



Unpacking the New Draft Grades 7–9 Mathematics Curriculum: Part 1

Summer Institute
Math 7–9 New Curriculum

9:00 – 10:15 am

10:30 – 11:45 (optional)





Land Acknowledgment

Designers of Professional Learning

We are happy to support professional learning in your jurisdiction or school!



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Session Outline

New Learn Alberta (where to find the curriculum)

Architecture (how the curriculum is set up)

Comparison (looking at the current 2007 and the draft 2026 curricula)

Optional 2nd hour: Continue the curriculum comparison and to look at how you might organize your year plan

**Where to find the
draft curriculum:**
New Learn Alberta
Top 9 Tips



2025-2026

- Mandatory implementation of K to 3 social studies
- Optional implementation of 4 to 6 social studies
- November 2025: Release of draft 7 to 9 career education and financial literacy for optional field testing
- Winter 2026: Optional field testing of draft 7 to 9 career education and financial literacy, draft 7 to 9 mathematics, draft 7 to 9 physical education and wellness, and draft 7 to 9 social studies
- June 2026:
 - Release of updated draft curriculums for 7 to 9 career education and financial literacy, 7 to 9 mathematics, 7 to 9 physical education and wellness, and 7 to 9 social studies, in preparation for optional classroom piloting



2026-27

- Mandatory implementation of 4 to 6 social studies
- Optional classroom piloting begins for draft 7 to 9 mathematics, draft 7 to 9 social studies, draft 7 to 9 physical education and wellness, and draft 7 to 9 career education and financial literacy
- Optional field testing begins for draft 7 to 9 science, Grade 10 career education and financial literacy, and Grade 10 physical education and wellness

2027-28

- Mandatory implementation of 7 to 9 career education and financial literacy, 7 to 9 mathematics, 7 to 9 physical education and wellness, and 7 to 9 social studies
- Optional classroom piloting begins for draft 7 to 9 science, draft Grade 10 career education and financial literacy, and draft Grade 10 physical education and wellness

TIP 1

Take the time to create a new account and log in.

<https://curriculum.learnalberta.ca>



The screenshot shows the LearnAlberta website homepage. The header is blue with the 'Alberta LEARNALBERTA' logo on the left. On the right, there is a search icon, a globe icon, a language dropdown menu (currently showing 'Eng'), and a 'Login' button. A red circle highlights the 'Login' button, with a yellow arrow pointing to it from the right. Below the header, there is a 'Welcome to new LearnAlberta' section with a paragraph of text and an illustration of a family using a laptop. Below this, there are three main content boxes. The first box is 'Alberta's Curriculum' with a 'New' tag and a description. The second box is 'Parents' with a 'New' tag and a description. The third box is 'Recent Announcements' with a title 'Release of Updated Draft Curriculum for Classroom Piloting', a date 'Posted: 2026-06-18', and a detailed description. At the bottom of the page, there is a 'Contact Us' button with a question mark icon. A red circle highlights this button, with a yellow arrow pointing to it from the right.

Alberta LEARNALBERTA

Welcome to new LearnAlberta

New LearnAlberta is Alberta's bilingual platform for teachers, parents, students, and other education partners. This innovative platform will allow you to engage with the curriculum in ways that were not previously possible. Education partners are encouraged to participate in the fine tuning of new LearnAlberta by clicking "Contact Us" and providing feedback.

Alberta's Curriculum

View Alberta's Kindergarten to Grade 12 curriculum.

Parents

Parent Toolkits are now found here!

A space for parents that offers information on their children's education from Kindergarten to Grade 12.

Recent Announcements

Release of Updated Draft Curriculum for Classroom Piloting

Posted: 2026-06-18

Updated draft curriculum for grades 7–9 career education and financial literacy, mathematics, physical education and wellness, and social studies are available for classroom piloting in the 2026–27 school year. The curriculum was updated following field testing in 2026.

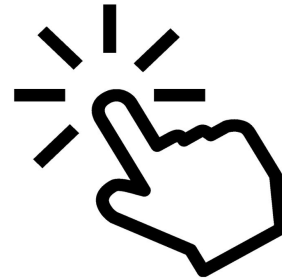
Contact Us



How to create a New LearnAlberta account



NLA Requesting Teacher Access



TIP 2 Multiple ways to Access Curriculum & Progressions

The screenshot displays the LearnAlberta website interface. The main header includes the 'Alberta LEARNALBERTA' logo and a welcome message. The left sidebar contains navigation links: Home, Alberta's Curriculum, Explore Resources, Parents, Alberta's Senior High School Courses, Boards, Curriculum Implementation Information Hub, Literacy and Numeracy Screening Hub, Parent Toolkits, Support, and Contact Us. The main content area is titled 'Alberta's Curriculum' and provides a link to 'View Alberta's Kindergarten to Grade 12 curriculum.' Below this, there are two sections: 'Browse Core Curriculum' and 'Browse Complementary Curriculum'. The 'Browse Core Curriculum' section lists: Career Education and Financial Literacy, Fine Arts, Language Arts - English, Language Arts - Français langue première, Language Arts - French Immersion, Mathematics, Physical Education, Health and Wellness, Sciences, and Social Studies. The 'Browse Complementary Curriculum' section lists: Aboriginal Studies, Bilingual Language Arts, Career and Technology Foundations, Career and Technology Studies, English as an Additional Language, Environmental and Outdoor Education, Ethics, First Nations, Métis, and Inuit Language and Culture, French as a Second Language, International Languages and, Off-Campus Education, and Social Sciences. On the right side, there are two boxes: 'Quick Links' with links to Ministerial Order on Student Learning, Alberta's School System, Guide to Education, Indigenous Education, Inclusive Education, Curriculum Implementation and Supports Timeline, and The guiding framework for the design and development of kindergarten to Grade 12 curriculum; and 'More Information' with links to Information & Communication Technology and Knowledge and Employability. At the bottom, there are several tiles: Parent Toolkits, Explore Resources, Literacy and Numeracy Screening, Alberta's Curriculum, Parents, and Curriculum Implementation. A yellow arrow points from the 'Parent Toolkits' tile to the 'Alberta's Curriculum' tile. Another yellow arrow points from the 'Curriculum Implementation Information Hub' link in the sidebar to the 'Curriculum Implementation' tile at the bottom.

Alberta LEARNALBERTA

Welcome to new LearnAlberta

New LearnAlberta is Alberta's bilingual platform for teachers, parents, students, and other education partners. This innovative platform will enable users to engage with the curriculum in ways that were not previously possible. Education partners are encouraged to participate in the fine tuning of LearnAlberta by clicking "Contact Us" and providing feedback.

Parent Toolkits
Curated Parent Toolkits and Additional Supplementary Resources to support students.

Alberta's Curriculum
View Alberta's Kindergarten to Grade 12 curriculum.

Explore Resources
Learning and teaching resources aligned to the curriculum.

Literacy and Numeracy Screening

Parents
A space for parents that offers information on their children's education from Kindergarten to Grade 12.

Curriculum Implementation

Alberta's Curriculum
View Alberta's Kindergarten to Grade 12 curriculum.

