your child has this understanding, he or she will learn strategies to begin memorizing the facts. At the end of the chapter, your child will use knowledge of multiplication to solve everyday problems.

Throughout this time, you and your child may do some activities such as:

- Your child can look around the house to find things that come in groups, such as packages of food or household items (e.g., juice boxes, eggs, batteries, scouring pads). Make a list of the items and the size of each group.
- Your child can look through grocery store flyers for items sold in groups, recording the items, the size of the groups, and its price.
- If your family has a cat or a dog, your child can figure out the age of your pet in “human” years. Every year a cat lives, it ages 5 human years. Every year a dog lives, it ages 7 human years.

You may want to visit the Nelson Web site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and for books that relate children’s literature to multiplication. Also check the Web site for links to other sites that provide online tutorials, math problems, and brainteasers.

If your child is using a *Nelson Mathematics 3 Workbook*, pages 70 to 76 belong to Chapter 9. There is a page of practice questions for each of the 6 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help box on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next two weeks, your child will be learning about the concept of division. He or she will be learning division facts up to and including $49 \div 7$ and seeing the connection between multiplication and division and subtraction and division. The goal will be for your child to either recall division facts or be able to apply a strategy to find each answer. Your child will use these facts, along with a variety of strategies, to solve real-life problems.

Throughout this time, you and your child can do some activities such as:

- Your child can look for things that come in groups of 2s, 3s, and 4s (such as rolls of hockey tape, bags of milk, and so on).
- Your child can begin to calculate how to share things equally within a group of people. For example, if I had 12 stickers to share with 3 friends, how many stickers could we each have?
- Your child could find objects that come in arrays (such as muffins in a box or eggs in a carton). This would assist in connecting the multiplication and division fact families.

You may want to visit the Nelson Web site at www.mathk8nelson.com for more suggestions to help your child learn mathematics and develop a positive attitude toward learning mathematics, and for books that relate children's literature to multiplication and division. Also check the Web site for links to other sites that provide online tutorials, math problems, and brainteasers.

If your child is using the *Nelson Mathematics 3 Workbook*, pages 77 to 83 belong to Chapter 10. There is a page of practice questions for each of the 6 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help box on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next three weeks, your child will be working with 3-D geometry shapes and measuring mass and capacity. Students will name and compare prisms and pyramids. They will also identify attributes, such as the number of faces, edges, and vertices. Students will then study the concept of measurement involving mass (the amount of matter in an object) and capacity (the amount a container will hold). The goal for your child will be to use their knowledge of 3-D shapes, mass, and capacity to solve related problems.

Throughout this time you and your child can do some activities such as:

- Your child can look around the house for examples of prism and pyramid shapes (for example, tissue boxes, milk cartons, cookie containers, and so on). They can name the shape and count the number of faces, edges, and vertices. They can also practise drawing the net (the flattened shape) that would make that 3-D shape.
- You and your child can play Name that Shape, where they either give or receive clues as to the shape and try to guess the name.
- Your child can find various containers of different masses in grams (g) or kilograms (kg). They can estimate the mass of each, and then check the mass on the container.
- Your child can also estimate the capacity of various containers. They can compare the sizes and units of measure in millilitres (mL) or litres (L).
- Show your child some recipes, and discuss the measurements that are listed. Encourage your child to measure the ingredients.

You may want to visit the Nelson Web site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and develop a positive attitude toward learning mathematics, and for books that relate children's literature to 3-D shapes and mass and capacity. Also, check the Web site for links to other sites that provide online tutorials, math problems, and brainteasers.

If your child is using the *Nelson Mathematics 3 Workbook*, pages 84 to 91 belong to Chapter 11. There is a page of practice questions for each of the 7 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help box on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next two weeks, your child will be working with fractions. Students will use fractions to describe parts of a group, parts of a whole, and parts of a measure. They will represent and explain fractions using drawings. They will also model and describe mixed numbers.

