



# Foundation Skills Assessment

## Description and Specifications

This document describes the design specifications for the Foundation Skills Assessment (FSA) and how reading, writing, and numeracy will be assessed.

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# Table of Contents

Introduction.....	1
Why the change in FSA? .....	1
FSA development .....	1
Overview of the FSA.....	2
FSA structure .....	3
FSA questions by cognitive level .....	3
Timing.....	3
The foundations.....	4
Reading and Writing.....	4
<i>Reading definition</i> .....	4
<i>Writing definition</i> .....	4
<i>Definition of other terms</i> .....	5
<i>Constructed-response scoring considerations</i> .....	6
<i>FSA Grade 4 Reading scoring rubric</i> .....	7
<i>FSA Grade 4 Writing scoring rubric</i> .....	7
Numeracy .....	8
<i>Numeracy definition</i> .....	8
<i>Distribution of questions</i> .....	8
<i>Definition of other terms</i> .....	8
<i>Constructed-response scoring considerations</i> .....	9
<i>FSA Numeracy scoring rubric</i> .....	10
FSA components.....	11
Collaboration Activity .....	11
Student Booklet .....	11
Online .....	11
Student Reflection.....	11
Foundation Skills Assessment structure .....	12
FSA reporting .....	13
Proficiency levels .....	13
<i>Reading and Writing proficiency levels (DRAFT for illustrative purposes only)</i> .....	14
<i>Numeracy proficiency levels (DRAFT for illustrative purposes only)</i> .....	15



## Introduction

The Foundation Skills Assessment (FSA) is an annual assessment of students' reading, writing, and numeracy skills at Grades 4 and 7. The FSA is the first provincial assessment in which students participate.

The purpose of the FSA is to:

- ➔ provide system-level information on student performance
- ➔ support decision making (interventions, planning, resource allocation, curriculum, policy, research)
- ➔ support districts and schools with information on student performance

The FSA is meant to complement the information teachers collect on student performance through ongoing methods of assessment.



### Why the change in the FSA?

BC's assessments are regularly reviewed and updated to respond to changes in curriculum. The FSA has been improved and now aligns with BC's new curriculum. The last time the FSA was updated was in 2008.

### FSA development

Teams of educators from across the province have worked together to develop the new FSA, which is built on the recommendations of the Advisory Group on Provincial Assessment. Following those recommendations, a working group of teachers, administrators, and measurement experts contributed to the design of the new assessment.



## Overview of the FSA

### FSA Structure

**Collaboration Activity**

Explore 2 themes, students choose 1 theme

**Weighting**

<b>Student Booklet</b>  <i>Constructed-response items</i>	Student choice of theme		Not scored
	<b>Reading: Theme 1</b> 2 reading passages 3 written-response questions	<b>Reading: Theme 2</b> 2 reading passages 3 written-response questions	30%
<b>Writing</b> 1 writing question		100%	
<b>Numeracy</b> 3 written-response questions		30%	
<b>Self-Reflection</b> 1 written-response question		Not scored	
<b>Online</b>  <i>Selected-response items</i>	<b>Reading</b> 30 online questions		70%
	<b>Numeracy</b> 30 online questions		70%
	<b>Self-Reflection</b> 1 selected-response question 1 open-ended question		Not scored



## FSA questions by cognitive level

	RECALL Level 1	SKILLS AND CONCEPTS Level 2	STRATEGIC THINKING Level 3
<b>Reading</b>	Approximately 35% Selected response	Approximately 35% Selected response and constructed response	Approximately 30% Selected response and constructed response
<b>Writing</b>			100% constructed response
<b>Numeracy</b>	Approximately 35% Selected response	Approximately 35% Selected response	Approximately 30% Selected response and constructed response

## Timing

Component		Number of items	Time	Score
<b>Collaboration Activity</b>		1 group activity	10 minutes	N/A
<b>Student Booklet</b>	Reading	3 items	45 minutes	12
	Writing	1 item	45 minutes	4
	Numeracy	3 items	45 minutes	12
	Self-Reflection	1 item	5 minutes	N/A
<b>Online</b>	Reading	35 items (includes 5 field test items)	60 minutes	30
	Numeracy	35 items (includes 5 field test items)	60 minutes	30
	Self-Reflection	2 items	5 minutes	N/A
				<b>Total: 4.5 hours</b>



## The foundations

Underlying British Columbia's redesigned curriculum are the foundations of literacy and numeracy. Reading, writing, and numeracy are the bases for achievement in all areas of learning within the K–12 system and are essential for success in school and adult life.

