# **BCDLA Meeting Sept.20**

### **Janine Hannis - Assessments**





## Purpose of the GNA

The Graduation Numeracy Assessment assesses a student's understanding, application of knowledge and deeper learning, and has students apply mathematical reasoning learned throughout their education. It also serves as a graduation requirement for all students.





## **Purpose of the GNA**

The GNA is not defined as formative or summative. Information can be used **both** summatively and formatively.

### *Formative*

- ✓ support individual students by providing descriptive information for formative use and goal setting e.g.:
  - students can use the information in the proficiency scale and the detailed student report to set new learning goals.
- provide additional information for educators, allowing them to identify areas of strength and weakness

### Summative

✓ provide schools, districts, and the Ministry with system-level information regarding the extent to which students are proficient in numeracy

✓ provide students with evidence of their numeracy for use after graduation

✓ describe the proficiency levels of subgroups of a population (e.g., Aboriginal students) for use by schools, districts, Ministry, and key stakeholder groups

✓ help inform decision making at all levels of the education system regarding performance in numeracy

✓ provide information for schools, districts, and the Ministry regarding trends in performance over time



## **Common questions**

- Who is required to write the GNA?
- What is the difference between numeracy and Math?
- What level of "literacy" is required?
- Will post-secondary institutions consider GNA results as part of admission?

Numeracy

Numeracy is the ability, 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.



## Provincial Administration (June 2018)

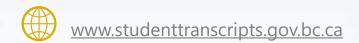
- Approximately 50,000 students
- Student results are now available
- As in January, the GNA performed well as an assessment instrument and had high statistical reliability
- Student results are comparable to those from January
- Next session of the GNA is November 5-7, 2018



## **Finding the Student Report**

Students log-in to the Student Transcripts Service to view their detailed GNA results.

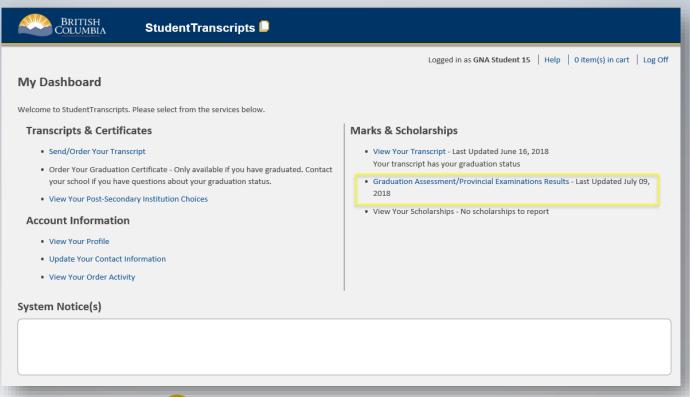






# Finding the Student Report Cont'd

Students can find their GNA results under their dashboard.





www.studenttranscripts.gov.bc.ca





## Online Student Results



### Ministry of Education Graduation Assessment/Provincial **Examination Results**

Last Updated Date

09-JUL-2018

Student Name: School Name:

### Personal Education Number:

Session Date	Assessment/Examination Title	School %	Best School %*	Exam %	Best Exam %*	Final % / Assmnt Score	Final Grade
2018/01	NUMERACY ASSESSMENT	N/A	N/A	N/A	N/A	3	N/A

### Assessment Scores:

- 1 = Emerging Demonstrates an initial understanding of the concepts and competencies relevant to the expected learning.
- = Developing Demonstrates a partial understanding of the concepts and competencies relevant to the expected learning.
- = Proficient Demonstrates a complete understanding of the concepts and competencies relevant to the expected learning.
- = Extending Demonstrates a sophisticated understanding of the concepts and competencies relevant to the expected learning.

AEG = Aegrotat Standing

DSQ = Student was disqualified

NC = Student did not complete enough of the assessment

B = 73-85%

If you have achieved a proficiency level of 1, 2, 3, 4 or AEG you have met the graduation requirement.

### Course Marks:

A = 86-100%

C + = 67 - 72%

C = 60-68%C = 50-59% F = 0-49% (FAIL)

\*Best % refers to the student's best % if the course or exam is taken multiple times.

The school percentage is combined with the Provincial Examination percentage to produce a final percentage and final grade. Non-provincially examinable courses have standings determined entirely by the school and are not recorded on this statement.

If you have any questions about these results, please contact your school or district office.



### Ministry of Education **Graduation Numeracy Assessment** Student Report

School Name:

Personal Education Number: Session Date:

2018/01

Page 1 of 2

The Graduation Numeracy Assessment (GNA) is a province-wide assessment required for graduation. Numeracy, like literacy, is an important life skill. You and your school may use your GNA results to understand your areas of strength and how to support your further learning. The GNA also provides information to schools, districts and the Province about how numerate students are in B.C.

