

Board Learning Session: Numeracy

Syós:ys lets'e th'ále, lets'emó:t

~One heart, one mind, working together for a common purpose~

SD33 Numeracy Updates

- Numeracy Framework
- Elementary Numeracy Collaboration
 - Classroom assessment practices
 - SNAP refresh 2-5
 - River & Forest SNAP K-1
 - Number fact fluency
- New Initiatives



Comprehensive Numeracy Framework

- Aligns with BC Curriculum
- Identifies high quality instructional practices
- Amplifies the importance of competencies, computational fluency and the executive functioning skills required to engage as mathematicians



Elementary Numeracy Collaboration & SNAP

How **teachers** use SNAP data:

- Creating class profiles to plan for small-group instruction and other interventions
- Creating year plans to target area of need
- Reporting/communicating progress to students and parents
- Clarification of rubrics and templates to ensure a level of consistency

Classroom Numeracy Profile (SNAP)
Teacher: Ms. Oliver Year: 2024-25 (Fall)

NS: Communicating & Representing <small>Picture Box, Describe, Expanded Form</small>		NS: Understanding & Solving <small>3 Equations</small>		NS: Connecting & Reflecting <small>Real Life Connection, Reflection</small>		NS: Reasoning & Analyzing <small>Number Line, Skip Counting</small>	
Emerging	Developing	Emerging	Developing	Emerging	Developing	Emerging	Developing
Seth	Lorne Zach Claire Nicole	Seth Zach	Claire Paul Olivia	Claire	Seth Paul Zach Lisa Sandeep		Seth Zach Claire
OP: Communicating & Representing <small>Estimate Assessment</small>		OP: Understanding & Solving <small>Draw, Calculate</small>		OP: Connecting & Reflecting <small>Real Life Connection, Word Problem, Reflection</small>		OP: Reasoning & Analyzing <small>Estimate & Justify</small>	
Emerging	Developing	Emerging	Developing	Emerging	Developing	Emerging	Developing
Seth Zach	Paul Claire Mike	Seth Zach	Claire Mike Connor Sandeep	Mike Seth Zach	Claire Lisa Paul Liam	Seth Zach Sandeep	Lisa Claire Nick Mike
Gathering Information & Progress Monitoring <small>Conferences, additional observations, checklists, self-assessments, exit slips</small>		Resources & Supports <small>Guidance for EA, differentiated instruction method, resources</small>		Instructional Decisions <small>Define class instruction priority, small group instruction priority</small>			
Confer with Seth and Zach (language barrier). Exit slip for manipulatives experience.		Manipulatives Determining small grp for more scaffolded learning experience (Seth, Zach, Claire). Need for manipulatives experience (Paul, Sandeep, Mike in).		Language clarification (whole class) Manipulatives for emergent group Whole class: connection to real world			

Elementary Numeracy Collaboration & SNAP

How **schools** use SNAP data:

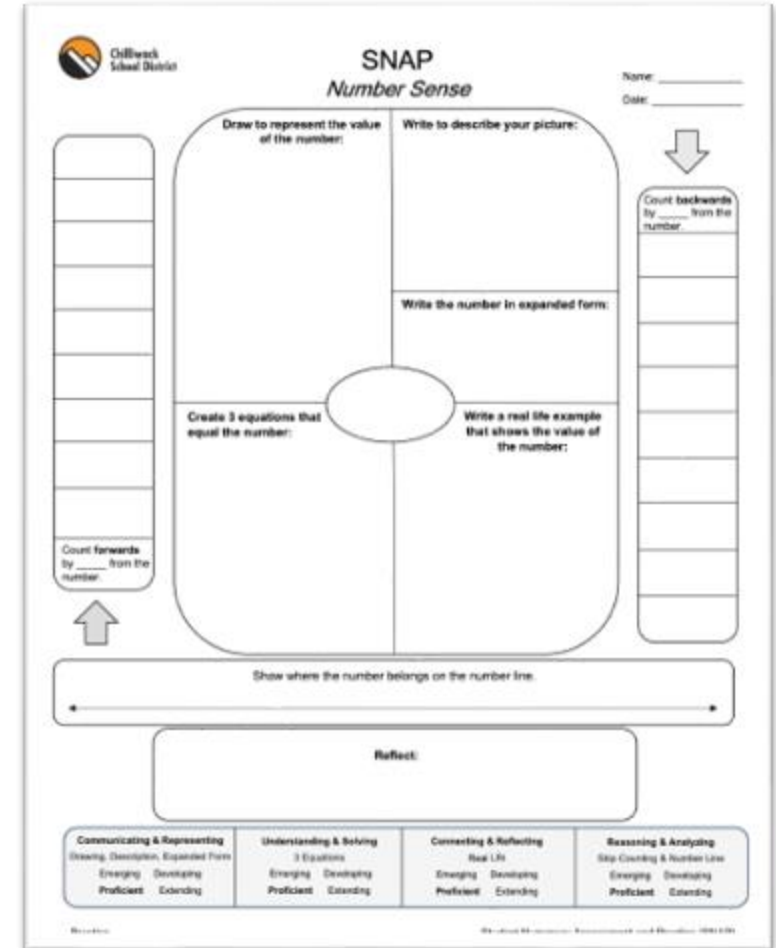
- Identifying curricular areas of need at various grade levels or as a whole school
- Planning 90-day cycle goals
- Purchasing and providing resources to support high quality instruction

Classroom Numeracy Profile (SNAP)
Teacher: Ms. Oliver Year: 2024-25 (Fall)

