Be Positive and Supportive

Celebrate success and build confidence. Everyone uses math!

- Show and talk about how math is part of daily life.

- Be relaxed when talking about math, whether that is during homework time or in conversation.

- Encourage your child to keep trying, even if the problem seems hard at first.

- Focus on *how* your child is working on math problems and comment on good understanding.

The goal of this document is to support parents and caregivers as they promote positive math thinking. It also provides an overview of what Saskatchewan students will be taught in school in Grade 5.

Make Math Real at Home

- Discuss how math is part of everyday activities, such as sports, music and art.

- Look for ways to help your child use math skills while cooking, shopping or measuring.

- Comment on and discuss the meaning of charts and graphs that you may see online or in the news.

- Practice your own estimation skills along with your child as you estimate amounts, measurements or calculations.

- Talk about math in the weather, such as precipitation amounts, wind speeds and temperatures.

- Play card games, chess, checkers, Mancala, Tri-Ominos, Qwirkle and do puzzles such as Sudoku or Pentominos.

Overview of Grade 5 Math

<div style="writing-mode: vertical-lr">NUMBER</div>

- Write and say whole numbers up to 1 000 000.
  - o The number 934 567 is read as "nine hundred thirty-four thousand five hundred sixty-seven."
  - o The number 45 321 is (4 x 10 000) + (5 x 1000) + (3 x 100) + (2 x 10) +1.
- Know the times tables (multiplication and division facts) to 81.
- Understand different models of multiplication.

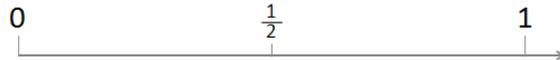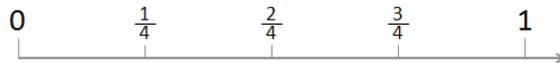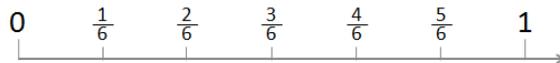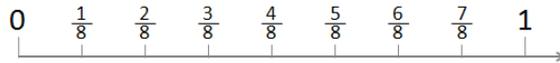|		36					1200
		x 42		30	6		240
		72	40	1200	240		60
		+1440	2	60	12		+12
		1512					1512

- Divide 3-digit by 1-digit numbers and realize that remainders are treated differently, depending on the situation.
  - o If 22 books are divided among 4 students, each student gets 5 books and 2 books are left over.
  - o How many 5-passenger vehicles are needed to transport 13 people? Three vehicles are needed, because you cannot divide a vehicle into fractional parts.
  - o When 5 apples are divided among 4 people, each person gets 1 ¼ apple, because apples can be divided into fractional parts.
  - o If 12 dollars are divided among 5 people, each person receives $2.40, because when working with money, remainders are expressed as decimals.
- Use estimation strategies and describe when and how to use estimation.
  - o Estimate about how many newspapers Aaron will deliver in one month if he delivers 48 papers every day.
  - o Estimate long will it take to drive to a destination 2000 km away if you drive about 300 km per day.
- Compare fractions.

$\frac{1}{2} = \frac{2}{4}$ $\frac{1}{2} = \frac{4}{8}$ $\frac{1}{2} = \frac{6}{12}$

0 $\frac{1}{8}$ $\frac{2}{8}$ $\frac{3}{8}$ $\frac{4}{8}$ $\frac{5}{8}$ $\frac{6}{8}$ $\frac{7}{8}$ 1

0 $\frac{1}{6}$ $\frac{2}{6}$ $\frac{3}{6}$ $\frac{4}{6}$ $\frac{5}{6}$ 1

0 $\frac{1}{4}$ $\frac{2}{4}$ $\frac{3}{4}$ 1

0 $\frac{1}{3}$ $\frac{2}{3}$ 1

0 $\frac{1}{2}$ 1
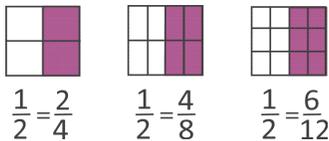
- Compare decimals and relate decimals to fractions.
  - o 0.2 is $\frac{2}{10}$, and that number is greater than 0.02 which is $\frac{2}{100}$.
- Add and subtract decimals (to thousandths).

