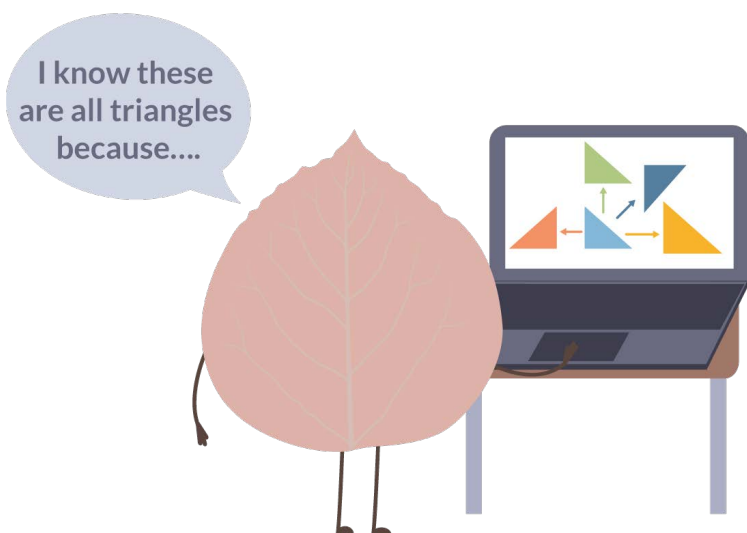


EXAMINE

K - 3

To carefully and in detail consider the nature and characteristics of something to find out more about it.



Examining requires students to engage in learning activities which support exploration, questioning and further investigation to uncover details, possibilities, concepts, ideas and information. ***Examining*** is a comprehensive process in which students have multiple opportunities over time to work within the specific grade level context of the verb in the curriculum.

The table below shows where **examine** is included as student action within Alberta's K-3 Math curriculum.

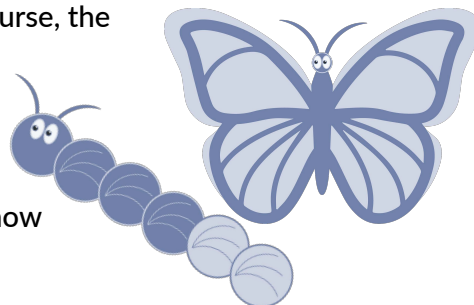
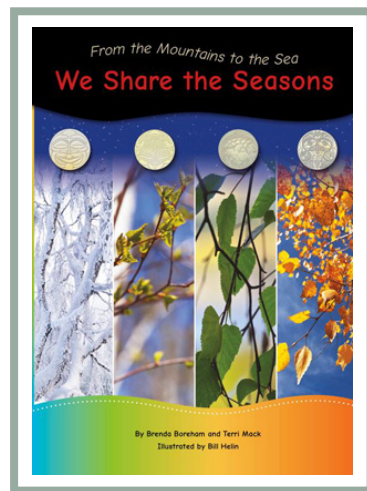
Grade Level	Learning Outcomes	Skills & Procedures
Kindergarten		
Grade 1	Students examine addition and subtraction within 20. Students examine one-half as a part-whole relationship. Students examine patterns in cycles.	
Grade 2		
Grade 3		Examine patterns in multiplication and division, including patterns in multiplication tables and skip counting. Examine geometric properties of polygons by translating, rotating, or reflecting using hands-on materials or digital applications. Examine First Nations, Métis, or Inuit representations of data.

To best support learners, student action verbs should be explicitly taught, modeled and practiced through multiple experiences. The illustrative examples can provide clarification about how student understanding might be developed. It is important to reference the curriculum to view the entire context of the Learning Outcome and related KUSPS.

Illustrative Examples

Learning Outcome 1P1: Students **examine** patterns in cycles.

1. Read the book [*From the Mountains to the Sea*](#), which **examines** various types of cycles. (Disponible aussi en français: [*Des montagnes à la mer: Nous partageons les saisons*](#).) This book provides a rich source of Indigenous content and information about various types of cycles (plants, animals, rivers, moon, etc.) and can connect easily to other curricular areas. "This book is about the changing seasons in and along a riverbank, from the mountains to the sea. You will see many plants and animals that live along a riverbank. They grow and change just as we do". The book can be used as a springboard for discussions and learning activities.
- 2a. Show the [animated version](#) of Eric Carle's, The Very Hungry Caterpillar. This video clearly examines the night and day cycle, the days of the week cycle, and the metamorphosis from caterpillar to butterfly. Of course, the book expresses these too.
- 2b. As an extension activity, after **examining** patterns in "The Very Hungry Caterpillar" students can create a pattern of colour segments on a caterpillar, then use those same colours on a butterfly to show the connection between them, and/or, show how the same pattern can be represented with different elements on each of the drawings.
3. Students **examine** the pattern of a school day. The teacher will show the beginning of a school day. (For example, arriving at school, removing coats/ shoes, ...) Students are invited to complete the day. (For example: learning in the classroom, recess, more learning, lunchtime, learning, recess, home time.). Repeat over 3-5 days. Then the teacher asks students whether each day at school follows this same pattern. **Examine** which events each day stay the same or is different.



Additional Resources

[Strong Nations Indigenous, Native American, Aboriginal, First Nations, Inuit, and Métis books.](#)

References

Boreham, B., & Mack, T. (2003). *From the Mountains to the Sea: We Share the Seasons*. Strong Nations Publishing.

https://www.strongnations.com/store/item_display.php?i=5832

Carle, E., & Illuminated Films. (2016, August 25). The Very Hungry Caterpillar - Animated Film. YouTube. <https://www.youtube.com/watch?v=75NQK-Sm1YY>

Manitoba Education. (n.d.). Mathematics. Manitoba Education. https://www.edu.gov.mb.ca/k12/cur/math/c_u/index.html

Strong Nations. (n.d.). Strong Nations - Indigenous & Native American Books, Aboriginal Kids Books, First Nations Kids Books, Inuit, Métis - Building Strong Nations Together! <https://www.strongnations.com/>