

# Mathematics at Work 11

*Foundational Outcomes*

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## Outcomes Framework Mathematics at Work 11 (2020-2021)

In September 2020, teachers will be working hard to create a space that is safe and welcoming for all learners no matter the location of their “classroom”. The first weeks will still be a time to establish a sense of community, engage learners in rich interactive experiences to promote critical thinking and create opportunities for collaboration and discussion. This is an opportune time to develop a culture and a climate for mathematics learning, conducive to collaboration, risk taking and inquiry.

The **Foundational Outcomes** identified in this document represent outcomes determined to be relevant for future learning in mathematics. Decisions about foundational outcomes were made in consultation with teachers, provincial mathematics team, Board and Regional Centre staff. The foundational outcomes are meant to guide teachers in making decisions about creating learning experiences that will prepare and engage their learners in a responsive way. However, a teacher’s professional judgment remains the most important guide to effectively responding to the needs of their learners.

Colour coding has been used to identify outcomes and indicators as foundational (**green**), optional (**orange**) or non-foundational (**red**) for the 2020-2021 school year.

<p><b>M01</b> Students will be expected to solve problems that involve SI and imperial units in surface area measurements and verify the solutions.</p> <p><b>Performance Indicators: all indicators</b></p>
<p><b>M02</b> Students will be expected to solve problems that involve SI and imperial units in volume and capacity measurements.</p> <p><b>Performance Indicators: all indicators</b></p>
<p><b>G01</b> Students will be expected to solve problems that involve two and three right triangles.</p> <p><b>Performance Indicators: all indicators</b></p>
<p><b>G02</b> Students will be expected to solve problems that involve scale.</p> <p><b>Performance Indicators: all indicators</b></p>
<p><b>G03</b> Students will be expected to model and draw 3-D objects and their views.</p> <p><b>Performance Indicators: all indicators</b></p>
<p><b>G04</b> Students will be expected to draw and describe exploded views, component parts, and scale diagrams of simple 3-D objects.</p> <p><b>Performance Indicators: all indicators</b></p>

**N01** Students will be expected to analyze puzzles and games that involve numerical reasoning, using problem-solving strategies.

**Performance Indicators:** all indicators

**N02** Students will be expected to solve problems that involve personal budgets.

**Performance Indicators:** all indicators

**N03** Students will be expected to demonstrate an understanding of compound interest.

**Performance Indicators:** all indicators

**N04** Students will be expected to demonstrate an understanding of financial institution services used to access and manage finances.

**Performance Indicators:** all indicators

**N05** Students will be expected to demonstrate an understanding of credit options, including credit cards and loans.

**Performance Indicators:** all indicators

**A01** Students will be expected to solve problems that require the manipulation and application of formulas related to

- volume and capacity
- surface area
- slope and rate of change
- simple interest
- finance charges

**Performance Indicators:** all indicators

**A02** Students will be expected to demonstrate an understanding of slope

- as rise over run
- as rate of change
- by solving problems

**Performance Indicators:** all indicators

**A03** Students will be expected to solve problems by applying proportional reasoning and unit analysis.

**Performance Indicators:** all indicators

**S01** Students will be expected to solve problems that involve creating and interpreting graphs, including bar graphs, histograms.

Performance Indicators: **all indicators**