Name _____ Date _____

Master 1.6

To Parents and Adults at Home...

Your child's class is starting a mathematics unit on number patterns. Patterns occur regularly in mathematics. As children learn to analyse patterns, they develop powerful reasoning skills that will help them make sense of mathematics.

In this unit, your child will:

- Investigate and describe patterns in tables and charts.
- Extend number patterns.
- Use concrete materials to display patterns.
- Use patterns to solve problems.
- Write and solve equations.

Patterns occur in many different forms. Encourage your child to look for patterns around the home, and talk about them.

Here's a game you can play with your child that creates a pattern of words that expands.

Expand the List Word Game

Think of words to describe a cat or other animal. Each player repeats the words said by previous players in the correct order, and adds a new word at the end of the descriptive list.

The first player starts by saying, for example, "My cat is an *adorable* cat." The next player must repeat this but add a new descriptive word. For example, "My cat is an adorable, *black* cat."

A player is out of the game when he or she cannot repeat the list or fails to provide a new word.

Name _____ Date _____

Master 2.6

To Parents and Adults at Home...

Your child's class is starting a mathematics unit on whole numbers.
Children will develop strategies for adding and subtracting whole numbers.
They will use mental math, estimation, and pencil-and-paper calculations.

In this unit, your child will:

- Recognize and read numbers from 1 to 10 000.
- Read and write numbers in standard form, expanded form, and written form.
- Compare and order numbers.
- Use diagrams to show relationships.
- Estimate sums and differences.
- Add and subtract 3-digit and 4-digit numbers mentally.
- Use personal strategies to add and subtract.
- Pose and solve problems.

We use numbers every day in many different situations.
Encourage your child to use mental math to calculate.
Talk with your child about the strategies you use to calculate mentally.
This is an important step to developing number sense.

Here are some games you can play with your child when you are travelling.

Licence Plate Games

Take turns to call out the numbers on a licence plate.
See who can add the numbers the fastest.

Ignore the letters. Read the number out loud.
For example, if the licence plate is ABCD 749, the number is seven hundred forty-nine.
See who can find the greatest number in a certain length of time.

Name _____ Date _____

Master 3.6

To Parents and Adults at Home...

Your child's class is starting a mathematics unit on multiplication and division. Multiplication and division are basic computational skills that children will use often, and skills that children must master to succeed in higher levels of mathematics. The focus of this unit is on developing strategies for multiplying and dividing with whole numbers. Children will identify patterns on multiplication charts, use mental math, and pose and solve problems.

In this unit, your child will:

- Use different mental math strategies to multiply and divide.
- Multiply by 0, 1, and 10.
- Divide by 1.
- Recall multiplication and division facts.
- Identify and describe patterns in a multiplication chart.
- Relate multiplication and division.
- Pose and solve story problems using multiplication and division.
- Write and solve equations.

We use multiplication and division in many day-to-day situations. Encourage your child to practise the multiplication facts from 1×1 to 9×9. Talk with your child about the strategies you use to recall these facts.

Here is an activity you can do at home:

Multiplication Challenge

Remove the jokers and face cards from a deck of playing cards.
Shuffle the cards. Divide them into two equal piles.
Keep 1 pile and give the other pile to your child.
Each player turns over two cards and multiplies the numbers on the cards.
An ace counts as 1.
The player with the greater answer takes the cards.
Continue playing until one player runs out of cards.

Name _____ Date _____

Master 4.6

To Parents and Adults at Home...

Your child's class is starting a mathematics unit on measurement. Children will explore telling time to the nearest minute using digital and analog clocks, reading and recording calendar dates, and finding area in square centimetres and square metres.

In this unit, your child will:

- Tell time to the nearest minute using 12-hour and 24-hour clocks.
- Read and record the date in various formats.
- Estimate and measure area.
- Construct different rectangles for a given area.

Measurement is an important part of everyday life.
We plan our time according to schedules.
We buy items such as carpeting by area.

Here are some suggestions for activities you can do at home:

- Frequently ask your child, "What time is it?"
  "What time will it be in 20 minutes?",
  "What time was it 15 minutes ago?"
- Have your child estimate, then measure, the time required to complete different activities.
- Ask questions such as, "What unit would you use to find the area of this table?"

