SD71-Comox Valley Schools

District Numeracy Assessment Check-In

Grade 3

Primary teachers identify and monitor their learners' strengths and needs to ensure continuous growth in numeracy. This assessment tool is designed for classroom teachers and focuses on critical skills that foster numeracy development. The tool can be used to inform instructional decisions as part of the ongoing instructional cycles throughout the Early Years K-3 and is useful for school data collection to determine school goals and to pass on to future teachers in support of transitions.

Wiliam and Leahy (2015, p.9) state that many in education talk of 'data driven instruction' resulting in large scale assessments that provide information on our learners after the fact – too late to do anything about it! We should instead be focusing on 'decision-driven data collection' answering the questions:

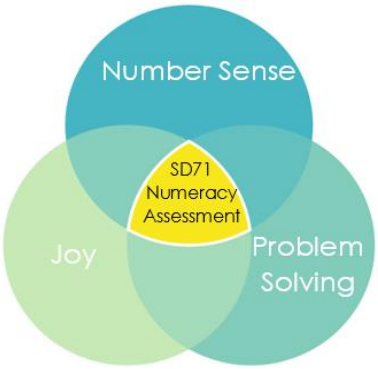
- "What do you want to know about your learners?"
- "When do you want to know it?"

We need 'laser-beam focused' assessments to help us reach all our learners that are quick to implement, interpret and act upon.

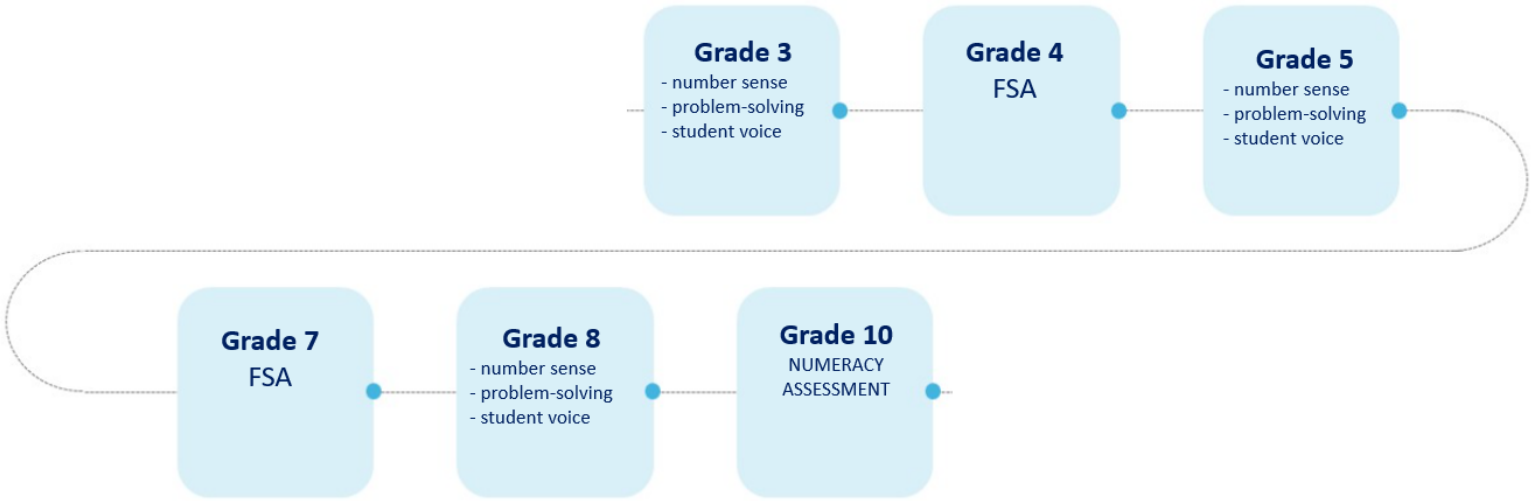
NOTE: Please note that these assessment tools focus on some of the key numeracy areas and do not represent a comprehensive numeracy learning program. For more information about our district's holistic approach to numeracy learning, please see the SD71 Numeracy Framework.

