Program of Learning Assessment for Nova Scotia (PLANS) Nova Scotia Assessment: Reading, Writing, and Mathematics/Mathématiques in Grade 8



Reading and Writing in Grade 8: Day 1 and Day 2

This assessment includes

- reading and writing tasks that reflect grade 8 curriculum outcome expectations
- reading passages in the narrative, information, poetry/song, and visual text genres
- reading comprehension questions in selected response format
- reading comprehension questions that are designed to provide a broad range of challenge, thereby providing more information about individual student performance
- one essay writing task and one story writing task

Reading and Writing in Grade 8: Curriculum Connections

Elements of the grade 8 English Language Arts curriculum outcomes, in relation to comprehension and communication that can be measured on large-scale assessments, will be included on the literacy component of this assessment. The writing component of the assessment will include an optional planning space for learners to use as they plan their writing; however, only the learners' written response (not the planning space) will be scored.

- Learners will comprehend a range of communication forms using listening strategies, reading strategies, and viewing strategies.
- Learners will analyze the accuracy, reliability, validity and bias in a range of written, audio, visual, and digital communication forms.
- Learners will create oral, written, and visual communication forms for a range of audiences and purposes.
- Learners will implement speaking and writing strategies for effective communication in relation to audience and purpose.

Reading Cognitive Levels	Percentage*
Literal Comprehension ¹	30–40
Non-literal Comprehension ²	30–40
Analysis ³	30–40
Genres	Percentage*
Information Text	20–30
Narrative	20–30
Visual Text	20–30
Poetry/Song	20–30
Writing Tasks	Percentage*
Narrative (i.e. story)	50
Transactional (i.e. essay)	50

Reading and Writing in Grade 8: Table of Specifications

* Percentages are approximate

1 Literal Comprehension questions are designed to elicit responses that indicate the student has comprehended explicit information in the text.

2 Non-literal Comprehension questions are designed to elicit responses that indicate the student has comprehended implicit information in the text such as inferences, connotative meanings, idioms, and figurative language (e.g., simile and metaphor).

3 Analysis questions are designed to elicit responses that indicate the student has thought critically about texts by analyzing, synthesizing, or evaluating the explicit and/or implicit information in the text.

Mathematics/Mathématiques in Grade 8: Day 1 and Day 2

Each day of this assessment deals with the conceptual knowledge students are expected to have acquired by the end of grade 8. Students will have the opportunity to demonstrate and apply their understanding of the foundational mathematical ideas, operations, and relationships they have been studying in the mathematics/ mathématiques program.

This assessment includes

- tasks embedded in a context that will sometimes require mental mathematics skills to solve and others that will require the use of a calculator
- tasks presented in a selected-response format
- tasks designed to assess students' ability to solve problems
- tasks requiring different levels of cognitive demands to solve, thereby providing more information about student performance

Mathematics/Mathématiques in Grade 8: Curriculum Connections

Elements of the grade 8 Mathematics/Mathématiques curriculum outcomes that can be measured on large-scale assessments will be included on this assessment, as well as items that cover prior knowledge from grades 6 and 7.

The pillars of NS Assessment: Mathematics in Grade 8 are the following general Curriculum Outcomes:

Number (N)

Number GCO: Students will be expected to demonstrate number sense.

Patterns and Relations (PR)

Patterns GCO: Students will be expected to use patterns to describe the world and solve problems.

Variables and Equations GCO: Students will be expected to represent algebraic expressions in multiple ways.

Measurement (M)

Measurement GCO: Students will be expected to use direct and indirect measure to solve problems. **Geometry (G)**

3-D Objects and 2-D Shapes GCO: Students will be expected to describe the characteristics of 3-D objects and 2-D shapes and analyze the relationship among them.

Note: Due to the timing of the administration in late spring, questions specific to Unit 8 (8G01) in the Pacing Guide for grade 8 would not be reflected in the M8 Assessment.

Statistics and Probability (SP)

Data Analysis GCO: Students will be expected to collect, display, and analyze data to solve problems.

Chance and Uncertainty GCO: Students will be expected to use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

Mathematics/Mathématiques Cognitive levels

Cognitive levels of questions require a student to complete tasks that require fact, procedural, and conceptual knowledge, as well as strategic reasoning.

- Knowledge questions may require students to recall or recognize information, names, definitions, or the steps in a procedure.
- Application questions require some degree of comprehension and students will have to apply their mathematical knowledge to answer correctly.
- Analysis questions go beyond comprehension and application to higher order thinking skills, such as analysis and problem solving.

Mathematics/Mathématiques in Grade 8: Table of Specifications

A table of specifications is derived from an analysis of the curriculum and provides a framework for the components and weightings of the assessment.

The evaluation control procedures, based on the percentage of learning outcomes in the curriculum, roughly correspond to the following distribution:

Strand	Percentage*
GCO N (Number)	30–40
GCO PR (Patterns and Relations)	15–20
GCO M (Measurement)	15–20
GCO G (Geometry)	10–15
GCO SP (Statistics and Probability)	15–20
Cognitive Level	Percentage*
Knowledge	20–30
Application	50–60
Analysis	10–20

* Percentages are approximate