### Reading and Writing

Reading and writing are interconnected; reading influences writing and writing influences reading. Research has shown that when children read extensively they become better writers. In the process of writing their own texts, students come to better understand an author's construction of his or her texts. This understanding is considered in defining reading and writing.

#### Reading definition

The reading definition is based on the redesigned provincial English Language Arts curriculum, the BC Performance Standards for Reading, and research on national and international literacy definitions.

*Reading is central to success in school and in life. People read for many purposes: to explore the ideas, feelings, and opinions of others; to enjoy the power and beauty of language; and to develop the reader's own thinking and enrich their own experiences.*

*Reading is a meaning-making process in which readers understand, use, reflect on, and engage with texts to achieve their purposes of finding meaning and enjoyment. Through engaging and connecting with texts in a variety of forms (print, oral, visual, and digital), readers deepen their understanding of self, identity, and others.*

The reading definition reflects the idea that reading is a constructive, interpretive, and interactive process. Students make meaning while they interact with the text, set purposes, and employ strategies that support their reading.

#### Writing definition

The writing definition is derived from the redesigned provincial English Language Arts curriculum, the BC Performance Standards for Writing, and research on national and international literacy definitions.

*Writing is central to success in school and in life. People write to record and explore their thoughts, feelings, and opinions; to communicate with others; and to express their ideas using the power and beauty of language. Writing involves using language creatively, critically, and reflectively for different audiences and purposes, using appropriate form, style, and conventions to achieve one's goals.*



## Definition of other terms

### **Text types – including digital and print formats**

Literary: for example, short stories, biographies, play excerpts

Informational: for example, interviews, web pages, brochures, comic strips, menus, posters

### **Question format**

There are two categories of question formats:

**Selected-response** questions require students to select a response from a set of options, including drop-down menus, drag-and-drop, multiple choice, matching, and sequencing.

**Constructed-response** questions require students to provide a written response. They include short-answer questions, extended-response questions, writing tasks, and problem-solving tasks.

### **Cognitive level**

Cognitive level categorizes questions according to the complexity of thinking required to successfully complete them. Student responses provide opportunity to evaluate the student's ability to comprehend and communicate. Students demonstrate understanding at three cognitive levels of Webb's Depths of Knowledge<sup>1</sup>. Depth of Knowledge Level 4 is not part of the assessment, as this level cannot be measured in the limited time frame of a large-scale assessment.

RECALL Reading Level 1	SKILLS AND CONCEPTS Reading Level 2	STRATEGIC THINKING Reading Level 3
The reader uses simple skills to retrieve or locate information from the text. The responses require only literal understanding of text presented and often consist of verbatim recall from text, or simple understanding of a single word or phrase.	The reader shows initial comprehension and subsequent processing of text or portions of text. The reader understands important concepts and literal main ideas.	The reader applies deep knowledge to go beyond the text to explain, generalize, or connect ideas. The reader is able to support their thinking, making references and interpretations from the text or other sources.

<sup>1</sup> Webb, Norman L. *Depth-of-Knowledge Levels for Four Content Areas*. March 28, 2002.



RECALL Writing Level 1	SKILLS AND CONCEPTS Writing Level 2	STRATEGIC THINKING Writing Level 3
<p>The student writes or recites simple facts and basic ideas.</p>	<p>The student shows evidence of some mental processing, such as beginning to connect ideas using a simple organizational structure. The student is engaged in first draft writing for a limited number of purposes and audiences. The student is beginning to connect ideas using a simple organizational structure for such things as composing a short, accurate summary.</p>	<p>The student shows evidence of higher-level mental processing. The student is developing multi-paragraph compositions that may include complex sentence structures or demonstrate some synthesis and analysis. Revisions are made to the writing to improve precision of language used and to produce a logical progression of ideas</p>

### Constructed-response scoring considerations

#### Reading

- Cognitive levels: level 2 to level 3
- Descriptors from BC Performance Standards for Reading
- Understanding
- Details, accuracy, comprehension
- Relationships, inferences, predictions
- Theme, integration, support
- Reactions, connection

#### Writing

- Cognitive levels: level 3
- Descriptors from BC Performance Standards for Writing, measuring
- Meaning
- Style
- Form
- Conventions



## FSA Grade 4 Reading scoring rubric

Below is a snapshot of the Grade 4 Reading scoring rubric. The full scoring rubric includes further elaborations.