Browse Core Curriculum

- Career Education and Financial Literacy
- Fine Arts
- Language Arts - English
- Language Arts - Français langue première
- Language Arts - French Immersion
- Mathematics
- Physical Education, Health and Wellness
- Sciences
- Social Studies

Browse Complementary Curriculum

- Aboriginal Studies
- Bilingual Language Arts
- Career and Technology Foundations
- Career and Technology Studies
- English as an Additional Language
- Environmental and Outdoor Education
- Ethics
- First Nations, Métis, and Inuit Language and Culture
- French as a Second Language
- International Languages and
- Off-Campus Education
- Social Sciences

Quick Links

- [Ministerial Order on Student Learning](#)
- [Alberta's School System](#)
- [Guide to Education](#)
- [Indigenous Education](#)
- [Inclusive Education](#)
- [Curriculum Implementation and Supports Timeline](#)
- [The guiding framework for the design and development of kindergarten to Grade 12 curriculum](#)

More Information

- [Information & Communication Technology](#)
- [Knowledge and Employability](#)

TIP 2 Multiple ways to Access Curriculum & Progressions

Home

Alberta's Curriculum

Explore Resources

Parents

Alberta's Senior High School Courses

Boards

Curriculum Implementation Information Hub

Literacy and Numeracy Screening Hub

Support

Contact Us

Alberta's Curriculum

- Career Education and Financial Literacy
- Language Arts – Français langue première
- Physical Education, Health and Wellness
- Fine Arts
- Language Arts – French Immersion
- Sciences
- Language Arts – English
- Mathematics
- Social Studies

Browse Complementary Curriculum

- Aboriginal Studies
- Bilingual Language Arts
- Career and Technology Foundations
- Career and Technology Studies
- English as an Additional Language
- Environmental and Outdoor Education
- Ethics
- First Nations, Métis, and Inuit Language and Culture
- Francisation (Francophone Education)
- French as a Second Language
- International Languages and Cultures
- Off-Campus Education
- Social Sciences
- Special Projects

Features of the Provincial Curriculum

- Competency Progressions
- Literacy Progressions
- Numeracy Progressions
- Career Progressions

More Information

[Information & Communication Technology](#)

[Knowledge and Employability](#)

[Literacy, Numeracy, and Competencies for Grades 7 to 12](#)

TIP 3 If you like Paper... Print Option



The screenshot shows the Alberta LearnAlberta website interface. The top navigation bar includes the Alberta logo, 'new LearnAlberta', a search icon, a language dropdown set to 'English', and a user profile icon. The left sidebar contains navigation links: Home, Alberta's Curriculum, Explore Resources, Parents, Alberta's Senior High School Courses, Boards, Curriculum Implementation Information Hub, Literacy and Numeracy Screening Hub, Parent Toolkits, Support, and Contact Us. The main content area is titled 'Mathematics (7-9)' with a 'Change Subject' dropdown. Below the title is a paragraph describing mathematics as a universal language. A red circle highlights a print icon in the top right corner of the main content area, with a yellow arrow pointing to it. A 'Print Options' dialog box is open on the right side of the screen. The dialog box has a title bar with a close button (X) and contains three sections: 1. 'What would you like to print?' with a 'Print' button; 2. 'Which Components?' with checkboxes for 'Organizing Ideas', 'Guiding Questions', 'Learning Outcomes', and 'Knowledge, Understanding, and Skills & Procedures'; and 3. 'Which Grades?' with 'Previous' and 'Next' buttons. A yellow arrow points to the 'Print' button in the dialog box. The main content area also features a 'Draft curriculum: Optional field testing in 2025-26' banner, a 'Prev' button, and tabs for 'Grade 7' and 'Grade 8' (both with 'Single Grade View' buttons). Below these are sections for 'ORGANIZING IDEA', 'GUIDING QUESTION', and 'LEARNING OUTCOME'.

Alberta new LearnAlberta

Mathematics (7-9) [Change Subject](#)

Mathematics is a universal language relying on a shared understanding of symbols and procedures to communicate ideas efficiently. It is a powerful tool used every day in our world. Mathematics involves learning across various disciplines, including arithmetic, algebra, geometry, statistics, and probability. In all disciplines, procedures may range from counting, calculating, and measuring to analyzing, modelling, and generalizing. Engaging in mathematics allows students to develop logical thinking skills, which contribute to effective decision making and problem solving. Students are able to extend their thinking by applying mathematical concepts to their personal experiences through flexible and collaborative learning opportunities. Mathematics experiences provide students with opportunities to build foundational numeracy skills through engagement with various types of quantitative and spatial information.

[Draft curriculum: Optional field testing in 2025-26](#)

[Prev](#) [Grade 7](#) [Single Grade View](#) [Grade 8](#) [Single Grade View](#)

ORGANIZING IDEA
Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.

GUIDING QUESTION
How can the symmetry of the number line contribute to a sense of number?

LEARNING OUTCOME

Print Options

Please select the options below for Mathematics:

- What would you like to print?
[Print](#)
- Which Components?
[Select All](#) | [Unselect All](#)
 - ☒ Organizing Ideas
 - ☒ Guiding Questions
 - ☒ Learning Outcomes
 - ☒ Knowledge, Understanding, and Skills & Procedures
- Which Grades?
[Previous](#) [Next](#)

Multiple views

Printed or PDF



Single Grade View

https://curriculum.alberta.ca/curriculum/en/g7/MAT_7-9/MAT7

new LearnAlberta

Home > Alberta's Curriculum > Mathematics > Mathematics (7-9) > Grade 7

Grade 7 Change ▾

! Draft curriculum: Optional field testing in 2025-26

Curriculum Details

Subject Introduction

Grade 7 Multi-Grade View →

Organizing Idea

Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.

Guiding Question

How can the symmetry of the number line contribute to a sense of number?

Learning Outcome

Students analyze positive and negative numbers.

Multi Grade View

Draft Mathematics (7-9) Curriculum Alberta

Grade 7 Grade 8 Grade 9

Mathematics (7-9) Change Subject ▾

Prev Grade 7 Single Grade View → Grade 8 Single Grade View → Next

ORGANIZING IDEA

Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.

GUIDING QUESTION

How can the symmetry of the number line contribute to a sense of number?

LEARNING OUTCOME

Students analyze positive and negative numbers.

KNOWLEDGE	UNDERSTANDING	SKILLS & PROCEDURES
Absolute value represents the magnitude of any number from zero.	Every fraction and decimal number has an additive inverse with the same absolute value and opposite sign.	Relate the absolute value of positive and negative numbers, including decimal numbers and fractions, to their positions on the number line.
A negative fraction can be expressed equivalently as $-\frac{a}{b}$, $\frac{-a}{b}$, or $\frac{a}{-b}$, for any two positive numbers a and b .		Convert between fractions and decimal numbers, including negative numbers.
Negative decimal numbers can be found in real-world situations, such as		Compare and order rational numbers.

GUIDING QUESTION

How can the density of the number line contribute to a sense of number?

LEARNING OUTCOME

Students interpret rational and irrational numbers.

KNOWLEDGE	UNDERSTANDING	SKILLS & PROCEDURES
The set of real numbers includes the sets of rational numbers and irrational numbers.	There are infinitely many rational numbers between any two rational numbers on the number line.	Express rational numbers as fractions and decimal numbers.
A rational number can be expressed as the quotient of two integers, $\frac{a}{b}$, where $b \neq 0$.		Classify natural numbers, integers, and rational numbers.
Rational numbers are terminating or repeating decimal numbers.		Relate a rational number to its position on the number line.
		Compare and order rational numbers.

Contact Us

TIP 4 Flyouts. Hover then CLICK!



ORGANIZATION

Number: N



GUIDANCE

How can



LEARNING

Student



KNOWLEDGE

Absolute

the mag

number

A negative fraction can be expressed equivalently as

opposite sign.

their positions on the number line.



LEARNING OUTCOME

Students analyze positive and negative numbers.

Knowledge, Understanding and Skills & Procedures

Resources



KNOWLEDGE

Absolute value represents the magnitude of any number from zero.

A negative fraction can be expressed equivalently as $-\frac{a}{b}$, $\frac{-a}{b}$, or $\frac{a}{-b}$, for any two positive numbers a and b .

Negative decimal numbers can be found in real-world situations, such as

- debt
- change in stock prices
- sea levels
- temperature



UNDERSTANDING

Every fraction and decimal number has an additive inverse with the same absolute value and opposite sign.



SKILLS & PROCEDURES

Relate the absolute value of positive and negative numbers, including decimal numbers and fractions, to their positions on the number line.

Convert between fractions and decimal numbers, including negative numbers.