NS: Communicating & Representing <small>Picture Box, Describe, Expanded Form</small>		NS: Understanding & Solving <small>3 Equations</small>		NS: Connecting & Reflecting <small>Real Life Connection, Reflection</small>		NS: Reasoning & Analyzing <small>Number Line, Skip Counting</small>	
Emerging	Developing	Emerging	Developing	Emerging	Developing	Emerging	Developing
Seth	Lorne Zach Claire Nicole	Seth Zach	Claire Paul Olivia	Claire	Seth Paul Zach Lisa Sandeep		Seth Zach Claire
OP: Communicating & Representing <small>Entire Assessment</small>		OP: Understanding & Solving <small>Draw, Calculate</small>		OP: Connecting & Reflecting <small>Real Life Connection, Word Problem, Reflection</small>		OP: Reasoning & Analyzing <small>Estimate & Justify</small>	
Emerging	Developing	Emerging	Developing	Emerging	Developing	Emerging	Developing
Seth Zach	Paul Claire Mike	Seth Zach	Claire Mike Connor Sandeep	Mike Seth Zach	Claire Lisa Paul Liam	Seth Zach Sandeep	Lisa Claire Nick Mike
Gathering Information & Progress Monitoring <small>(Conference, additional observations, check-ins, self-assessments, etc.)</small>		Resources & Supports <small>(Guidance for EA differentiated instruction method, resources)</small>		Instructional Decisions <small>(Define class instruction priority, small group instruction priority)</small>			
Conference with Seth and Zach (language barrier). Exit slip for manipulatives.		Manipulatives Determining small grp for more scaffolded learning experience (Seth, Zach, Claire). Need for manipulatives experience (Paul, Sandeep, Mike in).		Language clarification (whole class) Manipulatives for emergent group Whole class: connection to real world			

Elementary Numeracy Collaboration & SNAP

- How the **District** uses SNAP data:
 - Targeting curriculum support in specific schools
 - Identifying and addressing areas of need district-wide (e.g. developing resources to support the conceptual understanding of division)
 - Tracking long-term trends in district numeracy



The image shows a worksheet titled "SNAP Number Sense" from Chilliwack School District. It includes a name and date field, a central workspace for drawing, writing, and creating equations, and a number line at the bottom. The worksheet is divided into several sections for student work.

SNAP Number Sense

Name: _____
Date: _____

Draw to represent the value of the number: _____

Write to describe your picture: _____

Write the number in expanded form: _____

Create 3 equations that equal the number: _____

Write a real life example that shows the value of the number: _____

Count forwards by _____ from the number: _____

Count backwards by _____ from the number: _____

Show where the number belongs on the number line: _____

Reflect: _____

Communicating & Representing	Understanding & Solving	Connecting & Reflecting	Reasoning & Analyzing
Drawing, Description, Expanded Form	3 Equations	Real Life	Skip Counting & Number Line
Emerging Developing Proficient Extending	Emerging Developing Proficient Extending	Emerging Developing Proficient Extending	Emerging Developing Proficient Extending

River and Forest SNAP - The Background Story

- Collaborative partnership between the Indigenous and Math Departments.
- Integrates First Peoples Principles of learning with numeracy concepts.
- Aligned with BC Curriculum for Number Sense.
- Developmentally appropriate through play-based learning principles



River and Forest SNAP In The Classroom

- Play-Based Numeracy kit that focuses on Number Sense.
 - Honours the power of story that naturally fits with Indigenous holistic learning.
 - Whole Class, Small Group and Zoom-In lessons.
 - Math Manipulatives to support student learning.

- Place-Based Mat – Amanda Ned’s Art
 - Indigenous Enhancement Teachers teach Sto:lo stories connected to the land.
 - Gives all students an entry point for learning.
 - Assessment is gathered through Observational Data Sheet.

Forest SNAP - Survey February 2025

- **22%** - Used the Forest SNAP as their primary math resource
- **78%** - Useful supplement for whole class, small group, and math stations
- **100%** - Found it easy to implement and use once they had experience with the lessons and elements of the kit

Forest SNAP Lesson

- Interactive Read Aloud – Ten Frame Focus
 - Combining Literacy and Numeracy
 - Using different ways to show comprehension of Number Sense Concepts to 20
 - Working on Oral Language skills



Ten Frames
Zoom In

Interactive Read Aloud

Grade 1 SNAP Template / Connection

- Draw The Number On The Ten Frames

Resources

- Demo Magnetic Ten Frame (2)
- *Counting Creatures* by Julia Donaldson

Big Idea

- Numbers to 20 represent quantities that can be decomposed into 10s and 1s.

Core Competencies

- I can use evidence to make simple judgements.
- In familiar settings, I can interact with others and my surroundings respectfully.

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New Initiatives

- Math Support in Middle Schools
 - Connected to our Middle School Project with Leyton Schnellert, UBC Professor
 - Middle school "Math Monday" residencies at MSMS and Stitó:s
- Story Studio K-1
 - Partnership with District Teacher Librarian and Indigenous Education Department
 - Connect story to number concept through place-based learning

River SNAP - Testimonial

The resources found in the SNAP kit are the fundamental concepts we need to teach in Kindergarten and are presented in a way that is clear, concise and extremely approachable. I am honestly blown away by my student's math progress and knowledge this year. The SNAP kit takes a play-based approach to math which is one of the reasons it has been so effective in my class.

Kara Lafurgy

Kindergarten Teacher - Leary Integrated Arts and Technology Elementary