	1	2	3	4
Snapshot	Student demonstrates limited understanding or misreading of the text(s) and/or task, usually a verbatim recall of information.	Demonstrates an understanding of the gist of the text(s) and task. The reader is able to support their thinking in a simplistic way; literal interpretation of main ideas and concepts.	Demonstrates a clear understanding of the text(s) and task. The reader is able to support their thinking using mostly accurate details closely linked to the central idea of the task and text(s).	Demonstrates an in-depth understanding of the text(s) and task. The reader supports their thinking using accurate text based information; may be insightful.
Snapshot	<b>NR</b> No response (answer page is blank)	<b>0</b>	Response does not relate to the text(s) or task in any way; response does not have enough information to be scored; response contains very inappropriate language; or all work is erased or crossed out.	

## FSA Grade 4 Writing scoring rubric

Below is a snapshot of the Grade 4 Writing scoring rubric. The full scoring rubric includes further elaborations.

	1	2	3	4
Snapshot	Writing poorly addresses the topic, is brief and unorganized with few relevant details. Simple language with weak sentence structure; ideas are often disjointed or illogical.	Writing attempts to address the topic; some sense of organization; few details. Generally simple language and little sentence variety; ideas may be unevenly developed or list-like	Writing addresses the topic; ideas are organized and developed with relevant supporting details. Shows growing control of written language; attempts sentence variety; may consider audience.	Writing clearly addresses the topic; ideas are focused, organized, and elaborated. Language flows smoothly, with sentence variety; engages the reader with a sense of originality or individuality. Strong sense of audience.
Snapshot	<b>NR</b> No response (answer page is blank)	<b>0</b>	Response does not relate to the text(s) or task in any way; response does not have enough information to be scored; response contains very inappropriate language; or all work is erased or crossed out.	



## Numeracy

### Numeracy definition

The definition for numeracy is based on the redesigned provincial Mathematics curriculum, in addition to numeracy definitions used in Canada and worldwide.

**Numeracy** is the willingness and perseverance to interpret and apply mathematical understanding to solve problems in contextualized situations, and to analyze and communicate these solutions in ways relevant to the given context.

### Distribution of questions

Curriculum themes <sup>2</sup>	Approximate distribution
<b>Number and Computational Fluency</b>	35–45%
<b>Patterns</b>	20–25%
<b>Geometry and Measurement</b>	20–50%
<b>Data and Probability</b>	15–25%

### Definition of other terms

#### Curriculum themes

The curriculum themes are found throughout the Mathematics curriculum. These themes are present throughout the Numeracy components of the FSA and consist of the following:

- ➔ Number represents and describes quantity.
- ➔ Developing computational fluency requires a strong sense of number.
- ➔ We use patterns to represent identified regularities and form generalizations.
- ➔ We can describe, measure, and compare spatial relationships.
- ➔ Analyzing data and chance enables us to compare and interpret.

<sup>2</sup> BC's New Curriculum, Mathematics at <https://curriculum.gov.bc.ca/curriculum/mathematics/introduction>



## Question formats

There are two categories of question formats:

**Selected-response** questions require students to select a response from a provided set of options, including drop-down menus, drag-and-drop items, multiple choice, matching, scale, drawing, spatial/visual responses, and interactive graphing.

**Constructed-response** questions require students to provide a written response, including short-answer questions, extended-response questions, writing tasks, and problem-solving tasks.

## Cognitive level

Cognitive level categorizes questions according to the complexity of thinking required to successfully complete them. Student responses provide opportunity to evaluate the student's ability to comprehend and communicate. Students demonstrate understanding at three cognitive levels of Webb's Depths of Knowledge<sup>3</sup>. Depth of Knowledge Level 4 is not part of the assessment, as this level cannot be measured in the limited time frame of a large-scale assessment.

RECALL Numeracy Level 1	SKILLS AND CONCEPTS Numeracy Level 2	STRATEGIC THINKING Numeracy Level 3
The student is able to recall information such as a fact, definition, or term; use a procedure; or apply a formula.	The student is able to demonstrate conceptual understanding through models and explanations, comparing and classifying information, or interpreting data; can make decisions on how to approach a problem.	The student is able to solve a problem and explain thinking by reasoning, planning, and using evidence.

## Constructed-response scoring considerations

The scoring rubric for constructed-response questions is based on Mathematics curricular competencies, which are:

- Reasoning and analyzing
- Understanding and solving
- Communicating and representing
- Connecting and reflecting

All FSA Numeracy constructed-response questions will use the same scoring rubric.

<sup>3</sup> Webb, Norman L. *Depth-of-Knowledge Levels for Four Content Areas*. March 28, 2002.