Name _____ Date _____

Master 5.6

To Parents and Adults at Home...

Your child's class is starting a mathematics unit on fractions and decimals.

In this unit, your child will:

- Model, name, and record fractions.
- Compare and order fractions.
- Interpret and model decimals as tenths and hundredths.
- Explore equivalent decimals.
- Use decimals to record money values.
- Add and subtract decimals to hundredths, including money.

Fractions and decimals are a common feature in our world. Encourage your child to look for and use fractions and decimals at home. For example, when your child is reading a book, ask her to tell you when she has read about one-half.

If you are dividing something into equal pieces, such as a cake, have your child name fractions that describe the pieces. For example, when a cake is cut in 8 equal pieces, each person receives one-eighth of the cake.

While shopping, encourage your child to look for decimals on price tags or labels. Have your child help you estimate the total amount of your items, and how much change you will receive.

Name _____ Date _____

Master 6.6

To Parents and Adults at Home ...

Your child's class is starting a mathematics unit on geometry. Through daily activities, your child will explore objects and shapes and the relationships among them.

In this unit, your child will:

- Name, describe, and sort triangular and rectangular prisms.
- Construct prisms from nets.
- Construct models of prisms.
- Identify, create, and sort symmetrical and non-symmetrical shapes.
- Draw lines of symmetry.

Geometry is an important part of a student's mathematical experience. People with a deep understanding of geometry and good spatial sense will be able to describe the world around them and appreciate the geometry found in art, nature, and architecture.

Here are some suggestions for activities you can do with your child.

When you are at the grocery store, look for items on the shelves that have the same size and shape, then have your child name the geometric objects they resemble. For example, a Toblerone bar is a triangular prism, and a cereal box is a rectangular prism.

When you are in the car or on a bus, look for structures that are made of different objects. Have your child name the geometric objects they resemble. For example, apartment buildings may look like rectangular prisms or cubes.

Look through magazines with your child to find as many different symmetrical shapes in a picture as you can.

Name _____ Date _____

Master 7.6

To Parents and Adults at Home ...

Your child's class is starting a mathematics unit on data analysis.

In this unit, your child will:

- Read and find information from pictographs and bar graphs.
- Use keys and scales to construct pictographs and bar graphs.
- Answer questions and solve problems by interpreting data in a pictograph or bar graph.

Data analysis is the collection and organization of data. This unit includes concepts and themes that your child may encounter every day in the world outside the classroom. Your child will interpret information from displays of data.

Here is an activity you can do at home to enhance your child's understanding of data analysis.

- Watch for examples of tables and graphs in newspapers, magazines, or on the Internet. Ask your child what information the tables or graphs convey.

Name _____ Date _____

Master 8.6

To Parents and Adults at Home...

Your child's class is starting a mathematics unit on multiplying and dividing larger numbers. We completed a unit earlier in the year on multiplication and division facts and the relationship between the two operations. Now children will use their knowledge of basic facts and place value to develop strategies for multiplying and dividing larger numbers. They will use mental math, estimation, concrete materials, and paper-and-pencil calculations.

In this unit, your child will:

- Use personal strategies to multiply and divide.
- Estimate products and quotients.
- Use models and arrays to multiply and divide.
- Multiply a 2-digit and a 3-digit number by a 1-digit number.
- Divide a 2-digit number by a 1-digit number.
- Relate multiplication and division.
- Identify and describe patterns in multiplication and division.

Fluency with basic multiplication and division facts is a key to success as we develop strategies for multiplying and dividing larger numbers. Encourage your child to continue to practise the basic multiplication and division facts (to $9 \times 9 = 81$ and $81 \div 9 = 9$). Discuss how you remember these facts and encourage your child to share her or his strategies for recall.

Here are some suggestions for things you can do at home:

- Point out when you need to multiply or divide to solve a problem and share your strategies for solving the problem.
- Involve your child in estimating the costs when you shop together.
  For example: Juice is on sale for 89¢ a can.
  About how much will 6 cans cost?
- Use a store flyer to create and solve problems together.
  For example: DVDs are on sale for $18 each.
  How much would it cost to buy 6?
  How many can we buy with $50?