District Numeracy Check-In Point- Grade 3

With in the SD71 Numeracy Framework, there are district check-in points to monitor how learners in our system are doing across the years and to inform decision making regarding numeracy initiatives, professional learning opportunities, and resources. The district will be extracting the data from both the SNAP that classroom teachers have entered in Grades 3 and 5

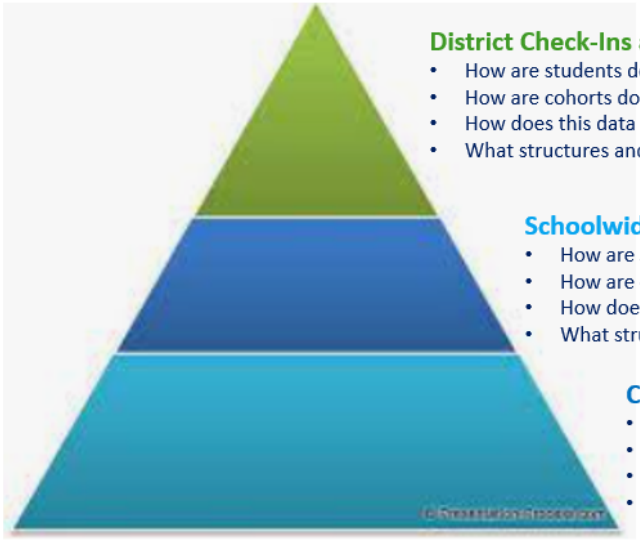


District Numeracy Check-In Points:



Assessment Design for the Frameworks

Grounded in Classroom Assessment System



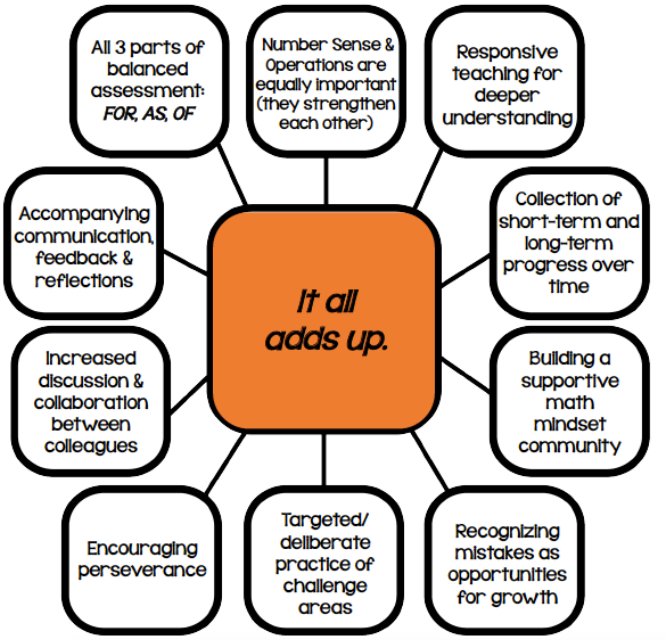
District Check-Ins and Provincial Assessments
- How are students doing across our system?
- How are cohorts doing across time?
- How does this data inform our district's long term goals and plans?
- What structures and strategies are needed for continuous improvement?

Schoolwide Assessment
- How are students doing across the school?
- How are cohorts doing across the grades?
- How does this data inform our school goals and plans?
- What structures and strategies are needed to address needs?

Classroom Assessment
- How is each student doing?
- How is the class doing?
- Who needs supplemental learning?
- Did supplemental learning make a difference?

SNAP (Student Numeracy Assessment and Practice):

Whole Class Assessment SNAP:



The Student Numeracy Assessment and Practice (SNAP) is the Chilliwack School District's numeracy assessment available for all students in grades K – 7. It was created by a group of Chilliwack educators and has been used in all grades K – 7 classes since September 2016, informed by The ANIE Assessment-2014.

The SNAP is a unique assessment; not only is it a measurement of achievement, but it is intended to be used as a practice tool throughout the entire year. The data it provides should be used to inform and guide instructional planning.

The SNAP is a two-page assessment that focuses on the foundational skills of mathematics: Number Sense and Operations. It **compliments any balanced math program** and quickly provides teachers the information they need for responsive planning and instruction.

SNAP is fully aligned with the BC Curricular Competencies in math. Each area of the assessment is connected to a particular competency, and the competencies are built right into the rubric.

The data collected by the district will also be used to guide and inform resources to support student learning in numeracy & mathematics.