Throughout this time, you and your child can do some activities such as:

- Make a list of up to 10 family members your child is familiar with—aunts, uncles, cousins, grandparents. Have your child describe fractions about parts of that list. (For example, what fraction are older than 20? What fraction wear glasses? What fraction live in the same town as you?)
- Have your child make a list of the rooms in your house. He or she can then use fractions to describe the rooms. (For example, what fraction of the rooms have a closet? a bed?)
- Have your child explain to you how to cut or divide appropriate food (e.g., pizza, casseroles, cakes) into equal shares of halves, thirds, quarters, sixths, eighths, or tenths.
- Even though we deal mostly with the metric system, many recipes still use imperial measurements. Look at recipes with your child, and discuss the fractional amounts of the various ingredients.

You may want to visit the Nelson Web site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and develop a positive attitude toward learning mathematics, and for books that relate children's literature to patterns. Also check the Web site for links to other sites that provide online tutorials, math problems, and brainteasers.

If your child is using *Nelson Mathematics 3 Workbook*, pages 92 to 97 belong to Chapter 12. There is a page of practice questions for each of the 5 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help box on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next week and a half, your child will be learning about probability. Understanding probability is essential in many areas of mathematics. In this chapter, your child will be learning to use simple probability language, such as *impossible*, *unlikely*, *likely*, and *certain*. We will investigate possible outcomes of simple events, such as spinning a spinner, and make predictions about what will happen in simple probability situations. Playing games that involve chance is one way to explore probability. As well, your child will look at the possibility of being able to collect free offers in products such as cereal.

Throughout this time, you and your child can do some activities such as:

- Your child can make a list of events that might or might not happen at home one evening, and then describe the probability of each event using *impossible*, *certain*, *likely*, or *unlikely*, and explain his or her choice of probability words.
- Your child can look through your family's board games for any that use a spinner, and then play the game(s).
- Your child can look through your family's board games for any that use a spinner, and then predict the probability of spinning each section on each spinner in 40 spins. Your child can spin the spinner to check his or her predictions.
- Your child might make a spinner for doing chores around the house, use the spinner to decide which chore is to be done next, and keep a tally chart of the results for a week.
- Your child can look around the house, especially in the kitchen, to find products that offer free give-away items, and then make a list of the products and the types and numbers of items that can be collected. If your child can bring empty cartons with free item offers to school, they will be displayed.

You may want to visit the Nelson Web site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and develop a positive attitude toward learning mathematics, and for books that relate children's literature to probability. Also check the Web site for links to other Web sites that provide online tutorials, math problems, and brainteasers.

If your child is using *Nelson Mathematics 3 Workbook*, pages 98 to 103 belong to Chapter 13. There is a page of practice questions for each of the 4 lessons in the chapter and a 2-page Test Yourself at the end. If your child requires assistance, you can refer to the At-Home Help box on each Workbook page.

Family Newsletter

Dear Parent/Caregiver:

Over the next two weeks, your child will be learning about movement and patterns in geometry that involve flips, slides, and turns. They will also be learning about patterns that use these movements. The goal for your child will be to identify and perform a variety of flips, slides, and turns independently, and to compare, extend, and create a variety of patterns involving 2-D geometric shapes and their movements.

Throughout this time, you and your child can do some activities such as:

- Your child can identify things around the house that show flips, slides, and turns. These may appear in pictures, book covers, clothing designs, wallpaper patterns, board games, or the images on a deck of cards.
- Your child can play games, such as checkers and chess, to see how slides work in real-life situations.
- Your child can use the clock to identify and show how turns work. Turns can go both ways, clockwise and counterclockwise.
- Your child can find repeating patterns that may appear in such things as wallpaper designs, quilts, comforters, or clothing.
- Your child can create his or her own patterns or designs, using flips, slides, and turns.

You may want to visit the Nelson Web site at www.mathk8.nelson.com for more suggestions to help your child learn mathematics and develop a positive attitude toward learning mathematics, and for books that relate children's literature to patterns and motion in geometry. Also, check the Web site for links to other sites that provide online tutorials, math problems, and brainteasers.

If your child is using the *Nelson Mathematics 3 Workbook*, pages 104 to 111 belong to Chapter 14. There is a page of practice questions for each of the 6 lessons in the chapter and a Test Yourself page at the end. If your child requires assistance, you can refer to the At-Home Help box on each Workbook page.