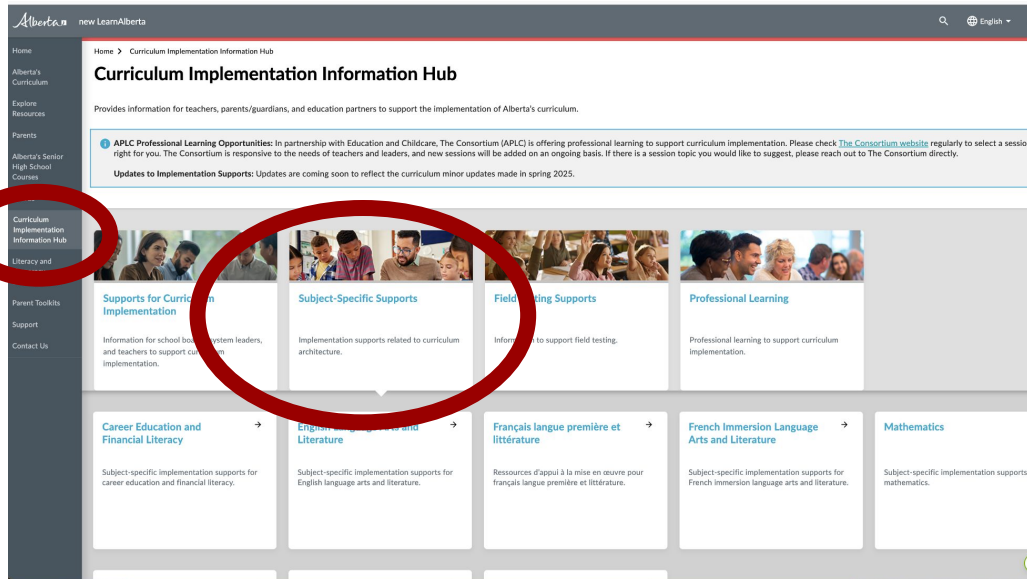
Compare and order positive and negative numbers, including decimal numbers and fractions.

Discuss real-world situations involving negative decimal numbers.

TIP 5 The Curriculum Implementation Hub

Subject Specific **Overviews** =

“Front Matter” + “Year at a Glance” for each grade level



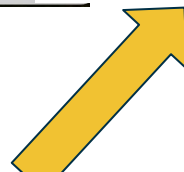
π K-9 Mathematics Snapshot

The snapshot below provides an overview of some of the content students explore in each grade.

- The final K-6 mathematics curriculum was released in spring 2022.
- Draft 7-9 mathematics curriculum was updated following field testing in advance of optional classroom piloting in the 2026-27 school year.
- Optional classroom piloting of draft 7-9 mathematics will occur in the 2026-2027 school year, providing school boards an opportunity to pilot curriculum and provide feedback for final refinements.

Grade 7

- Add, subtract, multiply, and divide integers.
- Multiply and divide fractions.
- Solve equations with algebraic terms on both sides.
- Investigate circles and volume of prisms and cylinders.
- Interpret domain and range of functions.
- Calculate theoretical and experimental probability.



TIP 5 The Curriculum Implementation Hub



Alberta new LearnAlberta

English Cheryll

Home

Alberta's Curriculum

Explore Resources

Parents

Alberta's Senior High School Courses

Boards

Curriculum Implementation Information Hub

Literacy and Numeracy Learning Hub

Parent Toolkits

Support

Contact Us

Curriculum Implementation

Subject-specific implementation supports for career education

Mathematics

Subject-specific implementation supports for mathematics.

[Quick Reference Video: Mathematics K-6](#)

A video explaining organizing ideas, learning outcomes, knowledge, understanding, and skills and procedures. [Unabridged version](#) available.

[K-9 Mathematics Overview](#)

Provides an overview of the K-9 curriculum including shifts and snapshots by grade.

[Illustrative Example: Draft 7-9 Mathematics](#)

Provides an exemplar of how knowledge, understanding, and skills and procedures can support learning and achievement of a learning outcome.

[Quick Reference Guide: Draft 7-9 Mathematics](#)

A guide explaining organizing ideas, learning outcomes, knowledge, understanding, and skills and procedures.

Contact Us

TIP 6 Resources



Learning Outcome

Students analyze multiplicative relationships within ratios.

Knowledge, Understanding
and Skills & Procedures

Resources

3 Results

Search Resources



Sort: A to Z



Exploring Rate, Ratio and Proportion

Explore how ratios and proportions are used to...

Grade(s) 7-8 | Audience(s) Teacher

Subject(s) Mathematics



Gears Toolkit

Explore how gears interact to create movement...

Grade(s) 8 | Audience(s) Student, Teacher

Subject(s) Mathematics



Proportion Playground

Explore how ratios and proportions compare...

Grade(s) 7-8 | Audience(s) Student, Teacher

Subject(s) Mathematics

These are coming...
watch for additions
once the curriculum
is no longer “draft”

Items per page: 10



1 - 3 of 3



TIP 7 Boards



Boards

My Boards Shared with Me Published by Education and Childcare Published by Teachers All Boards

Hide Filters ▼ Clear Filters ✕ **1 Result**

Grade 7 ✕ Grade 8 ✕ Grade 9 ✕ English ✕

Find Boards 🔍

My Favourites

Expand All | Collapse All

Grade(s) (3)

Select All | Unselect All

- ☐ Kindergarten
- ☐ Grade 1
- ☐ Grade 2
- ☐ Grade 3

APLC - Curriculum Resource Website

APLC

The Consortium (Alberta Professional Learning Consortium) has developed a site in support of teachers across all subjects in the work of Curriculum Implementation. Located on the **APLC**.

Grade(s) K-12

Subject(s) Social Studies, Language Art...

Meant to be a space where teachers can share with each other.

Boards will grow over time.

If you do not see Boards, then you do not have full access.

TIP 8 The SEARCH function



The screenshot shows the Alberta Education website interface. At the top, the header includes the Alberta logo, the text "new LearnAlberta", and a navigation bar with a search icon, a globe icon, a language dropdown menu set to "English", and a "Login" button. A red circle highlights the search icon, and a yellow arrow points to it from the top right. Below the header, the main content area is titled "Mathematics (7-9)" with a "Change" dropdown. A banner below the title reads "Draft Curriculum: Optional Classroom Piloting in 2026-27" and "So tiny, yet so powerful." The main content is divided into two sections: "Curriculum Details" and "Grades". The "Curriculum Details" section shows the curriculum status as "DRAFT", published on "2026-06-18", in "English and French", and sourced from "PROVINCIAL". The "Grades" section shows a "Multi-Grade View" button and a list of grades: "Grade 7", "Grade 8", and "Grade 9". A sidebar on the right contains a "Collapse All" button and a "On This Page" menu with links to "Curriculum Details", "Grades", "Junior High", "Subject Introduction", "What Is Mathematics?", "Numeracy, Quantitative Information, and Spatial Information", "Technology in the Mathematics", and "Classroom".

Alberta new LearnAlberta

Search English Login

Mathematics (7-9) Change

Draft Curriculum: Optional Classroom Piloting in 2026-27

So tiny, yet so powerful.

Curriculum Details

Curriculum Status	DRAFT
Curriculum Published	2026-06-18
Curriculum Language	English and French
Curriculum Source	PROVINCIAL This curriculum was developed by Education and Childcare.

Grades

Multi-Grade View →

Junior High (Grades 7 to 9)

Grade 7 →

Grade 8 →

Grade 9

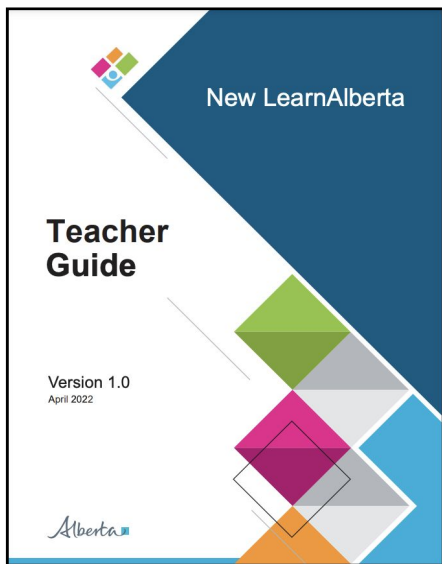
students transfer their understandings of properties of numbers to new contexts.

