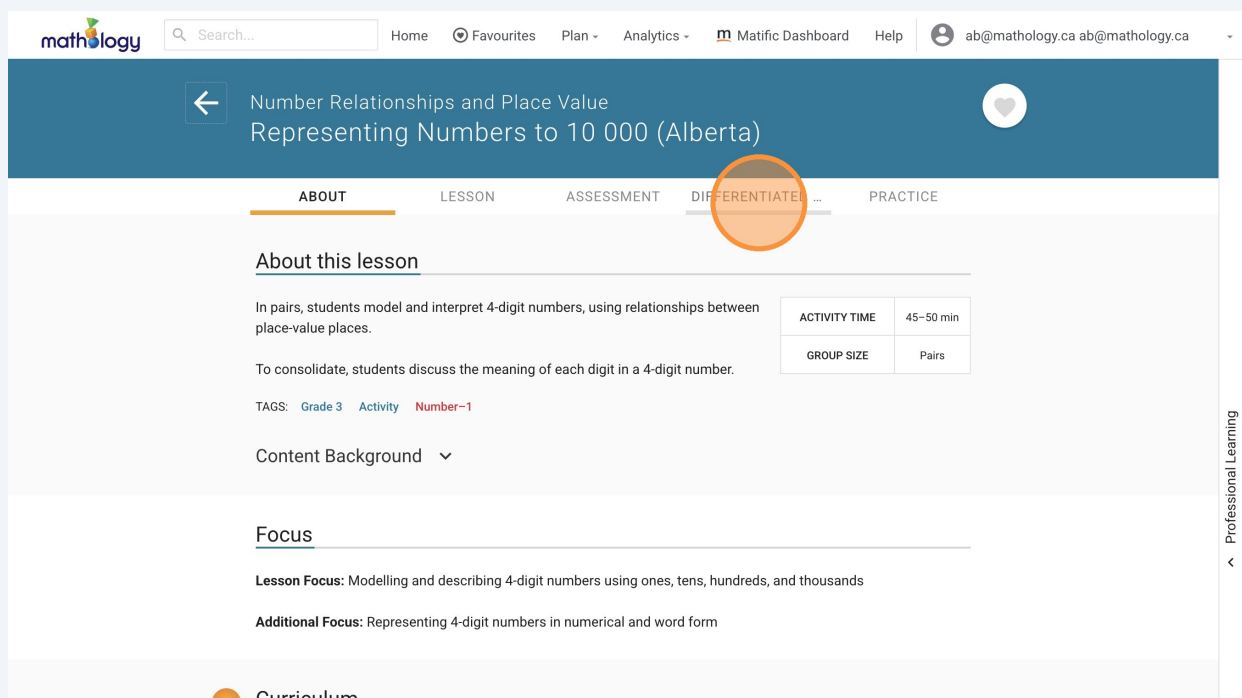


Differentiation: Use Differentiated Mini Lessons Gr 1-Gr 3

This guide helps educators address a common misconception where students misunderstand the value of digits in a number. Learn how to intervene effectively and reinforce the concept of place value using Base Ten Blocks.

1 Click "Differentiated Support"



The screenshot shows the Mathology website interface. At the top, there is a navigation bar with the Mathology logo, a search bar, and links for Home, Favourites, Plan, Analytics, Matific Dashboard, and Help. The user's email address is displayed as ab@mathology.ca. Below the navigation bar, the page title is "Number Relationships and Place Value Representing Numbers to 10 000 (Alberta)". A navigation menu includes tabs for ABOUT, LESSON, ASSESSMENT, DIFFERENTIATED (highlighted with an orange circle), and PRACTICE. The main content area is titled "About this lesson" and contains the following text:

In pairs, students model and interpret 4-digit numbers, using relationships between place-value places.

To consolidate, students discuss the meaning of each digit in a 4-digit number.