(SNAP Teacher Guide – updated, Chilliwack School District)

NOTE: SD71 SNAP Templates can be found under Learn71-Assessment & reporting-District Assessments

SD71 prescribed numbers for Grade 5 fall district check-in:

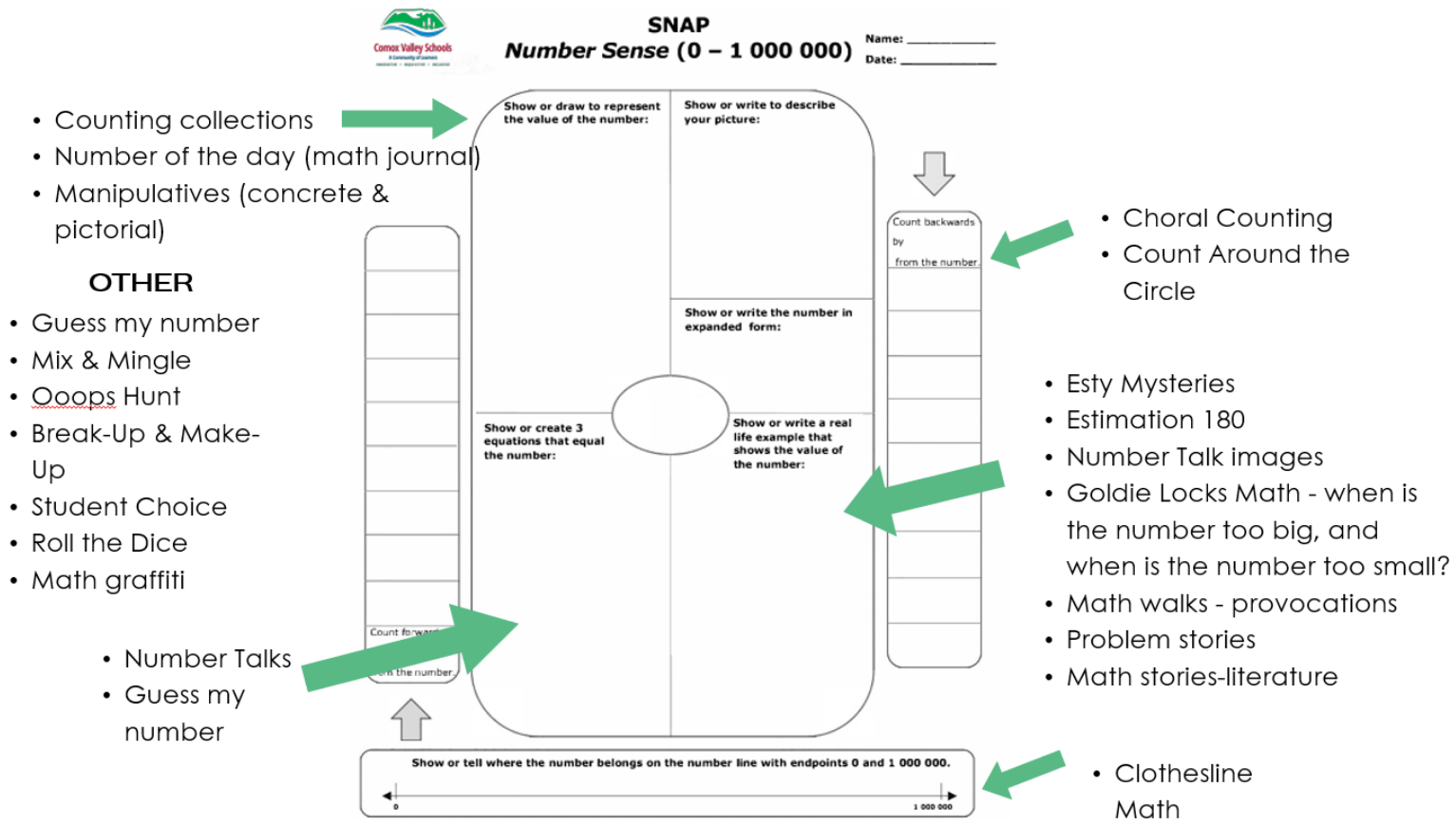
Grade	Number Sense *(Concepts reflective of previous grade)*	Number Sense: skip counting sample numbers	Operations (NOTE: District data not collected)
Fall Grade 3	Number Concepts to 100 Fall Number **67**	Count forwards by : **10** Count backwards by: **2**	Encouraged to incorporate operations section for in-class assessment and practice.

Getting Started with the SNAP

Students should be familiar with the SNAP prior to moving into their individual district assessment. When introducing your students to the SNAP, take your time and explicitly teach and model each component of the assessment. Begin with content that the students should be confident with from the previous year.
SNAP practice does not always need to be done on the SNAP templates; in-fact, once the areas of need are identified, most number sense and operations practice will happen through other strategies such as daily high yield number sense routines (e.g. number talks, choral counting, clothesline math). Have students share their thinking; encourage them to use many different ways to determine their thinking and solutions.