Collapse All

On This Page

- Curriculum Details
- Grades
- Junior High
- Subject Introduction
- What Is Mathematics?
- Numeracy, Quantitative Information, and Spatial Information
- Technology in the Mathematics
- Classroom

TIP 9 Select the right options for yourself to start your learning:



New LearnAlberta Teacher Guide

This step-by-step document:

- is useful for those who appreciate printed instructions
- is handy to have open in an additional window or browser
- explicitly identifies and describes the tools and functions
- provides anytime, any place support while learning

Let's Get Started!

A video (15:11) to provide Alberta's teachers and system leaders a quick overview of how to start engaging with the curriculum, learning and teaching resources and how to use the teacher planning tools (Boards).

New LearnAlberta Video Overview

This 15 min video walks viewers through:

- how to access and engage with curriculum
- where to find resources
- how to use and create Boards, a teacher planning tool

Questions about the new Learn Alberta?



Alberta

LEARNALBERTA



Welcome to new LearnAlberta

Architecture:
Draft Math 7, 8, 9



Architecture



Organizing Idea

Guiding Question

Learning Outcome

Knowledge, Understanding, Skills and Procedures

Literacy and Numeracy Progressions, and Competencies

<https://curriculum.learnalberta.ca/curriculum/en/f/numk>

<https://curriculum.learnalberta.ca/curriculum/en/f/comk>



STRANDS	ORGANIZING IDEAS
Number	Number
Patterns and Relations	Algebra
Shape and Space	Geometry
Statistics and Probability	Measurement
	Functions
	Statistics
	Probability

Organizing Ideas

Organizing Ideas instead of Strands. Where they each start and end.

[illegible]

Organizing Idea	Grade:	K	1	2	3	4	5	6	7	8	9
Number									5	3	2
Algebra									1	3	3
Geometry									1	2	1
Coordinate Geometry											
Measurement									2	1	1
Patterns											
Functions									1	1	1
Time											
Statistics									1	1	1
Probability									1	1	1

Numbers show how many Learning Outcomes in each of the Organizing Ideas, in grades 7, 8 & 9.

Curriculum Architecture



Organizing Idea

- statement of the learning
- spans all or most grades
- main concepts

Grade 7				Grade 8		
Organizing Idea	Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.					
Guiding Question	How can the symmetry of the number line contribute to a sense of number?			How can the density of the number line contribute to a sense of number?		
Learning Outcome	Students analyze positive and negative numbers.			Students interpret rational and irrational numbers.		
	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures
	Absolute value represents the magnitude of any number from zero. A negative fraction can be expressed equivalently as $-\frac{a}{b}$, $-\frac{a}{b}$, or $-\frac{a}{b}$, for any two positive numbers a and b. Negative decimal numbers can be found in real-world situations, such as • debt • change in stock prices • sea levels • temperature	Every fraction and decimal number has an additive inverse with the same absolute value and opposite sign.	Relate the absolute value of positive and negative numbers, including decimal numbers and fractions, to their positions on the number line. Convert between fractions and decimal numbers, including negative numbers. Compare and order positive and negative numbers, including decimal numbers and fractions. Discuss real-world situations involving negative decimal numbers.	The set of real numbers includes the sets of rational numbers and irrational numbers. A rational number can be expressed as the quotient of two integers, $\frac{a}{b}$, where $b \neq 0$. Rational numbers are terminating or repeating decimal numbers. A repeating decimal, represented with a segment over the repeating digit(s), is a decimal number that contains a digit or group of digits that repeat endlessly. The set of rational numbers includes the sets of natural numbers and integers. The conventional order of operations applies to operations on rational numbers.	There are infinitely many rational numbers between any two rational numbers on the number line.	Express rational numbers as fractions and decimal numbers. Classify natural numbers, integers, and rational numbers. Relate a rational number to its position on the number line. Compare and order rational numbers. Determine a rational number between any two given rational numbers. Investigate fractions that result in repeating decimals. Add, subtract, multiply, and divide any two rational numbers. Assess the reasonableness of a sum, difference, product, or quotient, using estimation. Evaluate numerical expressions involving rational numbers according to the order of operations. Solve problems involving rational

Curriculum Architecture



Guiding Question

- informed by the organizing idea and frames the learning outcome
- intended to spark curiosity and wonder about the LO
- identifies more specific concepts

Grade 7				Grade 8		
Organizing Idea	Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.					
Guiding Question	How can the symmetry of the number line contribute to a sense of number?			How can the density of the number line contribute to a sense of number?		
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Curriculum Architecture

Learning Outcome

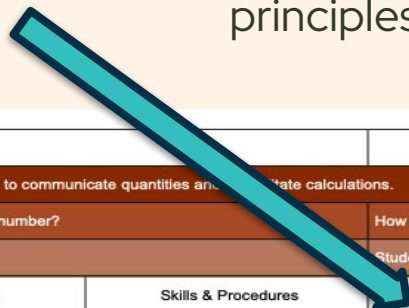
- describes what students are required to know, understand, and be able to do by the end of a grade.
- must be assessed and reported.
- discipline (subject) specific
- key concepts to be learned and assessed are identified.

Grade 7				Grade 8		
Organizing Idea	Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.					
Guiding Question	How can the symmetry of the number line contribute to a sense of number?			How can the density of the number line contribute to a sense of number?		
Learning Outcome	Students analyze positive and negative numbers.			Students interpret rational and irrational numbers.		
	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures
	Absolute value represents the magnitude of any number from zero. A negative fraction can be expressed equivalently as $-\frac{a}{b}$, $-\frac{a}{b}$, or $-\frac{a}{b}$, for any two positive numbers a and b. Negative decimal numbers can be found in real-world situations, such as • debt • change in stock prices • sea levels • temperature	Every fraction and decimal number has an additive inverse with the same absolute value and opposite sign.	Relate the absolute value of positive and negative numbers, including decimal numbers and fractions, to their positions on the number line. Convert between fractions and decimal numbers, including negative numbers. Compare and order positive and negative numbers, including decimal numbers and fractions. Discuss real-world situations involving negative decimal numbers.	The set of real numbers includes the sets of rational numbers and irrational numbers. A rational number can be expressed as the quotient of two integers, $\frac{a}{b}$, where $b \neq 0$. Rational numbers are terminating or repeating decimal numbers. A repeating decimal, represented with a segment over the repeating digit(s), is a decimal number that contains a digit or group of digits that repeat endlessly. The set of rational numbers includes the sets of natural numbers and integers. The conventional order of operations applies to operations on rational numbers.	There are infinitely many rational numbers between any two rational numbers on the number line.	Express rational numbers as fractions and decimal numbers. Classify natural numbers, integers, and rational numbers. Relate a rational number to its position on the number line. Compare and order rational numbers. Determine a rational number between any two given rational numbers. Investigate fractions that result in repeating decimals. Add, subtract, multiply, and divide any two rational numbers. Assess the reasonableness of a sum, difference, product, or quotient, using estimation. Evaluate numerical expressions involving rational numbers according to the order of operations. Solve problems involving rational



Knowledge

"Knowledge includes the facts, symbols, rules, principles, and **concepts**."