<table>
<tr><td rowspan="1">PATTERNS AND RELATIONS</td><td>

- Use patterns to solve problems.

  o When the mathematical pattern is x + 3, the answer changes depending on the value of x. If x = 2, the answer is 5, if x = 3, the answer is 6.

- Solve one-step equations that include a letter to represent an unknown number.

  o Find "b" if b – 7 = 25

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<tr><td>SHAPE AND SPACE</td><td>

- Understand perimeter and area, and explore the relationship between perimeter and area.

  o How many different rectangles can you draw that have an area of 24 units^2?

  o If a rectangle has a perimeter of 18 units, what are the dimensions of the possible rectangles? Which rectangle would be best for a dog run? Why?

- Measure and estimate volume using m^3, cm^3, mm^3 and build or draw possible boxes of a given volume.

  3 cm   6 cm   14 cm

  o Possible dimensions of a box with volume = 252 cm^3 are 14 cm x 6 cm x 3 cm.

- Describe shapes using the terms "parallel," "intersecting," "perpendicular," "vertical" and "horizontal."

- Identify and sort rectangles, squares, trapezoids, parallelograms and rhombuses.
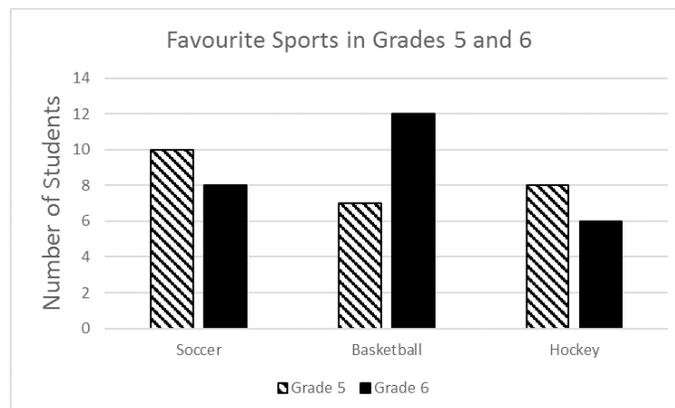
  rectangles   squares   trapezoids   parallelograms   rhombuses

- Identify and create changes in position (transformations) of shapes.

  Translation   Reflection   Rotation

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<tr><td>STATISTICS AND PROBABILITY</td><td>

- Find and use examples of first-hand data (collected yourself) and second-hand data (collected by someone else).

- Construct and interpret double bar graphs.

  Favourite Sports in Grades 5 and 6

  Number of Students

  14, 12, 10, 8, 6, 4, 2, 0

  Soccer   Basketball   Hockey

  Grade 5   Grade 6

- Describe, compare, predict and test the likelihood of outcomes in probability situations.

  o When spinning this spinner, are you less likely, equally likely or more likely to land on a 2 than on a 3?

  2 3 1 5 2 3 3 4

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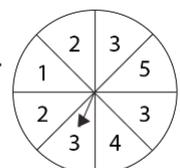
Math Learning in the Classroom

Math learning occurs in many ways in the classroom. Teachers observe students during daily work, have conversations with students about math ideas and look at the results of their math work.

If you have questions about math in the classroom or if your child needs additional support, please contact your child's teacher.

Online Resources for Grade 5 Math Students

These sites were active at the time of publication. Please review them to determine if they are appropriate for your child's needs and interests.

- **NRICH math** – interactive tasks and games for all grade levels: https://nrich.maths.org

- **Cool Math 4 Kids** – puzzles, games and much more: www.coolmath4kids.com

- **Mathpickle** – original math puzzles, games and problems: http://mathpickle.com

To view the entire Saskatchewan curriculum, go to *www.curriculum.gov.sk.ca*.