(SNAP Teacher Guide – updated, Chilliwack School District)

- **Use aspects of SNAP as a Number Talk - whole group discussion & exploration**
- **Teacher lead with student follow along**
- **Further practice through daily routines**
- **Zoom in on sections and explore in small chunks**



Resources for routines to support exploring the SNAP can be found on snap.sd33.bc.ca >Resources or on Learn71>Mathematics

Evaluating Student SNAP

Attached to this package is the SD71 **Grade 3** specific Rubric. When evaluating student SNAPs to be submitted to the district please refer to this rubric. The rubric is broken down into **Curricular Competencies** as well as an **Overall Proficiency Score**. Take the average from all the areas to determine the Overall Proficiency Score, for example: if four or more sections in the rubric are in the proficient column with other areas mixed between developing and emerging record the overall as proficient.

> *Mathematics is not about numbers, equations, computations, or algorithms: it is about understanding.*
>
> **William Paul Thurston**

The Districts SNAP App and the Student Data Recording sheet (attached to package) will reflect areas to record both the results from the competency areas as well as an Overall Proficiency Score. Please remember, you know your students best, if clarification is needed in an area, touch base with the student and make a judgement on how to record the results to the best of your professional judgment.

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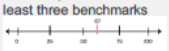
SD71- District Assessment

Number Sense Rubric - Grade 3

SNAP (Student Numeracy Assessment & Practice)

Competency	Emerging *The student demonstrates an initial understanding of the concepts and competencies relevant to the expected learning.*	Developing The student demonstrates a partial understanding of the concepts and competencies relevant to the expected learning.	Proficient *The student demonstrates a complete understanding* of the concepts and competencies relevant to the expected learning.	Notes
Communicating and Representing *Picture Box*	• Pictures do not show the value of the number • Inaccurate	• Pictures show some value in representing the number • Partially accurate	• Pictures are clearly communicated and represent the value of the number *(e.g. base ten and/or symbols)* • Accurate	
Describe Picture	• Description and elaboration of pictorial representation is not evident • Communication is not clear	• Partial accuracy in describing and elaborating on pictorial representation **AND/OR** • Partially communicated	• Accurately describes and elaborates on pictorial representation *(e.g. legend, key, or words)* • Clearly communicated	
Expanded Form	• Emergent understanding of the value of digits in their place values	• Partially accurate in demonstrating the value of each digit *(e.g. 10+10+10+10+20+7)*	• Accurately demonstrates the value of each digit *(e.g. 60+7 or 6 tens,7 ones)*	
Understanding and Solving *3 Equations*	• Emergent use of operations, two or more are not grade appropriate, and or accurate.	• Accurately uses grade appropriate operations in one or two equations *(+1/+2 or -1/-2 is not grade appropriate)*	• Accurately uses grade appropriate operations in all three equations with an attempt to use more than one operations (+,-)	
Connecting and Reflecting *Real Life Connection*	• The example is not representative of the value *(e.g. My soccer jersey is number 67)* • A real-life example is not provided.	• A partial connection to a real-life example representing the value of the number. • Partial understanding of the reasonableness *(e.g. There are 67 trees in the Comox Valley)*	• Connection to a reasonable real-life example is provided • Demonstrates understanding of the value of the number *(e.g. There are 67 pages in my book I read at home)*	
Reflection	• With support, student is not yet able to reflect on their learning *(e.g. I did not like it)*	• Can partially identify strengths and stretches • *e.g. "Everything was easy. Nothing was hard."*	• Can proficiently reflect on their learning, highlighting strengths and stretches. (e.g. "I feel confident with ___; ___ was challenging; my goal is___ ")	
Reasoning and Analyzing *Number Line*	• Emergent understanding of the placement of the number on a number line.	• Partially correct estimate of placement of number on provided number line; benchmarks may be missing	• Correct estimate of placement of number on provided number line with at least three benchmarks 	
Counting Forwards and Backwards	• Emergent understanding of place value, number sense, and/or skip counting with inconsistent mistakes.	• Partially complete and accurate, has more than one mistake in counting consistency.	• Complete and accurate; demonstrates understanding but may include a minor recording error, as long as pattern carries on consistently afterwards.	

