Program of Learning Assessment for Nova Scotia (PLANS)

2015–2016 Nova Scotia Assessment: Reading, Writing, and Mathematics in Grade 8

The Nova Scotia Assessment: Reading, Writing, and Mathematics in Grade 8 and the Nova Scotia Assessment: Reading, Writing, and Mathématiques in Grade 8 follow the same curriculum connections and table of specifications, as specified below. Both assessments will be administered on four days between May 24 and June 3, 2016 for 90 minutes each day.

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

This assessment includes the following

- 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 following curriculum outcomes that can be measured on large-scale assessments will be included on the Nova Scotia Assessment: Reading, Writing, and Mathematics in Grade 8.

General and Specific Outcomes for Reading and Viewing

GCO 4: Students will be expected to select, read, and view with understanding a range of literature, information, media, and visual texts.

Students will be expected to

- 4.3 explain with some regularity how authors use pictorial, typographical, and other organizational devices such as tables and graphs to achieve certain purposes in their writing, and rely on those devices to construct meaning and enhance understanding
- 4.4 read with greater fluency, confidence, and comprehension by furthering personal understanding, recognition, and use cueing systems and strategies to read and view increasingly complex texts

GCO 5: Students will be expected to interpret, select, and combine information using a variety of strategies, resources, and technologies.

Students will be expected to

- 5.2 experiment with and rely upon a range of print and non-print (e-mail, CD-ROMs) sources for accessing and selecting information

GCO 7: Students will be expected to respond critically to a range of texts, applying their understanding of language, form, and genre.

Students will be expected to

- 7.1 recognize that texts need to be assessed for bias and broaden their understanding and awareness of the ways in which print and media texts can be biased; begin to question and think critically about the relevance and reliability of information when answering questions and inquiries
- 7.2 identify the various features and elements writers use when writing for specific readers for specific purposes; describe how texts are organized to accommodate particular readers' needs and to contribute to meaning and effect
- 7.3 expand on earlier abilities to respond critically to a range of texts in various ways: understand how personal knowledge, ideas, values, perceptions, and points of view influence how writers create texts;

recognize how and when personal background influences meaning construction, understanding, and textual response; describe how cultures and reality are portrayed in media texts

General and Specific Outcomes for Writing and Other Ways of Representing

GCO 8: Students will be expected to use writing and other ways of representing to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imagination.

Students will be expected to

- 8.1 demonstrate competence in the frequent use of writing and representing strategies to extend learning; to explore their own thoughts and consider others' ideas, to reflect on their feelings, values, and attitudes; and to identify problems and describe logical solutions
- 8.4 demonstrate an awareness of how and when to integrate interesting effects in imaginative writing and other ways of representing; include thoughts and feelings in addition to external descriptions and activities; integrate detail that adds richness and density; identify and correct inconsistencies and avoid extraneous detail; make effective language choices relevant to style and purpose, and, when appropriate, select more elaborate and sophisticated vocabulary and phrasing

GCO 9: Students will be expected to create texts collaboratively and independently, using a variety of forms for a range of audiences and purposes.

Students will be expected to

- 9.4 keep the reader and purpose for writing in mind when choosing content, writing style, tone of voice, language choice, and text organization

GCO 10: Students will be expected to use a range of strategies to develop effective writing and other ways of representing and to enhance their clarity, precision, and effectiveness.

Students will be expected to

- 10.1 build and rely upon a broad knowledge base of how words are spelled and formed; use such knowledge to spell unfamiliar words and expand vocabulary; regularly use resource texts to verify spelling; use punctuation and grammatical structures capably and accurately; use a variety of sentence patterns, vocabulary choices, and paragraphing with flexibility and creativity to engage readers
- 10.2 choose, with increasing regularity, the prewriting, drafting, revising, editing, proofreading, and presentation strategies to aid in producing various texts

Reading and Writing in Grade 8: Table of Specifications

Reading and Viewing

Cognitive Level	Percentage*
Literal Comprehension[1]	30–40
Non-literal Comprehension[2]	30–40
Analysis[3]	30–40

Genre	Percentage*
Information Text	20–30
Narrative	20–30
Visual Text	20–30
Poetry/Song	20–30

Writing and Other Ways of Representing

Writing Tasks	Percentage*
Narrative (i.e. story)	50
Transactional (i.e. essay)	50

* 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 in Grade 8: Day 3 and Day 4

Each day of the assessment deals with the conceptual knowledge the students are expected to have by the end of grade 8. They 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 program.

The assessment includes the following

- Tasks embedded in a context that will sometimes require mental math skills to solve and others that will require the use of a calculator
- Tasks in a selected-response format
- Task designed to assess students' ability to solve problems
- Tasks requiring different levels of cognitive demands to solve, thereby providing more information about student performance.
  - Cognitive Level 1: Knowledge, Recall of information
  - Cognitive Level 2: Application
  - Cognitive Level 3: Analysis

Mathematics in Grade 8: Curriculum Connections

The Curriculum is organized into seven general curriculum outcomes (GCOs): Number, Patterns and Relationships, Measurement, Geometry, Data Management, and Probability. Within each GCO, there are specific curriculum outcomes (SCOs) for each grade level. The Grade 8 Mathematics Assessment is based mostly on the *NS mathematics 8 Implementation Draft, June 2015* although students will require knowledge of previously learned concepts to complete the assessment.

Elements of the following curriculum outcomes that can be measured on large-scale assessments will be included on the Nova Scotia Assessment: Reading, Writing, and Mathematics in Grade 8.

General Curriculum Outcomes for Mathematics (for more information concerning the specific curriculum outcomes, please refer to the *Atlantic Canada Mathematics Curriculum: Mathematics Grade 8*)

GCO N: Students will be expected to develop number sense.

GCO PR: Students will be expected to use patterns to describe the word and to solve problems.
Students will be expected to represent algebraic expressions in multiple ways.

GCO M: Students will be expected to use direct and indirect measurement to solve problems.

GCO G: Students will be expected to describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.
Students will be expected to describe and analyze position and motion of objects and shapes.

GCO SP: Students will be expected to collecte, display, and analyze data to solve problems.
Students will be expected to use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

Cognitive Levels

Questions are distributed over 3 cognitive levels.

- Level 1: questions may require recall of information, names, definitions, or the steps in a procedure.
- Level 2: questions require some degree of comprehension and students will have to apply their mathematical knowledge to answer correctly.
- Level 3: questions go beyond comprehension and application to higher order thinking skills, such as analysis and problem solving.

Mathematics 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 assessment reflects these approximate percentages for General Curriculum Outcomes (GCOs):

Strand	Percentage*
GCO N (Number)	30–40
GCO PR (Patterns and Relationships)	15–20
GCO M (Measurement)	15–20
GCO G (Geometry)	10–15
GCO SP (Data Management/Probability)	15–20

The assessment reflects these approximate percentages for the cognitive level of questions:

Cognitive Level		Percentage*
1	Knowledge	20–25
2	Application	55–60
3	Analysis	10–20

* Percentages are approximate