



Grades 1-7

Student Numeracy Assessment and Practice (SNAP)

For Number Sense Teacher Guide

Revised April 9, 2024

What is the SNAP?

Student Numeracy Assessment and Practice (SNAP) is the Okanagan Skaha School District numeracy assessment for all students in grades K-7. It was originally created by a group of Chilliwack educators and has been adapted by the SD #67 Numeracy Helping Teachers, Kim Robb and Lianna Tucker with input from classroom teachers. Parkway Elementary School began using the SNAP in the 2021-2022 school year.

Each area of the SNAP is connected to a particular BC Curricular Competencies in math and is communicated on the SNAP with colour coding. Data from the SNAP will guide you in selecting number sense activities and routines to support the learners in your classroom.

While the SNAP can be used as many times as you'd like throughout the year, it is not recommended that you use it regularly as a practice tool, but instead keep it as an assessment tool to guide your instruction. Once areas of need are identified, there are many daily high yield number sense routines as well as whole or small-group instruction that will help your students increase their numbers sense. Many number sense activities and routines can be found on [67learns.com](https://www.67learns.com).

The Number Sense SNAP format is the same for grades 2-7, but the number concepts (taken from the BC Math Curriculum) change and are listed in the chart below. Because the goal is that students are proficient at the end of the school year, the beginning of the year SNAP is the SNAP from the previous grade.

Grade	Number Sense
1	Number concepts to 20
2	Number concepts to 100 Any two-digit number
3	Number concepts to 1 000 Any three-digit number
4	Number concepts to 10 000 Any four-digit number
5	Number concepts to 1 000 000 Any six-digit number
6	Number concepts to thousandths to billions Any decimal to the hundredths
7	Integers concepts Any two-digit negative whole numbers

Administering the SNAP

When introducing your students to the SNAP, project the SNAP, and explicitly teach and model each component of the assessment using numbers, student should be comfortable with from previous years. As the SNAP is used within a school, students will become more familiar with the tool and will need less instruction.

MATERIALS NEEDED:

1. SNAP recording sheet for each student. If you have students working below grade level, choose a copy of the SNAP for their level without the grade indicated on the SNAP. These can be found on 67learns.com under “Assessments”. It is recommended that each time you administer the SNAP, you check the website for the most up to date version.

PREPARATION OF THE SNAP before printing:

- Put the date and teacher name on the page.
 - Decide your number giving careful thought to what will happen when the students do their forwards and backwards counting... does it move to another family (10s, 100s, 1 000s etc.)
 - Fill in what you want your students to count forwards and backwards by for the group counting ladders. With the beginning of the year SNAP, you might want your group counting to be what you would consider easy for your grade just so you can see who doesn't have that skill. In many cases we assume our students have mastered skills from previous years, such as counting by 2s, when they haven't. Place your starting number on the arrows.
2. Rubric page – either one for each student (Place date and teacher name on rubric before printing) or just one copy for your marking as the scale is on the bottom of each SNAP.
 3. Download and Save Class Data Chart (Optional)

DIRECTIONS and EXPECTATIONS FOR EACH PORTION OF SNAP

DRAW:

Ask the students to draw a picture that shows the value of the number. Students might use base ten blocks or money to represent their number. With lower numbers, they might use tally marks or pictures of items to show understanding.

TEN FRAME (Grade 1 only):

Ask the students to fill in the ten frames to represent the number. They should start at the top left. It is ideal not to tell them this during the assessment to see if they are aware of the expectation.

GROUP COUNTING:

Ask the students to begin at the number and count forwards and backwards by number chosen by the teacher. By the end of grade 3, it is expected that students are able to group count by any number from any starting point.

DECOMPOSE/EQUATIONS:

Ask the students to create 3 equations that equal the given number. Students who are demonstrating full proficiency will be using grade appropriate operations in their equations.

Grade	What to look for:
1	Any three equations (+ or -)
2	Shows an understanding of making 10 and use of doubles and friendly numbers. Understanding of making zero to achieve a sum ($124-124+64=64$), Evidence of use of a pattern in any group of equations.
3	Using more than 2 terms show evidence of understanding of place value ($300+300+2+2=604$, or $200+200+200+4=604$) Evidence of making hundreds ($560+40+4=604$)
4	Using more than 2 operations, (x, + and -) ($500 \times 4 + 3000 + 25 = 50$)
5	Uses all operations
6	Uses all operations, (might include use of fractions, decimals or exponents)
7	Uses all operations, (might include use of fractions, integers, decimals or exponents)

REAL-LIFE EXAMPLE:

Ask the student to provide a real-life example of the number that demonstrates an understanding of the value of number. For instance, "My house number is 26." does not show an understanding of value; "We have 26 students in our school." shows an understanding of "how much" 26 is.

NUMBER PATH (Grade 1):

Ask students to circle the correct number of boxes on the number path. The boxes must be connected in one group. Check to see if they are using benchmarks of 5 and 10 to build their number.

NUMBER LINE (Grades 2-5):

For grades 2-5, the endpoints to the number line are provided. To demonstrate full proficiency, students will add appropriate benchmarks to their number line to help situate the number.

Benchmarks for Number Lines by Grade:

2	5 and 10	25, 50, 75
3	25, 50, 75	250, 500, 750
4	250, 500, 750	2 500, 5 000, 7 500
5	2 500, 5 000, 7 500	250,000, 500,000, 750 000
6	250,000, 500,000, 750 000	Appropriate for number given
7	Appropriate for number given	Appropriate for number given

Students should not try and add ALL numbers to a number line (e.g., all number between 0 and 20, if those are the endpoints or for larger numbers every decade or hundred or thousand etc.). It is possible that they do not need all the benchmarks listed. They do need to have a beginning, middle and end benchmark as well as one at the quarter point of their number. For example, if the number is 435, their number line should have 0, 250, 500 and 1000. Students should not

REFLECTION (Grades 3 – 5):

Reflections are an important component of our curriculum as they allow students to link ideas and construct meaning from their experiences. Students should have opportunities to reflect on their learning at the end of every lesson. Providing guiding questions for students is helpful to develop their proficiency with this skill:

- What strategies did you find useful with this task?
- What were your strengths and stretches?
- What are you proud of?
- What would you like to learn more about?
- I am working on...
- What I learned about myself as a mathematician is...