Kindergarten
Student Numeracy Assessment and Practice (SNAP)
Teacher Guide

What is the SNAP?

The 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 for grades K-5 in the 2021-2022 school year.

The SNAP is a measurement of achievement and the data it provides should be used to inform and guide instructional planning.

The 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 grading rubric. It is a good idea to participate in collaborative marking with colleagues to help establish common expectations. Data from the SNAP will guide you in selecting number sense activities and routines to support the learners in your classroom.

Kindergarten Learning Standards

Students will focus on Number Concepts to 10. The number for the SNAP for each term will be:

- Term 1 The number 4
- Term 2 The number 6
- Term 3 The number 9

Administering the Kindergarten SNAP

The Kindergarten SNAP is a one-on-one assessment. The teacher will record students' thinking. Each section can be done separately or in a short interview style.

MATERIALS NEEDED

1. Copy of SNAP Teacher recording sheet for each student
2. Manipulatives for counting. You should have at least 12
3. "Representing the Number" Worksheet
4. Subitizing Mats for the correct term

DIRECTIONS FOR EACH PORTION OF SNAP

IDENTIFY NUMERAL

Write or show the number you are using for this assessment. Ask the student, "What number is this?". If they do not know, tell them. A page with the numbers 1-10 is included in this package.

BUILD THE NUMBER

1. Make sure you have a collection of objects that is more than the target number.
2. Ask the student to move number of objects towards a mat or designated area:
    a. Did they move the correct number without counting? (Subitized)
    b. If they subitized, ask them to count and note the following. If they counted in their head, ask them to count again out loud. Notice how they counted:
        - Is there one to one tagging? (Did they touch the object and say the number?)
        - Does the child count move each object say the number?
3. After the student has counted the objects, rearrange the objects and ask "Now, how many are there?"
        - Does the child have conservation of number? If the student needs to count the objects again, they do not have conservation of numbers. (They don't trust the count.)

ONE/TWO MORE/LESS

4. Ask the student- "If I have ____ and I added one more, how many would I have?"
   Ask the student- "If I have ____ and I added two more, how many would I have?"
        - Check to see if the student can do so mentally or if they still need concrete models to answer.
5. Ask the student- "If I had one less than _____ (if I took one away from _____), how many would I have?"
   Ask the student- "If I had two less than _____ (if I took two away from _____), how many would I have?"
        - Check to see if the student can do so mentally or if they still need concrete models to answer.

REPRESENT THE NUMBER

Have the student represent the given number in as many ways as they can on the "Represent the Number" worksheet found at the end of this package. Their choices are:

- printing the numeral
- drawing a picture of the number of objects
- filling in one die or two dice
- fill in a ten frame
- tally marks
- decomposing with a number sentence or illustration

SUBITIZE THE NUMBER

Sets of subitizing mats for each term are found at the end of this package (Ten Frame, Fingers, Dice, Dots, Tally Marks). Show the student the page and note if they can pick out the correct amount without counting the items one by one. 3-4 seconds is average.

DECOMPOSE THE NUMBER IN 3 WAYS

1. Make sure you have a collection of objects that is more than the target number.
2. Have the student count the number of objects out and place them on the top circle of the mat found at the end of this package.
3. Ask the students to break apart/decompose the amount in 3 different ways.
    - Guide students with a story such as, "Four bears were living in a big cave. They moved to two little caves. How many different ways could they be moved into the two smaller caves?"
    - As the student uncovers a way to decompose the teacher records their thinking on the Teacher Observation sheet.

REAL LIFE EXAMPLE OF NUMBERS IN YOUR WORLD

1. Ask the student "Where would you see _____ of something in the world? The answer should indicate that the student understands the quantity of the number and not just noticing digits in the environment. For example,

   Emerging - "My shirt has a four on it." does not show an understanding of the value.

   Developing - "There are 4 people." does not have enough details. You could prompt the student and ask them, "Where would you see 4 people?"

   Proficient - "There are 4 people in my family." shows an understanding of the value of the number. "There are 4 people in my class." is not proficient because there are more than 4 people in the class.

BENCHMARKS OF 5 AND 10

1. Use the correct Ten Frame provided in this package.
2. Ask the student "How can I make it 5?" Note if they need to do this concretely or mentally.
3. Next, ask the student "How can I make it 10?" Note if they need to do this concretely or mentally.

NUMBER PATH

1. Ask the student to show the number on the Number Path on the Representing the Number sheet.
    - Students should colour in or circle the number as a group from left to right. They should not circle or colour in individual boxes.
    - The teacher is watching to see if student uses the benchmark of 5 or 10 to circle their number.