## FSA Numeracy scoring rubric

Below is a snapshot of the Numeracy scoring rubric. The full scoring rubric includes further elaborations.

	1	2	3	4
<b>Snapshot</b>	Student demonstrates limited ability to view the situation mathematically. Approach or representation is ineffective. Reasoning or evidence is absent.	Student demonstrates basic ability to view the situation mathematically. Approach or representation is difficult to follow. Reasoning or evidence is lacking to some degree.	Student demonstrates proficient ability to view the situation mathematically. Approach or representation is sensible and generally can be followed. Reasoning or evidence contains minor inconsistencies.	Student demonstrates advanced ability to view the situation mathematically. Approach or representation is effective and is easily followed. Reasoning and evidence is clear and well presented.
<b>NR</b>	No response (answer page is blank)	<b>0</b> Data simply recopied from question. Picture, work, or solution is unrelated to problem. Incorrect solution with no work shown. Inappropriate response (work contains profanity, or inappropriate diagram or language). Everything erased.		



# FSA components

## Collaboration Activity

The FSA administration begins with an educator-led group Collaboration Activity. Collaboration engages the students and values the social nature of learning. The activity serves to activate the students' prior knowledge, build connections, and provide choice as to which theme they would like to explore during the Reading section of the FSA Student Booklet. Students prepare for the assessment by collaborating with others in teams or pairs. They will think about and discuss the two themes. The intention here is to set the stage for students to be motivated to engage in the activities that follow. In this relaxed environment, student anxiety is reduced and a success/growth mindset is established.

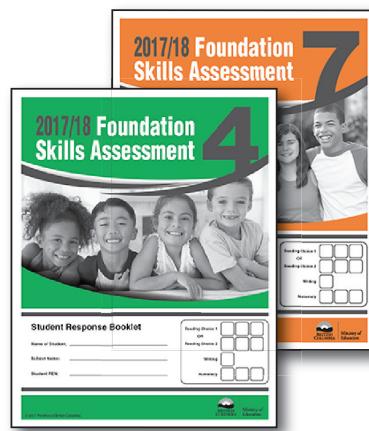
## Student Booklet

The Student Booklet provides an opportunity for students to engage deeply with reading, writing and numeracy, and to show their thinking in a variety of ways. This component of the FSA contains questions to scaffold student thinking, prompting students to connect ideas and concepts, and ultimately use higher-order thinking to provide rich, thoughtful responses.

The Reading portion of the assessment contains a number of theme-based constructed response questions for students to demonstrate deep learning in reading. Students are provided with a choice of themes and then read two texts associated with their choice and complete three reading questions.

The Writing portion of the assessment includes one writing prompt for student response. This prompt incorporates student understanding from the theme exploration and ideas from prior student learning.

The Numeracy portion of the assessment includes questions related to real-life contexts and tasks, supporting students to apply their mathematical understanding in order to interpret and solve the questions, and communicate their thinking. This portion of the FSA assesses numeracy through problem-solving tasks.



## Online

The Online component of the FSA employs a number of engaging and interactive question formats to assess knowledge and understanding in reading and numeracy. Students will respond to questions in a variety of ways, including drag-and-drop, drop-down menus, numerical value entry, and placing items in sequence.

## Student Reflection

After completing the FSA, students will reflect on and analyze their own experiences in the process and in the context of the tasks presented in the assessment. The core competencies of Thinking and Communication provide the focus for student reflection and self-assessment. This reflection offers an insightful lens into the students' thinking and communicating.

# Foundation Skills Assessment Structure

## Collaboration Activity

### Collaboration Activity

- Classroom-based
- Introduces and explores themes
- Supports student choice
- Interactive and collaborative
- Strengthens engagement

## STUDENT BOOKLET

### Reading: Theme 1

Informational text  
1 question  
Literary text  
1 question  
1 connecting question

or

### Reading: Theme 2

Informational text  
1 question  
Literary text  
1 question  
1 connecting question

### Writing

1 writing prompt

### Reading

- Provides choice of themes
- Open-ended questions encourage cognitive rigour
- Questions structured to scaffold the connections between the big ideas within the texts

### Writing

- Students create and communicate their thoughts and ideas from a writing prompt
- Writing purpose and audience may vary

### Numeracy

3 numeracy questions

### Numeracy

- Students solve a real-life problem that requires them to use numeracy skills
- Open-ended format encourages cognitive rigour
- Based on the Mathematics Curricular Competencies

