1 Module 7

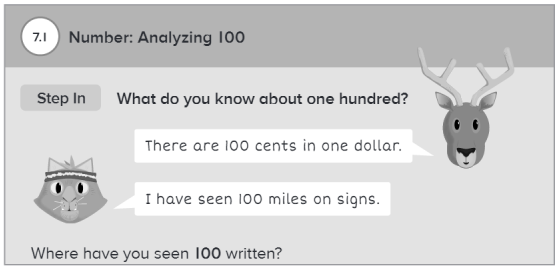
ORIGO STEPPING STONES 2.0

Core Focus

- Number: Analyzing 100 and writing three-digit numbers to 120
- Subtraction: Reinforcing all strategies
- Time: Half-past the hour

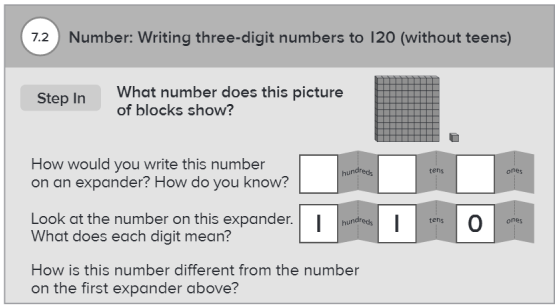
Analyzing 100

- Until now, students have mostly worked with numbers smaller than 100. This module provides them with a variety of experiences to extend their understanding of place value to three-digit numbers.
- To understand the place-value properties of three-digit numbers, students must be able to picture 100. They recognize 100 as a special number they can count to, but they need to understand that the quantity 100 can also be **one group of 100, ten groups of 10,** or **100 ones**.



In this lesson, students explore different representations for 100.

- The **numeral expander** helps students think of three-digit numbers as groups of **hundreds**, **tens**, and **ones**. This makes it easier to read and talk about three-digit numbers with understanding. **Base-10 blocks** are used in this module to help children visualize groupings by hundreds, tens, and ones.



In this lesson, students read and write three-digit numbers, using the blocks to represent the quantity, and the expander to write the number.

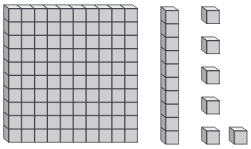
- Students deepen their understanding of place value by ordering and comparing three-digit numbers. When students explain why one number is greater or less than another, they have to think about the value of each place to justify their reasoning.

Ideas for Home

- By the end of Grade 1, students are expected to fluently add and subtract facts **within 10**. To practice these strategies (**count-on/-back; doubles**, and **make-ten**), use flash cards or fact practice on the computer.
- To compare quantities, discuss why one number is greater or less than another. E.g. "I know 125 is less than 127 because both have 120, but 5 is less than 7."

Glossary

- These are **base-10 blocks**. They are used to build numbers showing **hundreds**, **tens,** and **ones**.



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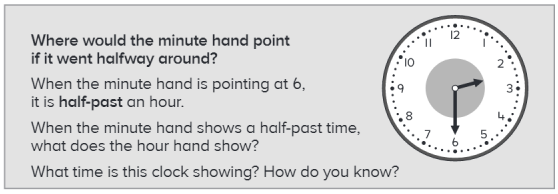
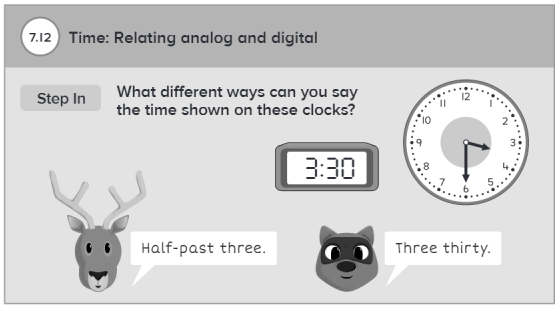
Time

- Learning to tell the time can be challenging for young students. For example, the hour hand on an analog clock does not point directly to any number when the time is half-past, so children must learn that it is always half-past the lesser hour.



At half-past 2, the hour hand is between the 2 and the 3.

- Although we rarely use this expression in everyday language, students learn to say half-past when the minute hand points to the 6 on an analog clock. Half-past helps students visualize an hour as one whole (revolution) and 30 minutes as half.



In this lesson, students match on-the-hour and half-past times shown on analog and digital clocks.

Ideas for Home

- Experience and opportunity are essential to your child learning to read, write, and make sense of time. Draw attention to times, with an emphasis on relating to the hour and half-hour (e.g. "We'll leave for the movie at 5:30. When the big hand moves from where it is now down to the 6, it will be 5:30, or half-past 5." Or, "The bus will come at 2:30. See how my watch says 2:28? So in just 2 more minutes (2:29, 2:30) the bus will be here."