Kindergarten Number Sense (0 - 10) SNAP Rubric

Name:_____ Teacher: _____ Date:_____

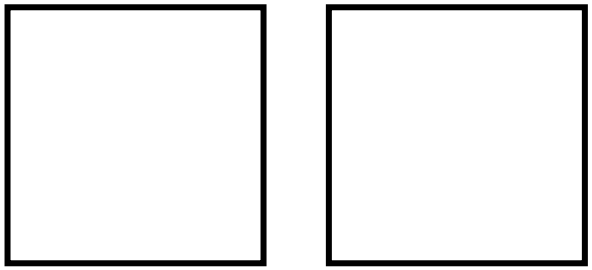
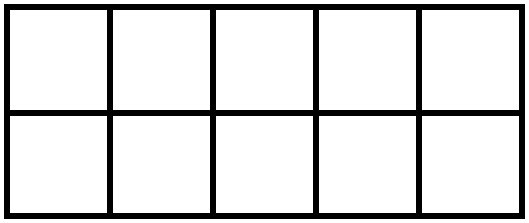
Competency	1 Student understanding and application of learning standard is not yet evident EMERGING	2 Student demonstrates some understanding and application of number sense DEVELOPING	3 Student demonstrates proficient understanding and application of number sense PROFICIENT	Teacher Notes
Communicating & Representing: Names the number shown	- Guesses/says random number	- Able to name the number	- Able to name the number	
Build the number	- Counts out a number different than what is asked - One to one tagging is not evident	- Counts out the number using one-to-one tagging - Does not have conservation of the number	- Correctly counts out the number with one-to-one tagging or moving the objects - Has conservation of the number	
Show one more/Less, two more/less	- Is unable to or can only partially show one/two more/less even with manipulatives	- Uses manipulatives to add one/two more/less and then counts one by one	- Is able to independently identify one/two more/less without manipulatives	
Represent the number in three ways	- Is not able to represent the number accurately	- Is able to represent the number in one or two ways	- Is able to represent the number in three ways	
Understanding & Solving: Subitize three different visual representations	- Unable to recognize representation quickly or - counts items one by one	- Recognizes **one or two** representations quickly without counting	- Recognizes **three or more** representations quickly without counting	
Decompose the number three different ways	- Not yet able to	- With prompting, accurately decomposes the **number one or two** ways	- Accurately decomposes the number **three** different ways	
Connecting & Reflecting: Real-Life Connection	- Is not able to provide a real-life example that shows the value of the number or - Not able to provide the relevant details after prompting	- Provides a real-life example but requires prompting to include relevant details (See Teacher Guide)	- Provides a real-life example that demonstrates understanding of the number value (See Teacher Guide)	
Reasoning & Analyzing: Recognize benchmark of 5 & 10	- Not yet able to	- By counting the number of empty spots, student accurately states how many are needed to make 5 **or** 10	- Without counting, student accurately states how many are needed to make 5 and 10	
Number Path	- Circles incorrect amount on the number path - Circles the correct number of boxes, but in separate groups	- Circles the correct amount as a group on provided number path by counting the boxes	- Circles the correct amount as a group on provided number path using a benchmark of 5 or 10	

9	4	10
5	8	2
1	3	6
	7	

This page is for the “Identify the Numeral” portion of the SNAP

Name:_____ Teacher: _____ Date: _____

REPRESENTING THE NUMBER

Digit	Picture	Dice
		
Ten Frame	**Tally Marks**	**Decompose**
		

Name:_____ Teacher: _____ Date: _____

Kindergarten SNAP – Teacher Observations

IDENTIFY THE NUMBER
- ☐ Correctly names the number

BUILD THE NUMBER
- ☐ Shows the number of objects using subitizing
- ☐ One-to-one Tagging (Points and counts objects)
- ☐ Moves and counts objects
- ☐ Conservation of number

ONE/TWO MORE/LESS
- ☐ One More – concretely or mentally
- ☐ Two More – concretely or mentally
- ☐ One Less – concretely or mentally
- ☐ Two Less – concretely or mentally

REPRESENT
- ☐ Print the numeral
- ☐ Picture
- ☐ Dice
- ☐ Ten Frame
- ☐ Tally Marks
- ☐ Decompose

SUBITIZE
- ☐ Ten Frame
- ☐ Fingers
- ☐ Dice
- ☐ Dots
- ☐ Tally Marks

DECOMPOSE THE NUMBER IN 3 WAYS
1.

2.

3.

REAL LIFE EXAMPLE

BENCHMARKS OF 5 AND 10
- ☐ Filled in Ten Frame
- ☐ Made it 5 – concretely or mentally
- ☐ Made it 10 – concretely or mentally

NUMBER PATH
- ☐ Correct

Communicating & Representing:

Build	1 2 3
More/Less	1 2 3
Represent in 3 Ways	1 2 3

Understanding & Solving:

Subitize	1 2 3
Decompose	1 2 3

Connecting & Reflecting:

Real Life	1 2 3

Reasoning & Analyzing:

Benchmark of 10	1 2 3
Benchmark of 5	1 2 3

Whole – Part, Part Mat

for Decomposing