TAGS: Grade 3 Activity Number-1

Content Background ▾

Focus

Lesson Focus: Modelling and describing 4-digit numbers using ones, tens, hundreds, and thousands

Additional Focus: Representing 4-digit numbers in numerical and word form

Curriculum

Professional Learning

2 Click Click Intervention or Extension to find mini lessons

mathology Search... Home Favourites Plan Analytics Matific Dashboard Help ab@mathology.ca ab@mathology.ca

← Number Relationships and Place Value Representing Numbers to 10 000 (Alberta)

ABOUT LESSON ASSESSMENT **DIFFERENTIATED ...** PRACTICE

Mini-Lessons

Intervention: Students having difficulty representing a number using Base Ten Blocks

(pairs)
Materials: Base Ten Blocks
Math Mat 10: Place-Value Mat (PDF) (WORD)

Model a 3-digit number (e.g., 472) using Base Ten Blocks on a Place-Value Mat. Have students identify the number.

Hundreds	Tens	Ones

Ask: "How many flats (hundreds), rods (tens) and ones (ones) are there? How many more ones are needed to make another ten? How would the number change if we removed all the tens (rods)?"

Have students select more 3-digit numbers to model. When ready, introduce the cube (thousands) and select 4-digit numbers to model.

Professional Learning

3 Click for sample misconceptions

ABOUT LESSON ASSESSMENT **DIFFERENTIATED ...** PRACTICE

Mini-Lessons

Intervention: Students having difficulty representing a number using Base Ten Blocks >

Extension: Students ready to represent numbers using additive place value >

Possible Misconceptions

Student thinks the "6" in 3612 represents the quantity of six.

What to Do
Use Base Ten Blocks to model 3612. Then represent each digit in the number on a place-value chart.

Relate the number of thousands, hundreds, tens and ones to the digits in the number (e.g., 3 thousands, 6 hundreds, 1 ten and 2 ones). Help students see that "6" in 3612 means there are 6 hundreds, or 600.

Professional Learning

✓ Planning Tool (3-4) 3

After The Lesson

Next Steps In Class >

4 Click "Next Steps In Class"

extension. Students ready to represent numbers using additive place value

Possible Misconceptions

Student thinks the "6" in 3612 represents the quantity of six.

After The Lesson

Next Steps In Class

- Have students order the school orders from least to greatest and explain their reasoning.
- Consider the school orders and add or subtract individual saplings, trays of 10, flats of 100, or crates of 1000.
For example, School C added 3 flats to their order. How many saplings do they need now? School E realized they ordered 1 crate too many. How many saplings do they actually need?

Next Steps At Home

3

Professional Learning

5 Click words to discover definitions

mathology

Search...

Home

Favourites

Plan

Analytics

Matific Dashboard

Help

ab@mathology.ca ab@mathology.ca

Next Steps In Class

Next Steps At Home

Word Wall

THOUSANDS PLACE

HUNDREDS PLACE

TENS PLACE

ONES PLACE

PLACE VALUE

EXPANDED FORM

Related Lessons

On Grade



On Grade



On Grade



Professional Learning

6

Click use this information for a classroom wordwall or copy and place in documents for students

The screenshot shows the mathology website interface. At the top, there is a search bar and navigation links for Home, Favourites, Plan, Analytics, Matific Dashboard, and Help. The user's email address, ab@mathology.ca, is visible in the top right. A modal window is open in the center, containing the text: "thousands place – the place value four places to the left of the decimal point in a number (e.g., 3247: 3 is in the thousands place and has value 3000)." An orange circle highlights the word "thousands" in the text. Below the text is an "OK" button. The background shows a "Word Wall" section with buttons for "THOUSANDS PLACE VALUE" and "EXPANDED FORM", and a "Related Lessons" section with three "On Grade" lesson cards.

7

Click "OK" to close

This screenshot is identical to the one above, showing the same modal window with the text about thousands place value. In this version, an orange circle highlights the "OK" button at the bottom right of the modal window, indicating the next step in the process.

8

Click "Related Lessons" to find other lessons with similar concepts

Next Steps At Home >

Word Wall

THOUSANDS PLACE

HUNDREDS PLACE

TENS PLACE

ONES PLACE

PLACE VALUE

EXPANDED FORM

Related Lessons

On Grade



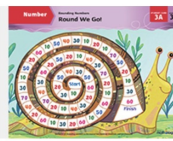
Number Relationships and Place Value: Composing and Decomposing Numbers to 10 000 (Alberta)

On Grade



Number Relationships and Place Value: Representing Larger Numbers (Alberta)

On Grade



Number Relationships and Place Value: Rounding Numbers (Alberta)

✓ Planning Tool (3-4) 3