Your overall result has been categorized into one of four proficiency levels: Emerging, Developing, Proficient or Extending.

### Your result on the Graduation Numeracy Assessment is: 3 - Proficient.

1 — Emerging	2 — Developing	3 — Proficient	4 — Extending
Students demonstrate an initial understanding of the concepts and competencies relevant to the expected learning, specifically, they can:	Students demonstrate a partial understanding of the concepts and competencies relevant to the expected learning, specifically, they can:	Students demonstrate a complete understanding of the concepts and competencies relevant to the expected learning, specifically, they can:	Students demonstrate a sophisticated understanding of the concepts and competencies relevant to the expected learning, specifically, they can:
retrieve information from sources (e.g., graph, image, table)     attempt to solve a real-world problem     communicate thinking with minimal evidence     use a narrow range of mathematical concepts, tools and approaches	apply information from sources (e.g., graph, image, table)     apply a strategy to solve a real-world problem     communicate thinking with limited supporting evidence     use an adequate range of mathematical concepts, tools and approaches	analyze and interpret information from sources (e.g., graph, image, table) Int a logical manner     sefect an appropriate strategy to solve a red-world problem     communicate thinking with sufficient supporting widence     use a broad range of mathematical concepts, tools and approaches	adeptly analyze and synthesize information from sources (e.g., graph, image, stable) in a logical manner     select an effective strategy to solve a real-world problem     communicate thinking with thorough supporting evidence     use on extensive range of mathematical concepts, tools and approaches

This score indicates how you performed on each Task and is not directly convertible to your proficiency level.

	Your Score	Out Of
Online Questions	16	24
Plan and Design — Students make a recommendation or design a product while working within constraints such as time, space, cost, or people. Example: Design a plan to reduce a family 5 monthly water consumption.	6	6
Reasoned Estimates — Students propose a logical solution based on estimation, while considering multiple factors.  Example: Estimate the population of a historical village based on discovered artifacts.	3	6
Fair Share — Students decide how best to share something fairly.  Example: Determine a procedure to distribute a group prize.	3	6
Model — Students analyze data for patterns and then apply their model to another situation, making any necessary refinements. Example: Predict the likelihood of an event based on a data trend.	4	6
extended Written Response Questions	7	16
Plan and Design — Students make a recommendation or design a product while working within constraints such as time, space, cost, or people. Example: Design a plan to reduce a family's monthly water consumption.	3	8
Model — Students analyze data for patterns and then apply their model to another situation, making any necessary refinements.  Fixanale: Predict the likelihood of on event bosed on a data trend.	4	8

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# **Numeracy Proficiency Scale**

1 - Emerging	2 - Developing	3 - Proficient	4 - Extending
Students demonstrate an initial understanding of the concepts and competencies relevant to the expected learning, specifically, they can:  retrieve information from sources (e.g., graph, image, table)  attempt to solve a real-world problem  communicate thinking with minimal evidence  use a narrow range of mathematical concepts, tools and approaches	Students demonstrate a partial understanding of the concepts and competencies relevant to the expected learning, specifically, they can:  apply information from sources (e.g., graph, image, table) apply a strategy to solve a real- world problem communicate thinking with limited supporting evidence use an adequate range of mathematical concepts, tools and approaches	Students demonstrate a complete understanding of the concepts and competencies relevant to the expected learning, specifically, they can:  analyze and interpret information from sources (e.g., graph, image, table) in a logical manner select an appropriate strategy to solve a real-world problem communicate thinking with sufficient supporting evidence use a broad range of mathematical concepts, tools and approaches	Students demonstrate a sophisticated understanding of the concepts and competencies relevant to the expected learning, specifically, they can:  adeptly analyze and synthesize information from sources (e.g., graph, image, table) in a logical manner select an effective strategy to solve a real-world problem communicate thinking with thorough supporting evidence use an extensive range of mathematical concepts, tools and approaches

## **GNA Student Report**



Ministry of Education Graduation Numeracy Assessment Student Report

Student Name: LI, GRACE

Session Date: 2018/01

Personal Education Number: 123456789 School Name: JH Secondary

The Graduation Numeracy Assessment (GNA) is a province-wide assessment required for graduation. Numeracy, like literacy, is a foundational skill. You and your school may use your GNA results to understand your areas of strength and how to support your further learning. The GNA also provides information to schools, districts and the Province about how numerate the students are in B.C.

This report describes your overall result on the GNA. Your result has been categorized into one of four proficiency levels: Emerging, Developing, Proficient or Extending. Your result has been highlighted.

