

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 3.

Make Math Real at Home

- Estimate things such as a length of time, number of objects, weights and measures.
- Play games of all kinds, including board games, card games and dice games. Some examples include Uno, Yahtzee, Frustration, Set and Qwirkle. Talk about strategies you can use.
- Talk about math concepts when baking or cooking.
- Sort and organize things around the house such as toys, food and laundry. Talk about your sorting rules.
- Look for patterns in music, art, numbers and nature. Create your own patterns.





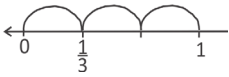


Overview of Grade 3 Math

NUMBER

- Compare, put in order, read and understand the value of digits in numbers up to 1000.
 - 453 is read as "four hundred fifty-three."
 - 10 hundreds is one thousand.
 - There are many numbers that can be written with the digits 8, 7 and 4. In order from largest to smallest, the numbers are 874, 847, 784, 748, 487, 478.
- Count by 5s, 10s or 100s to 1000 using any starting point.
- Identify the "counting pattern" in a number sequence.
 - The counting pattern in 8, 12, 16, 20 is counting by 4s.
 - The counting pattern in 125, 150, 175, 200 is counting by 25s.
- Add and subtract 1, 2 and 3-digit numbers with answers up to 1000.
 - Use a variety of strategies for adding and subtracting numbers.

$25 - 12 = ?$		$47 + 22 = ?$	
25 $\begin{array}{r} -12 \\ \hline 13 \end{array}$	I could think, "12 + 12 is 24, and 25 is one more than 24, so the difference is 12 + 1, which is 13."	47 $\begin{array}{r} +12 \\ \hline 69 \end{array}$	I could think, "47 + 20 is 67, and 22 is two more than 20, so the answer is two more than 67, which is 69."

- Develop the idea of moving from addition to multiplication by using numbers up to 5×5 .
 - What does it mean to multiply and divide numbers? 3×4 can be solved by:
 - skip counting $\rightarrow 4 + 4 + 4 = 12$
 - making sets of equal groups 
 - making 3 rows of 4 
- Understand that fractions can be represented in pictures, by using objects, and by writing a fraction with a numerator (top number) and denominator (bottom number).
 - There are numbers in between 0 and 1. $\frac{1}{4} \rightarrow$ one fourth \rightarrow  $\frac{4}{6}$ is more than $\frac{2}{6}$ 
 - A number line shows how a fraction is a number. 
 - Objects or diagrams can be divided to show fractions.
 - Fold a piece of paper to show fourths.

PATTERNS AND RELATIONS

- Understand increasing and decreasing patterns.



There are patterns that repeat. There are patterns that grow. There are patterns that shrink.

- Understand patterns in numbers.
 - Look at the columns in the number charts. Can you see a pattern for each chart?

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

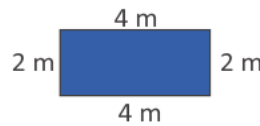
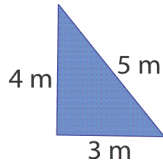
1	2	3
4	5	6
7	8	9
10	11	12

- Solve addition and subtraction problems with a missing number.

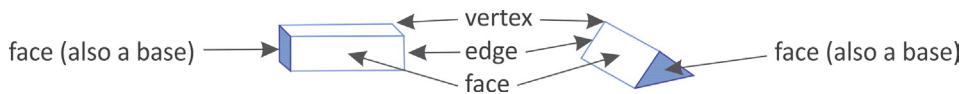
$$17 + \square = 25 \quad 20 = \square + 10 \quad 16 - \square = 9 \quad \square - 6 = 11$$

SHAPE AND SPACE

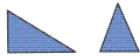
- Solve time problems involving seconds, minutes, hours, days, weeks, months and years.
 - If you went on a holiday and were gone for 10 days, were you gone more or less than one week?
- Measure and estimate mass using grams and kilograms.
 - A paper clip is about 1 gram. 1 litre of milk is about 1 kilogram. 1 kg = 1000 g.
- Measure and estimate length using centimetres and metres.
 - My finger is about 1 centimetre wide. A doorknob is about 1 metre from the floor. 1 m=100 cm.
- Measure and estimate the perimeter (distance around) of regular and irregular shapes using centimetres and metres.
 - I can draw more than one object with the same perimeter.



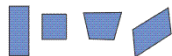
- Describe, compare and sort 3-D objects using language found in geometry.



- Sort and identify polygons (many-sided figures) according to the number of sides.



triangle



quadrilateral



pentagon



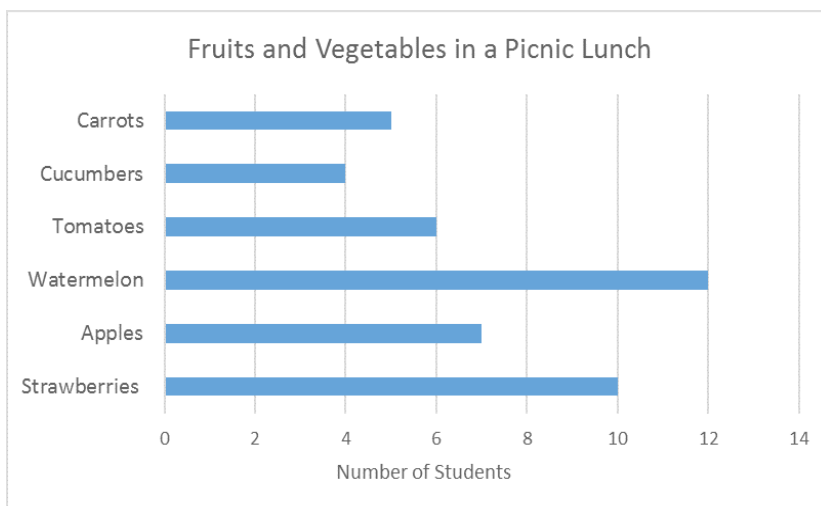
hexagon



octagon

STATISTICS AND PROBABILITY

- Collect, organize and display data using lists, charts, tally marks, line plots and bar graphs.

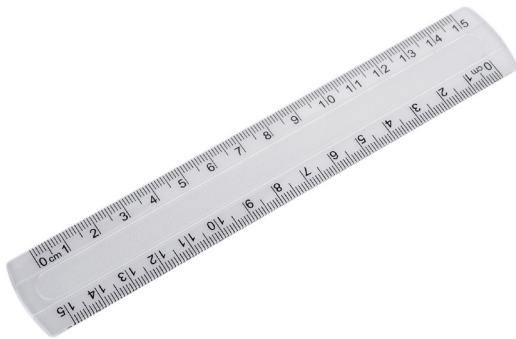


- Fifty students were asked to pick their favourite fruit or vegetable to pack in a picnic lunch. What was the favourite item to pack? The least favourite item? Do more students prefer fruits or vegetables?

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 3 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.