	Grade 7			Grade 8		
Organizing Idea	Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.					
Guiding Question	How can the symmetry of the number line contribute to a sense of number?			How can the density of the number line contribute to a sense of number?		
Learning Outcome	Students analyze positive and negative numbers.			Students interpret rational and irrational numbers.		
	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures
	Absolute value represents the magnitude of any number from zero. A negative fraction can be expressed equivalently as $-\frac{a}{b}$, $\frac{-a}{b}$, or $\frac{-a}{-b}$, for any two positive numbers a and b. Negative decimal numbers can be found in real-world situations, such as • debt • change in stock prices • sea levels • temperature	Every fraction and decimal number has an additive inverse with the same absolute value and opposite sign.	Relate the absolute value of positive and negative numbers, including decimal numbers and fractions, to their positions on the number line. Convert between fractions and decimal numbers, including negative numbers. Compare and order positive and negative numbers, including decimal numbers and fractions. Discuss real-world situations involving negative decimal numbers.	The set of real numbers includes the sets of rational numbers and irrational numbers. A rational number can be expressed as the quotient of two integers, $\frac{a}{b}$, where $b \neq 0$. Rational numbers are terminating or repeating decimal numbers. A repeating decimal, represented with a segment over the repeating digit(s), is a decimal number that contains a digit or group of digits that repeat endlessly. The set of rational numbers includes the sets of natural numbers and integers. The conventional order of operations applies to operations on rational numbers.	There are infinitely many rational numbers between any two rational numbers on the number line.	Express rational numbers as fractions and decimal numbers. Classify natural numbers, integers, and rational numbers. Relate a rational number to its position on the number line. Compare and order rational numbers. Determine a rational number between any two given rational numbers. Investigate fractions that result in repeating decimals. Add, subtract, multiply, and divide any two rational numbers. Assess the reasonableness of a sum, difference, product, or quotient, using estimation. Evaluate numerical expressions involving rational numbers according to the order of operations. Solve problems involving rational



Understanding

"Organizes the knowledge into what students need to understand"

	Grade 7			Grade 8		
Organizing Idea	Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.					
Guiding Question	How can the symmetry of the number line contribute to a sense of number?			How can the density of the number line contribute to a sense of number?		
Learning Outcome	Students analyze positive and negative numbers.			Students interpret rational and irrational numbers.		
	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures
	Absolute value represents the magnitude of any number from zero. A negative fraction can be expressed equivalently as $-\frac{a}{b}$, $\frac{-a}{b}$, or $\frac{a}{-b}$, for any two positive numbers a and b. Negative decimal numbers can be found in real-world situations, such as • debt • change in stock prices • sea levels • temperature	Every fraction and decimal number has an additive inverse with the same absolute value and opposite sign.	Relate the absolute value of positive and negative numbers, including decimal numbers and fractions, to their positions on the number line. Convert between fractions and decimal numbers, including negative numbers. Compare and order positive and negative numbers, including decimal numbers and fractions. Discuss real-world situations involving negative decimal numbers.	The set of real numbers includes the sets of rational numbers and irrational numbers. A rational number can be expressed as the quotient of two integers, $\frac{a}{b}$, where $b \neq 0$. Rational numbers are terminating or repeating decimal numbers. A repeating decimal, represented with a segment over the repeating digit(s), is a decimal number that contains a digit or group of digits that repeat endlessly. The set of rational numbers includes the sets of natural numbers and integers. The conventional order of operations applies to operations on rational numbers.	There are infinitely many rational numbers between any two rational numbers on the number line.	Express rational numbers as fractions and decimal numbers. Classify natural numbers, integers, and rational numbers. Relate a rational number to its position on the number line. Compare and order rational numbers. Determine a rational number between any two given rational numbers. Investigate fractions that result in repeating decimals. Add, subtract, multiply, and divide any two rational numbers. Assess the reasonableness of a sum, difference, product, or quotient, using estimation. Evaluate numerical expressions involving rational numbers according to the order of operations. Solve problems involving rational



Skill & Procedures

"Skills and procedures are what students do to demonstrate their knowledge and understanding. They are specific skills, methods, tools, strategies, and processes that students will develop as they achieve the learning outcome."

Grade 7				Grade 8		
Organizing Idea	Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.					
Guiding Question	How can the symmetry of the number line contribute to a sense of number?			How can the density of the number line contribute to a sense of number?		
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The content in the KUSPS can be combined in different ways to create meaningful learning and assessment experiences for students.						
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Skill & Procedures

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	Grade 7			Grade 8		
Organizing Idea	Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.					
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Optional vs Required Content

Language Examples	Interpretation for Implementation	Example from curriculum
such as tel que	Indicates that what follows is an optional component of the learning outcome.	Probability can inform decision making in various situations, such as games and weather forecasts.
for example, e.g. par exemple p.ex.	Indicates that what follows is an optional component of the learning outcome.	A set can be defined by listing its elements symbolically in braces, e.g., $A = \{2, 4, 6, 8\}$.
including include	Indicates that what follows is a required component of the learning outcome that must be addressed.	Sets can be represented with diagrams, including Venn diagrams.
Content in parentheses	Indicates content is directed to teachers.	The radical sign, $\sqrt{}$, is the conventional notation that indicates the positive square root (principal square root) of a number

Glossary for Student Action Verbs Alberta's 7-9 Math Curriculum

Found in Gr. 4-6	Found in LO	Found in S&Ps	Verb	Definitions
Gr. 4, 5, 6,		7N 8N	Add	To combine two or more quantities/numbers to determine the sum.
Gr. 4, 5, 6	7N, 7G, 7M 8N, 8G, 8M, 8ST 9N, 9G, 9M, 9ST	8ST	Analyze	To examine mathematical information, relationships, patterns, representations, or strategies to identify important features, make connections, and draw conclusions.
Gr. 4, 5, 6	7N, 7A	8G 8G Knowledge 7A Knowledge 9N Knowledge 9A Knowledge	Apply	To use appropriate mathematical knowledge, understanding, and skills to solve problems or complete tasks.
		8N	Approximate	To come close to, or be similar to, something in quality, nature, or quantity.
Gr. 4, 5, 6		7N 8N	Assess	To examine mathematical work to determine how accurate, effective, or reasonable it is using evidence and clear criteria.

Extended Glossary for Student Action Verbs Alberta's 7-9 Math Curriculum

Grade	Verb	Definition General	Curriculum Statement Learning Outcome	Curriculum Statement Skills and Procedures	Definition specific to statement	Example
7N,	Compare					

Draft Grades 7-9 Vocabulary Project

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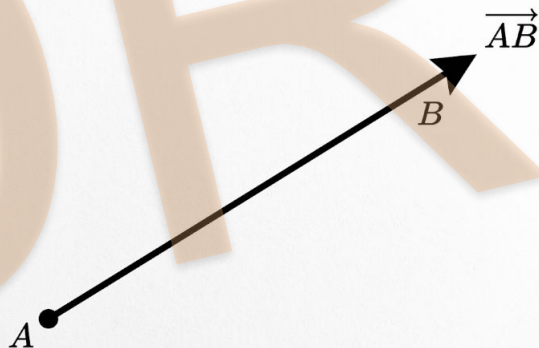
Ol: Geometry



Math 7

Ray

A line portion extending infinitely in one direction from a given point.



Ol: Geometry



Math 7

Ray

A line portion extending infinitely in one direction from a given point.

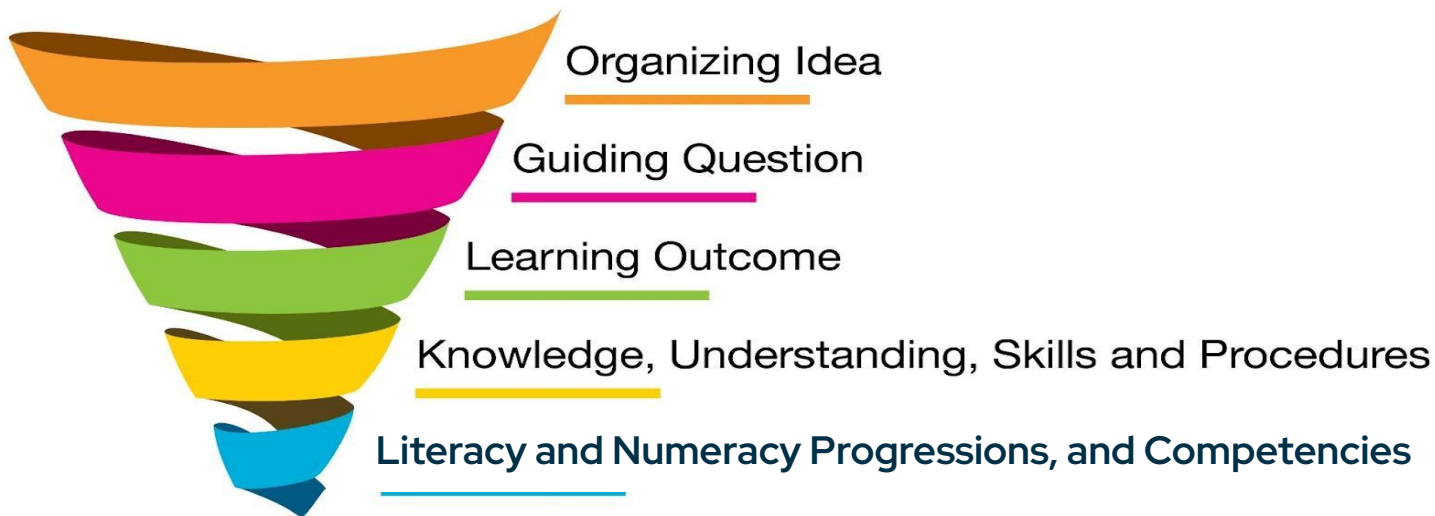
Example:

Light: A beam of light starting at a flashlight bulb and traveling infinitely in one direction.