### Your result on the Graduation Numeracy Assessment is: 3 - Proficient.



# **→ GNA Student Report**

### Your Raw Scores

Below are your raw scores on the GNA. This score indicates how you performed on each Task and is not directly convertible to your proficiency level.

	Your Score	Out Of
Online Questions	14	24
Plan and Design - Students make a recommendation or design a product while working within constraints	3	6
such as time, space, cost, or people.		
Example: Design a plan to reduce a family's monthly water consumption.		
Reasoned Estimates – Students propose a logical solution based on estimation, while considering multiple	5	6
factors.		
Example: Estimate the population of a historical village based on discovered artifacts.		
Fair Share – Students decide how best to share something fairly.	4	6
Example: Determine a procedure to distribute a group prize.		
Model – Students analyze data for patterns and then apply their model to another situation, making any	2	6
necessary refinements.		
Example: Predict the likelihood of an event based on a data trend.		
Extended Written Response Questions	10	16
Plan and Design – Students make a recommendation or design a product while working within constraints	6	8
such as time, space, cost, or people.		
Example: Design a plan to reduce a family's monthly water consumption.		
Fair Share – Students decide how best to share something fairly.	4	8
Example: Determine a procedure to distribute a group prize.		

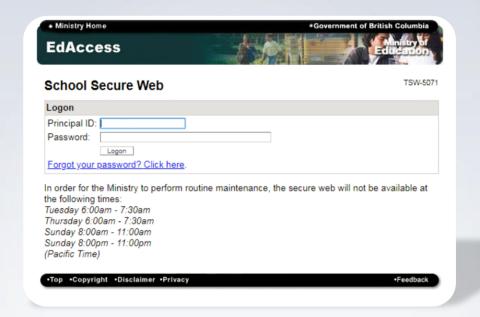
Further information about the GNA, student pre-assessment activities and a parent guide is available at: https://curriculum.gov.bc.ca/provincial-assessment/graduation/numeracy

If you have any questions about your results, please contact your school or district office.



## **Finding the School Report?**

Schools log-in to the School Secure Web to view the detailed GNA results.





https://www.bced.gov.bc.ca/exams/tsw/principals/principals/showSchoolReports.do



## **Numeracy School Level Report**

School level reports will be available by October 2018.

The school level reports will contain all of the information found on the student report, plus break downs by:



province



district



school

The data will also be available in csv format by PENs for those wishing to do further analyses.

### PRELIMINARY DRAFT - FOR DICUSSION PURPOSES



Ministry of Education

### Graduation Numeracy Assessment School Level Report

Run Date: 2018-AUG-31 Assessment Session: June 2018

97 VANCOUVER ISLAND SOUTH

9797010 ÉCOLE SECONDAIRE GEORGE VANCOUVER SECONDARY

	1	12	3	4	NC
School	20.42	38.40	31.62	8.40	1.16
School District	22.15	42.94	26.68	7.80	.43
All Public	19.53	37.57	29.44	13.38	.08
Province	20.28	35.82	29.62	14.21	.07

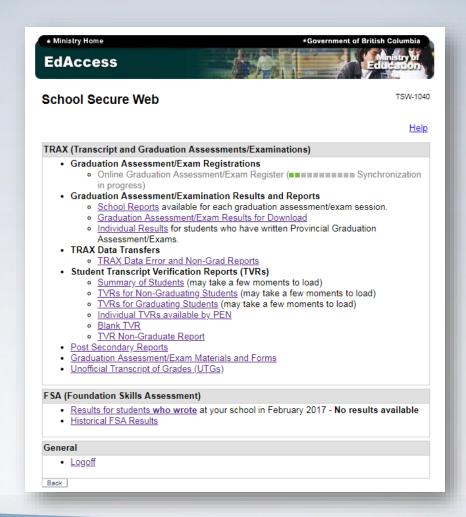
----- Proficiency Level Distribution (%) ----

ALL PUBLIC	17.03	3/.3/		25.44		13.30		.00
Province	20.28	35.82		29.62		14.21		.07
	Аз	sessment Raw	Scores	(mean)	-			
	Plan		Reason	ned	Fair		Model	
	and De	sign	Estim	ates	Share			
by Task (%)								
School	56.60		64.66		61.05		40.99	
School District	59.42		64.12		52.92		43.68	
All Public	62.83		68.68		60.03		53.35	
Province	63.56		69.84		61.01		53.16	
		Interpret	Apply		Solve		Analyz	e
by Numeracy Proce	ss (%)							
School		65.38	60.22		58.61		44.68	
School District		66.63	62.08		61.94		48.42	
All Public		70.25	67.31		64.33		52.73	
Province		71.82	68.24		64.42		52.66	
		Level 1	Level	2		Level	3	
		Recall	Skill,	/Concep	t	Strate	gic Thi	nking
by Cognitive Leve	1 (%)							
School		67.68	64.61			59.22		
School District		68.92	67.47			66.06		
All Public		71.97	69.32			66.30		