Overall Proficiency Score: Emerging Developing Proficient

Student Numeracy Assessment and Practice (SNAP)
Adapted from SD33- Chilliwack- SNAP

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Accessibility:

Both the Number Sense and Operations sections of the SNAP are accessible through district supported programs such as Orbit Note for desktop computers, and Claro for iPads. An option for all students is to use photos of concrete manipulatives, clipped virtual tools or voice recordings are all compatible as attachments to the SNAP and can be submitted to the classroom teacher electronically.

If you are needing support on how to use some of the tools available to support students beyond a paper and pen option, please get in contact with Shannon Hagen and the IT department.

Submitting Results:

Each fall the district will collect the results from the Number Sense part of the SNAP assessment for all grade 5 students. Results entered will reflect the SD71-Grade 3 District SNAP Rubric which is broken down into competencies. Results of each competency area as well as an overall proficiency score of the Number Sense Section will be submitted. District Grade 5 SNAP results will be collected in the fall using a district developed app specific to the SNAP Assessment.

The SNAP is intended to be a formative tool, it is encouraged that teachers use it as a formative tool through-out the year. School sites might also want to collect results to inform trends over time. These submissions may look different than those of the district.

What: Only the Number Sense results of the SNAP – page 1

When: Fall – submission dates to be determined year to year

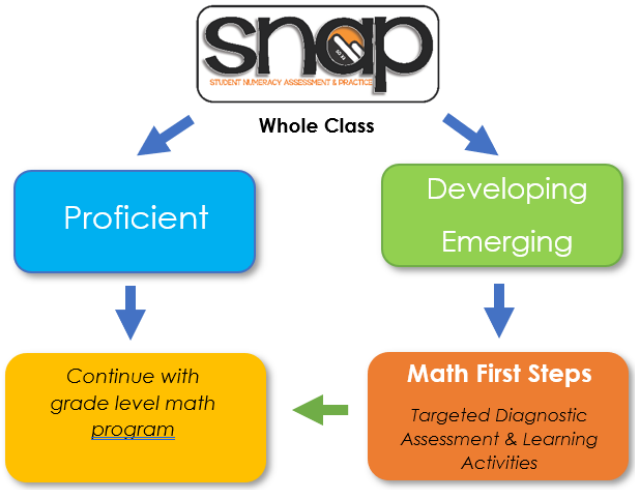
Where: District SNAP App.

Identifying who may require targeted instruction:

Use the SNAP with the **whole class** and sort completed assessments into 2-3 groups – Students who have demonstrated ***mastery/proficiency*** and those who have not. You may want to break the second group down into 'developing' and 'emerging' groupings if appropriate.

Targeted Diagnostic Assessment- First Steps in Math

It is this second group (emerging/developing) with whom we use the set of rich ***First Steps in Math - Number Sense*** diagnostics to identify learners' misconceptions and gaps and to determine which learning activities can address these and build their understanding. The *First Steps in Math* resource is designed to pinpoint and target student misconceptions and can be used to inform next steps in learning. This package includes the curated diagnostic tasks from the resource.



It is recommended that the teacher focus on **one** diagnostic assessment at a time, followed by an analysis to determine the next step for supplemental learning. "Next step" learning activities that correspond with each diagnostic are also provided to target the misconception or key understanding. All activities on the *Learning Activities* sheet will support the same misconception starting with less complex activities moving toward more complex activities. If the suggested learning activity does not seem to work for learners, try another corresponding activity. Professional judgement and relationship with your students will guide you in determining what works better for them.

Note that both the diagnostic assessments and learning activities can benefit the whole class or can be done during small group and/or one-to-one instruction.

Frequently Asked Questions:

1. ***Can I have my LST or CST assess my students for me?***

The SNAP assessments are designed for classroom teachers to use as part of their teaching, learning and assessment cycle. It is important for teachers to know where their students' strengths and stretches are in key numeracy skills to inform planning and to scaffold learning to meet the needs of their learners.

2. ***Do I have to assess students all at once?***

Teachers assess at a variety of times in a variety of ways, depending on assessment purposes and what works for their students. It is best to have all students who are present perform the SNAP as a whole class at the same time. Exceptions are made for those who are absent for the day but their results still need to be included.

3. ***Do I have to use this assessment if I have my own numeracy assessment tools?***

Yes, for the Grade 3 District Check-In, Teacher colleagues in our district have reviewed and discussed many possible strategies and assessments for number sense learning and have selected SNAP for our District Numeracy Assessment check-in.