Light: A beam of light starting at a flashlight bulb and traveling infinitely in one direction.

Questions About The Architecture?



The Big Picture:

What are the Changes
related to Math 7, 8, 9?



Big Picture – What are the Changes?



Highlight one mathematical process you “see” in the Subject Introduction

Subject Introduction

What Is Mathematics?

Mathematics is a universal language and a powerful tool used every day to solve problems. Mathematics involves learning across different areas. Procedures may range from counting to complex calculations. Students develop logical thinking and problem-solving skills. Thinking beyond personal experience provides opportunities to build foundational numeracy skills.

Numeracy, Quantitative Information, and Spatial Information

Numeracy is a foundational building block of learning and is developed in all subjects in various ways. Central to the development of numeracy, the mathematics curriculum helps students acquire and apply the knowledge and skills necessary to engage with quantitative and spatial information in a variety of situations. Numeracy focuses on counting, comparing, and calculating with numbers; describing, representing, and measuring shapes and objects; collecting, organizing, and interpreting data; and creating and interpreting diagrams, graphs, and tables. Numeracy skills support real-world pursuits, including managing time, using and managing finances, following instructions, understanding statistics, navigating with maps, and reading schedules and statements. With a focus on numeracy, the mathematics curriculum provides all

Where do you find the
mathematical processes?

What is the intended use of
technology?

Big Picture – What are the Changes?

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Competency Progressions [Change Feature](#) ▾

 [Export](#)



Kindergarten (ages 4–5)

Division 1 (ages 6–8)

Division 2 (ages 9–11)



Critical Thinking involves reasoning logically to analyze and synthesize new knowledge with existing knowledge in a coherent way.



Problem Solving involves selecting strategies and resources to move from what is known to what is sought.



Research and Managing Information involves research skills as well as organizing and using information for specific purposes.



Creativity and Innovation involves generating and applying knowledge and skill to create something new of value.



Communication involves sharing ideas through oral, written, or non-verbal media.



Collaboration involves working with others to achieve worthy common goals.



Citizenship involves participating in the institutions of our society as educated citizens. Students share responsibilities and approach the world with empathy, intellectual curiosity, and humility.



Personal Growth and Well-being involves managing emotional, intellectual, physical, social, and spiritual aspects of living well. Students develop character and talent and apply the virtues of wisdom, courage, self-control, justice, charity, and hope.



Cor

Big Picture – Scope and Sequence (next session)

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What do grades 4, 5 & 6 look like? How do grades 7, 8, & 9 flow and connect?

[Numbered Outcomes](#)

[Document](#)

(Pilot 7-9)

[See Scope and](#)

[Sequence handout](#)

(k-6)

[Link to Scope and](#)

[Seq slides](#) (Gr 6-9)

– draft in progress

Alberta Mathematics 6-9 Scope and Sequence

Number

Grade	6	7	8	9
Learning Outcome	6N1 Students Investigate magnitude with positive and negative numbers	7N1 Students analyze positive and negative numbers	8N1 Students interpret rational and irrational numbers	9N1 Students analyze sets of real numbers
Number 	6N1.1 Integers additive inverses of whole numbers	7N1.1 Additive Inverse of fractions and decimals with the same absolute value and opposite sign Absolute Value of positive and negative numbers including decimal numbers and fractions to their position on the number line Convert between fraction and decimals, including negative numbers Compare and Order positive and negative numbers, fractions and decimals,	8N1.1 Rational Numbers Express rational numbers as fractions and decimal numbers. Classify Natural, Integers and Rational numbers Repeating decimals. Add, subtract, multiply and divide, any two rational numbers Solve Problems involving rational numbers in real-world situation	9N1 Organization of numbers into sets and subsets. Describe a set of numbers as finite or infinite Justify whether a set of numbers is a subset or another Identify the subsets to which a real number belongs

Big Picture – What are the Changes?

GRADE 7

[C] Communication	[PS] Problem Solving
[CN] Connections	[R] Reasoning
[ME] Mental Mathematics and Estimation	[T] Technology
	[V] Visualization

NUMBER

General Outcome

Develop number sense.

Specific Outcomes

- Determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9 or 10, and why a number cannot be divided by 0.
[C, R]
- Demonstrate an understanding of the addition, subtraction, multiplication and division of decimals to solve problems (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected).
[ME, PS, T]
[ICT: P2–3.4]

Note:

Through this outcome, students have the opportunity to maintain and refine previously learned operations with whole numbers:

Grade 4, Number SO 3 – Demonstrate an understanding of addition of numbers with answers to 10 000 and their corresponding subtractions (limited to 3- and 4-digit numerals) by:

- using personal strategies for adding and subtracting
- estimating sums and differences
- solving problems involving addition and subtraction.

[C, CN, ME, PS, R]

Grade 5, Number SO 5 – Demonstrate, with and without concrete materials, an understanding of multiplication (2-digit by 2-digit) to solve problems.

[C, CN, PS, V]

Grade 5, Number SO 6 – Demonstrate, with and without concrete materials, an understanding of division (3-digit by 1-digit), and interpret remainders to solve problems.

[C, CN, ME, PS, R, V]

- Solve problems involving percents from 1% to 100%.

[C, CN, PS, R, T]

[ICT: P2–3.4]

Draft Mathematics (7–9) Curriculum

Alberta

Grade 7			
Organizing Idea	Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.		
Guiding Question	How can multiplication and division be generalized?		
Learning Outcome	Students interpret multiplication and division of positive fractions and of positive decimal numbers.		
	Knowledge	Understanding	Skills & Procedures
	The product of two fractions is the fraction resulting from multiplication of the numerators and multiplication of the denominators, i.e., $\frac{a}{b} \times \frac{c}{d} = \frac{ac}{bd}$ and can be applied to real-world situations such as adjusting recipes. Multiplication of two fractions can be represented by a model, e.g., an area model. The product of two proper fractions is less than its factors. A proper fraction is a fraction in which the numerator is less than the denominator. The product of two fractions is equivalent to the product of any equivalent forms of those fractions.	The product of two fractions can be interpreted as part of a part.	Model multiplication of fractions. Relate the product of a fraction by a fraction to part of a part. Multiply two fractions. Compare products of fractions in various equivalent forms, including simplest form. Solve problems involving multiplication of two fractions.
	Division by a fraction is equivalent to multiplication by its reciprocal, i.e., $\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \times \frac{d}{c} = \frac{ad}{bc}$ and $\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \times \frac{d}{c} = \frac{ad}{bc}$ and can be applied to real-world situations such as sharing food and cutting materials. A reciprocal is the multiplicative inverse of a fraction. The product of a fraction and its reciprocal is 1. The quotient of a number and a proper fraction is greater than the number. Division of two fractions can be facilitated by representing the fractions with common denominators. The quotient of two fractions with common denominators is the quotient of the two numerators, i.e., $\frac{a}{b} \div \frac{c}{b} = \frac{a}{c}$.	The quotient of any quantity and a fraction can be interpreted as the number of fraction-sized groups that compose the quantity.	Relate a number to its reciprocal. Prove that multiplication of a fraction and its reciprocal is 1. Divide a natural number by a fraction and vice versa. Divide a fraction by a fraction. Investigate the composition of a quantity by fraction-sized groups. Solve problems involving division of two fractions.

NUMBER

General Outcome

Develop number sense.