This school's student-level data for this assessment administration can be accessed from TraxSchoolWeb. Questions? Contact Education.NumeracyAssessment@gov.bc.ca

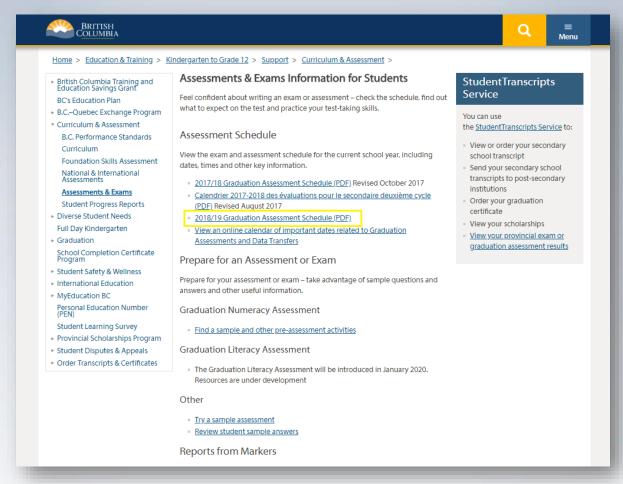


## Online Home Screen





## → GNA Schedule

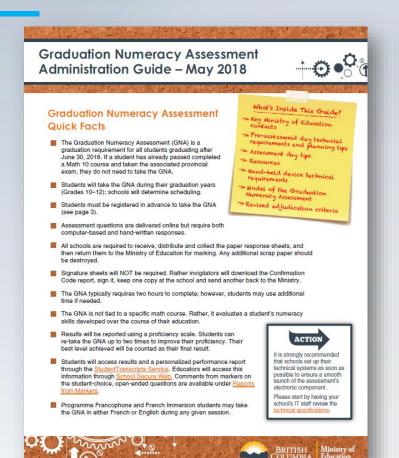


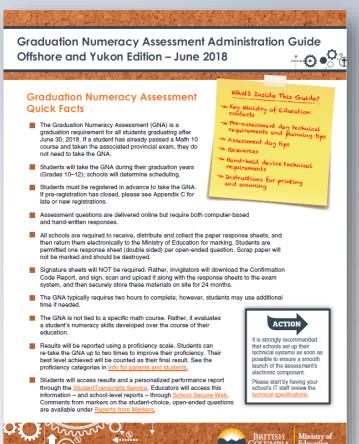


https://www2.gov.bc.ca/gov/content/education-training/k-12/support/curriculum-and-assessment/provincial-exams



## **GNA Admin Guide**







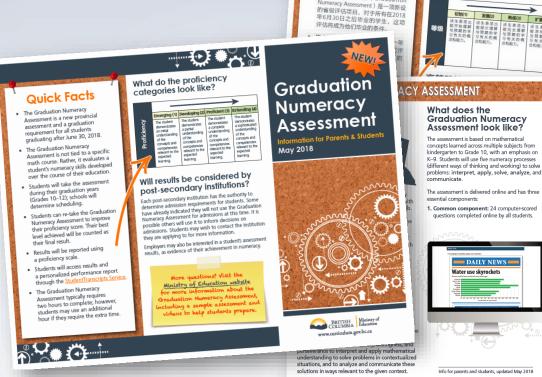
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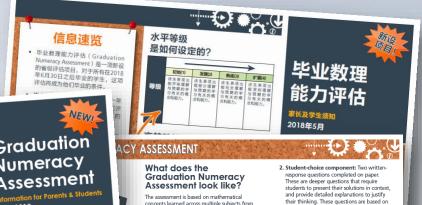


### **GNA Parent Brochure**

### Brochure available in 11 languages:

- English
- Français
- Español
- Tagalog
- ਪੰਜਾਬੀ
- 简体中文
- 繁體中文
- 한국어
- हिंदी
- فارسى •
- عربي •





Self-reflection component: These questions ask the student to reflect on their experience with the assessment. The process of reflection becomes part of their learning. This portion is

the information and work the student will have completed earlier in the common

component. Students pick 2 of 4 possible

questions and take their analysis deeper.



### How should students prepare?

There are pre-assessment activities for students to explore ahead of time and help them to prepare. These include the sample assessment and a series of videos that explain how to solve questions using the five numeracy processes.



https://curriculum.gov.bc.ca/assessment

# Literacy Field Test

- Coming soon!
- November 7-9
- Does not count for marks, but will help inform the ministry how it is received and crucial for making changes and tweaks to the assessment

# Thank you!

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