

## Ontario Math Curriculum

The Ontario math curriculum is organized in five major areas of knowledge and skills. The five areas are as follows: A. Social-Emotional Learning (SEL) Skills in Mathematics and The Mathematical Processes; B. Number; C. Algebra; D. Data; E. Spatial Sense; F. Financial Literacy

### Curriculum Expectations

### Key Concepts

#### A. SEL Skills and Mathematical Processes

1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other 5 strands of the mathematics curriculum

*problem solving  
reasoning  
proving  
reflecting  
tools*

*connecting  
communicating  
representing  
selecting  
strategies*

*communicate  
well-being  
self-aware  
identity  
collaborate*

#### B. Number

1. demonstrate an understanding of numbers and make connections to the way numbers are used in everyday life  
2. use knowledge of numbers and operations to solve mathematical problems encountered in everyday life

*compare  
decimals  
fractions  
number  
ratios  
rates*

*percents  
represent  
scientific notation  
estimate  
square roots*

#### C. Algebra

1. identify, describe, extend, create, and make predictions about a variety of patterns, including those found in real-life contexts  
2. demonstrate an understanding of variables, expressions, equalities, and inequalities, and apply this understanding in various contexts  
3. solve problems and create computational representations of mathematical situations using coding concepts and skills  
4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

*algebra  
code  
curve  
data points  
decimal numbers  
integers  
line*

*mathematical modelling  
algebraic equations  
algebraic expressions  
multiple terms  
patterns  
predictions  
real-life situations*

## D. Data

1. manage, analyse, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life
2. describe the likelihood that events will happen, and use that information to make predictions

*analyze data*  
*probability relationship*

*scatter plots*  
*two variables*  
*graphs*

## E. Spatial Sense

1. describe and represent shape, location, and movement by applying geometric properties and spatial relationships in order to navigate the world around them
2. compare, estimate, and determine measurements in various contexts

*angles*  
*calculate*  
*intersecting length*  
*line*  
*right-angle triangle*  
*terabyte*  
*tessellation*  
*dilation*  
*reflection*

*measuring nanosecond*  
*parallel properties*  
*Pythagorean Theory*  
*side lengths*  
*spatial sense*  
*scale*  
*translation*  
*rotation*  
*polygons*

## F. Financial Literacy

1. demonstrate the knowledge and skills needed to make informed financial decisions

*balanced budgets*  
*budget*  
*compound interest*  
*consumer*  
*financial goals*  
*financial literacy*  
*interest*  
*long-term financial planning*

*money*  
*simple interest*  
*spreadsheet*  
*interest*  
*value*

Adapted from *The Ontario curriculum, Grades 1-8: Mathematics (2020)*.

<https://www.dcp.edu.gov.on.ca/en/curriculum/elementary-mathematics/downloads>

& TVO Learn Grade 8 Mathematics. (n.d.). <https://tvolearn.com/pages/grade-8-mathematics>