Specific Outcomes

1. Determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9 or 10, and why a number cannot be divided by 0.
[C, R]

2. Demonstrate an understanding of the addition, subtraction, multiplication and division of decimals to solve problems (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected).
[ME, PS, T]
[ICT: P2–3.4]

Note:

Through this outcome, students have the opportunity to maintain and refine previously learned operations with whole numbers:

Grade 4, Number SO 3 – Demonstrate an understanding of addition of numbers with answers to 10 000 and their corresponding subtractions (limited to 3- and 4-digit numerals) by:

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- estimating sums and differences
- solving problems involving addition and subtraction.

[C, CN, ME, PS, R]

Grade 5, Number SO 5 – Demonstrate, with and without concrete materials, an understanding of multiplication (2-digit by 2-digit) to solve problems.

[C, CN, PS, V]

Grade 5, Number SO 6 – Demonstrate, with and without concrete materials, an understanding of division (3-digit by 1-digit), and interpret remainders to solve problems.

[C, CN, ME, PS, R, V]

3. Solve problems involving percents from 1% to 100%.
[C, CN, PS, R, T]
[ICT: P2–3.4]

	Grade 7		
Organizing Idea	Number: Numbers are organized into systems with unique notation to communicate quantities and to facilitate calculations.		
Guiding Question	How can multiplication and division be generalized?		
Learning Outcome	Students interpret multiplication and division of positive fractions and of positive decimal numbers.		
	Knowledge	Understanding	Skills & Procedures
	The product of two fractions is the fraction resulting from multiplication of the numerators and multiplication of the denominators, i.e., $\frac{a}{b} \times \frac{c}{d} = \frac{ac}{bd}$ and can be applied to real-world situations such as adjusting recipes. Multiplication of two fractions can be represented by a model, e.g., an area model. The product of two proper fractions is less than its factors. A proper fraction is a fraction in which the numerator is less than the denominator. The product of two fractions is equivalent to the product of any equivalent forms of those fractions.	The product of two fractions can be interpreted as part of a part.	Model multiplication of fractions. Relate the product of a fraction by a fraction to part of a part. Multiply two fractions. Compare products of fractions in various equivalent forms, including simplest form. Solve problems involving multiplication of two fractions.
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Big Picture – What are the Changes?

GRADE 7

[C] Communication
[CN] Connections
[ME] Mental Mathematics
and Estimation

[PS] Problem Solving
[R] Reasoning
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General Outcome

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Note:

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Grade 4, Number SO 3 – Demonstrate an understanding of addition of numbers with answers to 10 000 and their corresponding subtractions (limited to 3- and 4-digit numerals) by:

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- estimating sums and differences
- solving problems involving addition and subtraction.

[C, CN, ME, PS, R]

Grade 5, Number SO 5 – Demonstrate, with and without concrete materials, an understanding of multiplication (2-digit by 2-digit) to solve problems.

[C, CN, PS, V]

Grade 5, Number SO 6 – Demonstrate, with and without concrete materials, an understanding of division (3-digit by 1-digit), and interpret remainders to solve problems.

[C, CN, ME, PS, R, V]

- Solve problems involving percents from 1% to 100%.

[C, CN, PS, R, T]

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Draft Mathematics (7–9) Curriculum

Alberta

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Big Picture – What are the Changes?

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Legacy vs New Content – What has remained the same?

This document is designed to support participants as they explore, examine, and unpack the new Pilot(Draft) Mathematics 7–9 Curriculum, considering its relationship to the 2007 curriculum.

Participant will be tasked to work in teams through one organizing idea, identifying Legacy Curriculum and New Curriculum.

Legacy Curriculum: curriculum that remains unchanged in its existing grade.

New Curriculum: curriculum completely new to the grade (identification of grade and strand it came from).

Big Picture – What are the Changes?

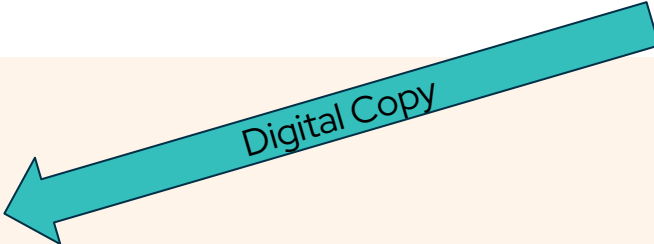
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Legacy vs New Content – What has remained the same?

Groups will:

- Review the new curriculum.
- Find the related “old” curriculum
- Determine whether the Pilot (DRAFT) is Legacy Curriculum or New and highlight it accordingly.
- For each Organizing Idea, you will also keep a record of new **vocabulary**.
- Each team will report on their findings.



Digital Copy

Breakout Rooms

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Collaborative Documents

Breakout room 1 - [Number](#) - Lead Candace Ketsa

Breakout room 2 - [Algebra](#) - Gilbert Morris

Breakout Room 3 - [Measurement and Geometry](#) - Julia Drefs

Breakout Room 4 - [Statistics and Probability](#) - Betty Morris

Breakout Room 5 - [Functions](#) - Chris Zarski

Questions About The Curriculum Comparison?



In each breakout room:

- Do a quick introduction.
- Who gets to type? Who gets to report to the group upon return?
- Divide and conquer! All three grades are hopefully present! Select the grade you are teaching and review the new outcomes, vocabulary, verbs in your Pilot Curriculum
 - What is the same (Legacy) - highlight green
 - What is different (New) - highlight yellow
 - Are there any new vocabulary words that are new to the grade? New to you? (enter in left column)
 - What questions do you have about the content? Pedagogy? Manipulatives?
 - What else came to mind?

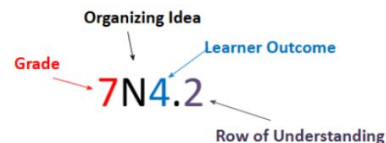
Curriculum Comparison Collaborative Document

Supporting every educator
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Grade 7 Curriculum Comparison Participant Working Copy

Legacy



N = Number
Probability = PR

F = Functions
Algebra = A

M = Measurement

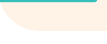
Geometry = G

Statistics

Outcomes from 2007 Curriculum	Understandings from April Draft (New Understandings)	Draft Outcomes, Knowledge, Skills and Procedures	
Number Notes and New Vocabulary	NUMBER		
	UNDERSTANDING Every fraction and decimal number has an additive inverse with the same absolute value and opposite sign.	LEARNING OUTCOME 7N1 Students analyze positive and negative numbers. KNOWLEDGE Absolute value represents the magnitude of any number from zero. A negative fraction can be expressed equivalently as $-\frac{a}{b}$, $\frac{-a}{b}$ or $\frac{a}{-b}$ for any two positive numbers a and b . Negative decimal numbers can be found in real-world situations, such as • debt • change in stock prices • sea levels • Temperature	SKILLS & PROCEDURES Relate the absolute value of positive and negative numbers, including decimal numbers and fractions, to their positions on the number line. Convert between fractions and decimal numbers, including negative numbers. Compare and order positive and negative numbers, including decimal numbers and fractions. Discuss real-world situations involving negative decimal numbers.
	UNDERSTANDINGS Addition and subtraction of integers can be represented as numerical expressions.	LEARNING OUTCOME 7N2.1 Students apply operations to positive and negative numbers. KNOWLEDGE	SKILLS & PROCEDURES Distinguish the meaning of the symbol, -, represented in a numerical expression. Add and subtract any two integers.

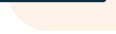
Additional q





Additional q







The Consortium

Alberta Professional Learning Consortium

APLC Post Session Survey

Thank you for attending this session. To help us enhance the delivery of future sessions, we ask that you complete this short survey. **Your feedback is important and appreciated!**

Note: Your survey will be submitted anonymously.