### Self-Reflection

1 open-ended question

### Reflection

- Students reflect on their assessment experience
- Focuses on the Core Competencies of Thinking and Communicating

## ONLINE

### Reading

5 texts      30 questions

### Reading

- Students read and respond to a variety of texts
- Engaging questions
- Questions reflect a range of difficulty and complexity

### Numeracy

Number      Computational Fluency      Patterning      Geometry and Measurement      Data and Probability

30 questions

### Numeracy

- Students respond to items related to Mathematics Curricular Competencies and Content
- Engaging questions
- Questions reflect a range of difficulty and complexity

### Self-Reflection

1 multiple-choice response  
1 open-ended question

### Reflection

- Explores student learning and attitudes
- Provides feedback from students



## FSA reporting

Raw score student reports use student response data that have not been processed by the Ministry. These reports will include the unprocessed scores from the student booklet and online components, and a print out of the online student self-reflection response. The raw score reports will be available to schools and districts once score entry is completed locally (October/November 2017).

Summary reports are reports that use student response data that have been processed and analyzed by the Ministry. These summary reports are currently undergoing a redesign, and will include reporting performance on proficiency levels. These new reports will be available in February 2018.

### Proficiency levels

The current FSA uses three levels for reporting overall achievement on FSA: not yet within expectations, meets expectations, and exceeds expectations.

The new FSA will continue to use three levels to describe student performance, but the levels will be shifted to proficiency levels and be descriptive and strength based. The new levels are Emerging → On Track → Extending.

Proficiency levels in large-scale assessment classify student performance according to broad descriptive categories. They are used to explain what a score actually means and bring a descriptive picture to a score.

While the number of proficiency levels will not change, the labels for the levels may change and the descriptors will change, based on student responses after the FSA has been administered and standard setting is complete in February 2018.



## Reading and Writing proficiency levels (DRAFT for illustrative purposes only)

Emerging	On Track	Extending
<p>The student demonstrates an early understanding of the concepts and competencies relevant to the expected learning.</p> <p>Students at this level are able to understand what they have read in a basic way. They can sometimes predict what happens next in the text. They can put some ideas together in the text to make connections.</p> <p>Students at this level provide some details in their writing. They consider audience or purpose. They choose basic language to convey meaning and sometimes show their own voice in their writing.</p>	<p>The student demonstrates a partial to complete understanding of the concepts and competencies relevant to the expected learning.</p> <p>Students at this level are able to use past experiences to understand what they have read. They can predict what might happen next in the text and use clues in the text to help them understand what the author has not directly said. They can synthesize information in basic ways and can make connections between ideas in the text.</p> <p>Students at this level provide some details in their writing. They consider audience and purpose. They choose appropriate language to convey meaning and show their own voice in their writing.</p>	<p>The student demonstrates a sophisticated understanding of the concepts and competencies relevant to the expected learning.</p> <p>Students at this level are able to use multiple past experiences to understand what they have read. They correctly predict what might happen next in the text and use multiple clues in the text to help them understand what the author has not directly said. They can synthesize information in multiple ways and make connections between big ideas in the text.</p> <p>Students at this level provide many details in their writing. They consider both audience and purpose in their writing. They choose appropriate language to convey meaning and show authentic voice and personality in their writing.</p>



## Numeracy proficiency levels (DRAFT for illustrative purposes only)

Emerging	On Track	Extending
<p>The student demonstrates an early understanding of the concepts and competencies relevant to the expected learning.</p> <p>Students at this level are able to identify a problem in the question being asked if it involves basic reasoning or where relationships are explicitly described. Their strategies when attempting to solve more complex problems are irrelevant or lack critical steps. Their solutions are generally difficult to follow but may demonstrate basic use of mathematical language.</p>	<p>The student demonstrates a partial to complete understanding of the concepts and competencies relevant to the expected learning.</p> <p>Students at this level are able to identify a problem in the question being asked. They present strategies that may be simplistic but nonetheless make sense and lead to responses that partially resolve the problem. Their solutions are supported by work that may be somewhat incomplete, (i.e. not all of the student's thinking is shown) but demonstrate use of mathematical language when possible.</p>	<p>The student demonstrates a sophisticated understanding of the concepts and competencies relevant to the expected learning.</p> <p>Students at this level are able to identify a problem in the question being asked and to determine the relevance of information given. They present effective strategies to solve problems using given information, in addition to making their own interpretations where appropriate. Their solutions are clearly communicated with all pertinent steps shown and incorporate the appropriate use of mathematical language.</p>