



## Ontario Mathematical Process Expectations & Essential Skills Math Software

This document outlines the correlations between the Grade 1 Ontario Mathematical Process Expectations and the Essential Skills math programs. The specific Ontario Mathematical Process Expectations are noted on the left and are matched with the relevant Essential Skills program on the right. Where correlations are not exact, the difference is noted in brackets. Essential Skills programs correlate with 84% of the Grade 1 Ontario Mathematical Process Expectations.

1. Number Sense and Numeration	
Ontario Mathematical Process Expectations	Essential Skills Software CORRELATING PROGRAMS
<b>Quantity Relationships</b>	
represent, compare, and order whole numbers to 50, using a variety of tools and contexts	<b>Mastering Numeration 1</b>
read and print in words whole numbers to ten, using meaningful contexts	
demonstrate, using concrete materials, the concept of conservation of number	
relate numbers to the anchors of 5 and 10	
identify and describe various coins, using coin manipulatives or drawings, and state their value	<b>Mastering Numeration 1</b>
represent money amounts to 20¢, through investigation using coin manipulatives	
estimate the number of objects in a set, and check by counting	
compose and decompose numbers up to 20 in a variety of ways, using concrete materials	<b>Mastering Numeration 1</b>
divide whole objects into parts and identify and describe, through investigation, equal-sized parts of the whole, using fractional names	
<b>Counting</b>	

1. Number Sense and Numeration	
demonstrate, using concrete materials, the concept of one-to-one correspondence between number and objects when counting	<b>Mastering Numeration 1</b>
count forward by 1's, 2's, 5's, and 10's to 100, using a variety of tools and strategies	<b>Mastering Numeration 1</b>
count backwards by 1's from 20 and any number less than 20, with and without the use of concrete materials and number lines	
count backwards from 20 by 2's and 5's, using a variety of tools	<b>Mastering Numeration 2</b> (by 1s)
use ordinal numbers to thirty-first in meaningful contexts	<b>Mastering Numeration 2</b>
Operational Sense	
solve a variety of problems involving the addition and subtraction of whole numbers to 20, using concrete materials and drawings	<b>Mastering Numeration 1</b>
solve problems involving the addition and subtraction of single-digit whole numbers, using a variety of mental strategies	
add and subtract money amounts to 10¢, using coin manipulatives and drawings	

## Mathematics Correlation - Grade 1

2. Measurement	
Ontario Mathematical Process Expectations	Essential Skills Software CORRELATING PROGRAMS
Attributes, Units, and Measurement Sense	
demonstrate an understanding of the use of non-standard units of the same size for measuring	Measurement 1
estimate, measure and record lengths, heights, and distances	
construct, using a variety of strategies, tools for measuring lengths, heights, and distances in non-standard units	
estimate, measure, and describe area, through investigation using non-standard units	
estimate, measure, and describe the capacity and/or mass of an object, through investigation using non-standard units	
estimate, measure, and describe the passage of time, through investigation using nonstandard units	
read demonstration digital and analogue clocks, and use them to identify benchmark times and to tell and write time to the hour and half-hour in everyday settings	
name the months of the year in order, and read the date on a calendar	
relate temperature to experiences of the seasons	
Measurement Relationships	
compare two or three objects using measurable attributes, and describe the objects using relative terms	Measurement 1
compare and order objects by their linear measurements, using the same non-standard unit	

2. Measurement	
use the metre as a benchmark for measuring length, and compare the metre with non-standard units	
describe, through investigation using concrete materials, the relationship between the size of a unit and the number of units needed to measure length	<b>Measurement 1</b>

3. Geometry and Spatial Sense	
Ontario Mathematical Process Expectations	Essential Skills Software CORRELATING PROGRAMS
<b>Geometric Properties</b>	
identify and describe common twodimensional shapes and sort and classify them by their attributes, using concrete materials and pictorial representations	<b>Patterning, Geometry &amp; Data Management 1</b>
trace and identify the two-dimensional faces of three-dimensional figures, using concrete models	
identify and describe common threedimensional figures and sort and classify them by their attributes, using concrete materials and pictorial representations	
describe similarities and differences between an everyday object and a threedimensional figure	
locate shapes in the environment that have symmetry, and describe the symmetry	
<b>Geometric Relationships</b>	
compose patterns, pictures, and designs, using common two-dimensional shapes	<b>Patterning, Geometry &amp; Data Management 1</b>
identify and describe shapes within other shapes	
build three-dimensional structures using concrete materials, and describe the twodimensional shapes the structures contain	
cover outline puzzles with two-dimensional shapes	<b>Problem Solving 2-3</b>
<b>Location and Movement</b>	
describe the relative locations of objects or people using positional language	<b>Patterning, Geometry &amp; Data Management 1</b>
describe the relative locations of objects on concrete maps created in the classroom	
create symmetrical designs and pictures, using concrete materials, and describe the relative locations of the parts	

4. Patterning and Algebra	
Ontario Mathematical Process Expectations	Essential Skills Software CORRELATING PROGRAMS
Patterns and Relationships	
identify, describe, and extend, through investigation, geometric repeating patterns involving one attribute	<b>Patterning, Geometry &amp; Data Management 1</b>
identify and extend, through investigation, numeric repeating patterns	
describe numeric repeating patterns in a hundreds chart	
identify a rule for a repeating pattern	
create a repeating pattern involving one attribute	
represent a given repeating pattern in a variety of ways	
Expressions and Equality	
create a set in which the number of objects is greater than, less than, or equal to the number of objects in a given set	<b>Numeration 1</b>
demonstrate examples of equality, through investigation, using a “balance” model	
determine, through investigation using a “balance” model and whole numbers to 10, the number of identical objects that must be added or subtracted to establish equality	

5. Data Management and Probability	
Ontario Mathematical Process Expectations	Essential Skills Software CORRELATING PROGRAMS
Collection and Organization of Data	
demonstrate an ability to organize objects into categories by sorting and classifying objects using one attribute, and by describing informal sorting experiences	Patterning, Geometry & Data Management 1
collect and organize primary data that is categorical, and display the data using one-to-one correspondence, prepared templates of concrete graphs and pictographs, and a variety of recording methods	
Data Relationships	
read primary data presented in concrete graphs and pictographs, and describe the data using comparative language	Patterning, Geometry & Data Management 1
pose and answer questions about collected data	
Probability	
describe the likelihood that everyday events will occur, using mathematical language	Patterning, Geometry & Data Management 1