Survey: <https://aplc.ca/survey/?id=15805>



Part 2 of this session

10:30 – 11:45 am

- Time to continue the curriculum comparison
- How might you organize your year (an opportunity to collaborate)
- Considerations for Grade 8 and 9 students who have not had the new 7 or 8.
- and to look at how you might organize your year plan



Additional Sessions Today



10:30 – 11:45

Math 7-9 From Curriculum to Designing Classroom Practice

Zoom link:

<https://us06web.zoom.us/j/87951761595?pwd=LJn4KeuG03L5jlkZMkapfuNgyazetU.1>

1:00 – 2:15

Career Foundations:

<https://us06web.zoom.us/j/84228838442?pwd=BCaWOtTxYdDLb2qheb7HK0HSysebf6.1>

Going Beyond Multicultural Potlucks: Culturally Responsive Practices to Support Changing School Populations

<https://us06web.zoom.us/j/84018248590?pwd=1Vh3zHxMFfoEksWfX2bbpZelVrZMcb.1>

APLC site with all sessions this week: <https://edmonton.aplc.ca/programs/details/?id=15805>

Thank you

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Please visit our website for more information.

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Unpacking the New Grades 7–9 Mathematics Curriculum: Part 2

- Time to continue the curriculum comparison
- How might you organize your year (an opportunity to collaborate)
- Considerations for Grade 8 and 9 students who have not had the new 7 or 8.



As you compared your documents your room may have made a list or discussed the verbs in Skills and Procedures.

How do the verbs inform your planning?

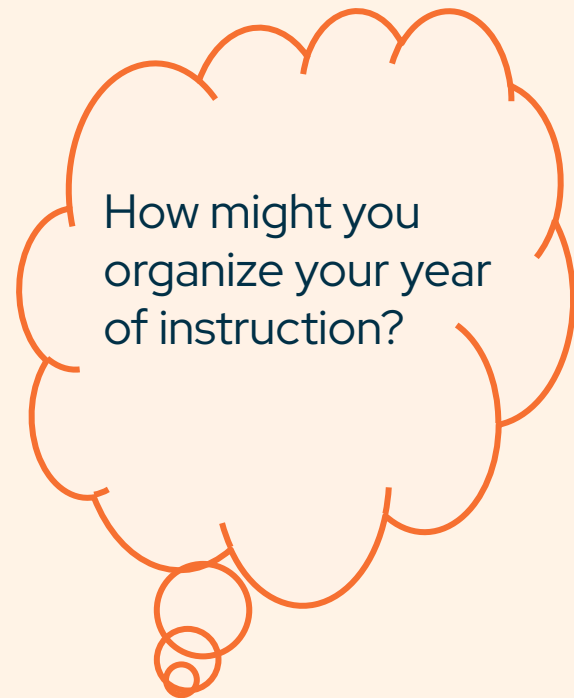
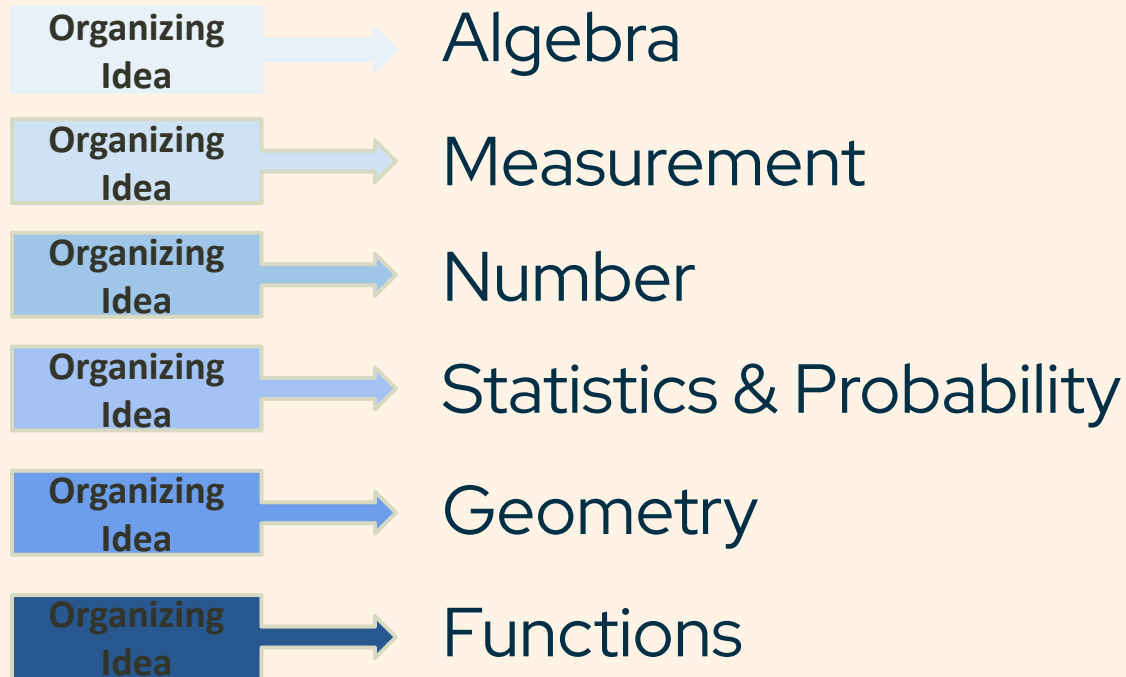
Do they impact pedagogy?

How might they impact the assessment approached you use?

Junior High Verbs by Organizing Idea

Organizing Idea	Grade 7	Grade 8	Grade 9
Number	Relate, Convert, Compare and Order, Discuss, Distinguish, Add and Subtract, Assess, Solve, Multiply and Divide, Investigate, Create, Identify, Express, Recall, Model, Prove, Evaluate, Generate and Determine	Express, Classify, Relate, Compare and Order, Determine, Investigate, Add, Subtract, Multiply and Divide, Assess, Evaluate, Solve, Distinguish, Approximate, Justify, Describe, Generate	Represent, Describe, Justify, Identify, Investigate, Simplify, Express, Convert, Discuss
Algebra	Simplify, Solve, Verify	Express, Justify, Classify, Relate, Name, Determine, Add and Subtract, Solve, Identify, Model, Verify, Represent	Multiply, Expand, Simplify, Factor, Justify, Determine, Solve, Relate, Represent,
Geometry	Differentiate, Model, Identify, Represent, Investigate, Verify, Solve	Determine, Solve, Dilate, Verify, Justify, Prove, Illustrate	Model, Justify, Verify, Represent, Determine, Write, Solve,
Measurement	Create, Investigate, Determine, Derive, Calculate, Solve, Relate, Differentiate, Model	Identify, Calculate, Solve, Predict, Relate, Differentiate, Justify, Recognize, Create, Model	Visualize, Model, Compare, Describe, Calculate, Solve, Investigate
Functions	Distinguish, Describe, Graph, Determine	Calculate, Compare, Investigate, Prove, Distinguish, Propose, Graph, Solve, Express,	Express, Interpret, Relate, Evaluate, Generate, Predict, Solve,
Statistics	Identify, Justify, Describe, Explain, Determine, Compare, Draw conclusions	Describe, Explain, Represent, Compare, Justify, Represent, Analyze	Determine, Identify, Examine, Justify, Represent, Interpret, Compare
Probability	Describe, Explain, Express, Draw conclusions, Predict, Collect, Simulate, Determine, Compare, Relate	Determine	Calculate, Determine, Model, Identify

Let's Collaborate - how might you organize your course?



In your breakout rooms

- Share the order that you might consider covering the Organizing Idea/Skill and Procedures in. There is no one correct answer.
- Challenge each other - conceptual progression
- As a grade team, what are some of your questions, concerns.

Be ready to share the highlights of your discussion with the main group.



Donald Duck in Mathmagic Land

Additional q



Thank you

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Session Description

Write up that is online:

Join this session to explore the architecture of the new Grade 7–9 Mathematics Curriculum in Alberta, including an introduction to New LearnAlberta. Participants will begin a guided comparison between the current and new curriculum to identify key shifts in content, emphasis, and organization.

This session is designed as an entry point for educators who are beginning to explore the new curriculum. Participants may choose to stay for an additional hour to continue their curriculum comparison work or transition to other sessions.

Please note that there is an option to stay in the session for the remainder of the morning to continue to work with facilitators on the activity. Part 1 serves as a recommended foundation for those planning to attend Part 2.