4. ***What do I do if my students are not demonstrating proficiency on a skill?***

Teaching, Learning and Assessment Cycle:

i. *Whole class teaching, and repeated experience practicing the skill*
ii. *Assess*
iii. *Targeted classroom instruction according to identified student needs.*
iv. *Assess*
v. *Targeted classroom instruction and/or consult with school-based team about other interventions that may be necessary.*
vi. *Assess*

Frequently Asked Questions con't:

6. ***How will the information collected from this assessment be used?***

Classroom Teachers *use this information to inform instruction and monitor progress of their students' numeracy skills. Additionally, this information will be helpful to pass on to the next year's teacher.*

The School *can use the data for school growth plans, allocation of resources and to inform school-based team discussions and strategies.*

The District *will collect the SNAP- Number Sense information in Grades 5. This data will be used to inform decisions regarding resource allocation and professional learning opportunities, as well as to monitor the numeracy development of student cohorts over time.*

Bibliography

First Steps in Mathematics.(2007-13). Pearson Canada.

SD38 - Chilliwack School District (retrieved 2024). *SNAP: Student Numeracy Assessment and Practice*.

Wiliam, D. and Leahy, S. (2015). *Embedding formative assessment: Practical techniques for K-12 classrooms* Learning Sciences International.

SD71-Comox Valley Schools

District Numeracy Assessment Check-In

Grade 3

QUICK GUIDE

Grade	Number Sense *(Concepts reflective of previous grade)*	Number Sense: skip counting sample numbers	Operations (NOTE: District data not collected)
Fall Grade 3	Number Concepts to 100 Fall Number **67**	Count forwards by : **10** Count backwards by: **2**	Encouraged to incorporate operations section for in-class assessment and practice.

- ✓ First and foremost the SNAP is intended to be a formative assessment for classroom teachers that will help support and drive instruction.
- ✓ Please find multiple opportunities to introduce and practice the SNAP prior to conducting the individual SNAP assessment.
- ✓ Fall collection – date submissions to be determined from year to year.
- ✓ Grade 3 fall SNAP assessment reflects the Grade 2 number concepts.
- ✓ District data collection will only be from the Number Sense side. It is encouraged to use the Operations part of the SNAP for in class assessment and practice.
- ✓ Use the SD71-Grade 3 District Assessment specific rubric for evaluating and recording results.
- ✓ SNAP results submitted through the District SNAP App.

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SNAP
Number Sense (0 – 1000)

Name: _____

Date: _____

Show or draw to represent the value of the number:

Show or write to describe your picture:

Show or write the number in expanded form:

Show or create 3 equations that equal the number:

Show or 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 or tell where the number belongs on the number line with endpoints 0 and 1000.

0 1000

Reflect on your thinking by writing or telling:

Communicating & Representing: *Drawing, description, expanded form*	Understanding & Solving: *3 equations*	Connecting & Reflecting: *Real-life*	Reasoning & Analyzing: *Skip counting & number line*
Emerging Developing Proficient	Emerging Developing Proficient	Emerging Developing Proficient	Emerging Developing Proficient

SNAP

Sens du nombre 0-1000

Nom: _____

Date: _____

Dessine une image qui représente la valeur du nombre:

Écris le nombre en forme développée:

Montre ou écris le nombre sous forme développée

Écris 3 équations qui sont équivalentes au nombre:

Écris un exemple concret qui démontre la valeur de ce nombre:

Compte **à l'avance** par _____ à partir du nombre

Compte **à reculons** par _____ à partir du nombre

Indique où le nombre se situe sur la droite numérique

0 1000

Réfléchis:

Communicating & Representing: *Drawing, description, expanded form*	Understanding & Solving: *3 equations*	Connecting & Reflecting: *Real-life*	Reasoning & Analyzing: *Skip counting & number line*
Emerging Developing Proficient	Emerging Developing Proficient	Emerging Developing Proficient	Emerging Developing Proficient

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SD71- District Assessment

Number Sense Rubric - **Grade 3**

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Overall Proficiency Score: Emerging Developing Proficient

Student Numeracy Assessment and Practice (SNAP)
Adapted from SD33- Chilliwack- SNAP

SD71- District Number Sense Assessment-Recording Sheet

Key for results:

P- Proficient

D- Developing

E - Emerging

Student	Communicating & Representing	Understanding & Solving	Connecting & Reflecting	Reasoning & Analyzing	Understanding & Solving	Overall Proficiency Score