

Math

PRE-ASSESSMENT 6

Finding Each
Student's Pathway



**SAMPLE
MATERIAL
INSIDE**

FINDING EACH STUDENT'S PATHWAY

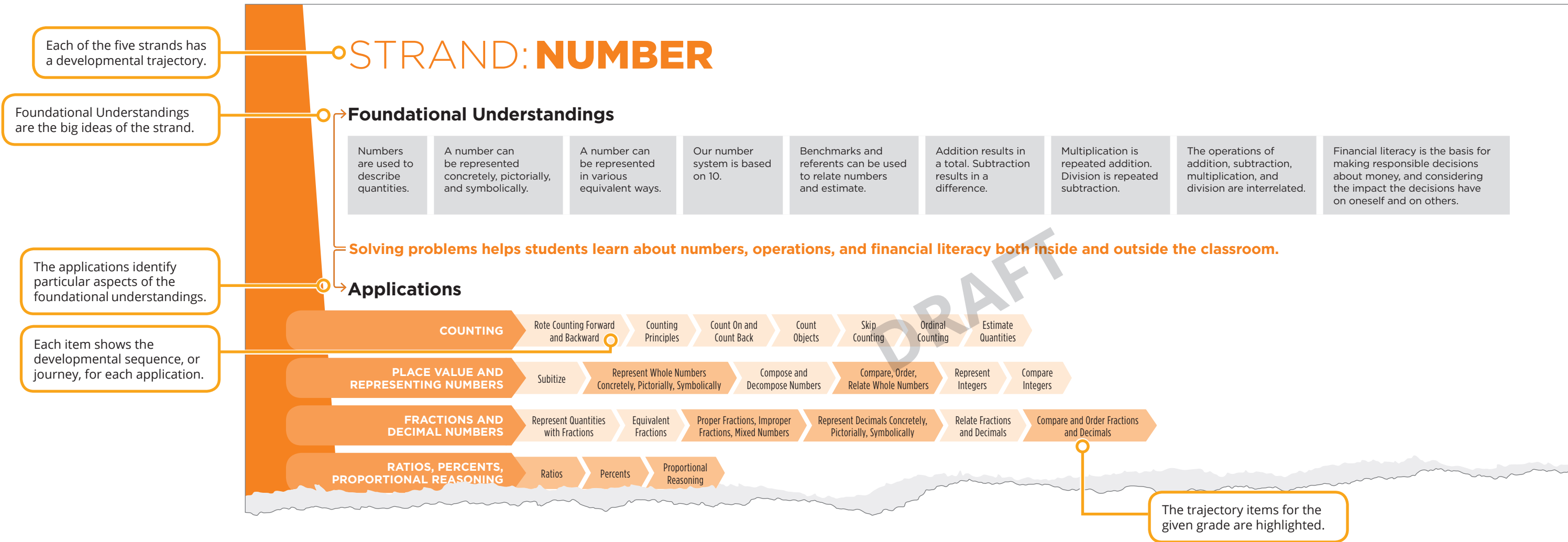
Math Pre-Assessment is a uniquely designed resource to help educators understand and customize each student's math education. The resource is developed by a team of expert math educators and backed by research. *Math Pre-Assessment* enables educators to compare a student's math understanding to their curriculum, identify gaps in understanding and ensure each student is ready for new curriculum material all with this easy to use assessment tool.

Each pre-assessment is created from a **DEVELOPMENTAL TRAJECTORY**. These developmental trajectories are research-supported pathways that students go through to understand mathematics concepts and skills as they move along a learning continuum.

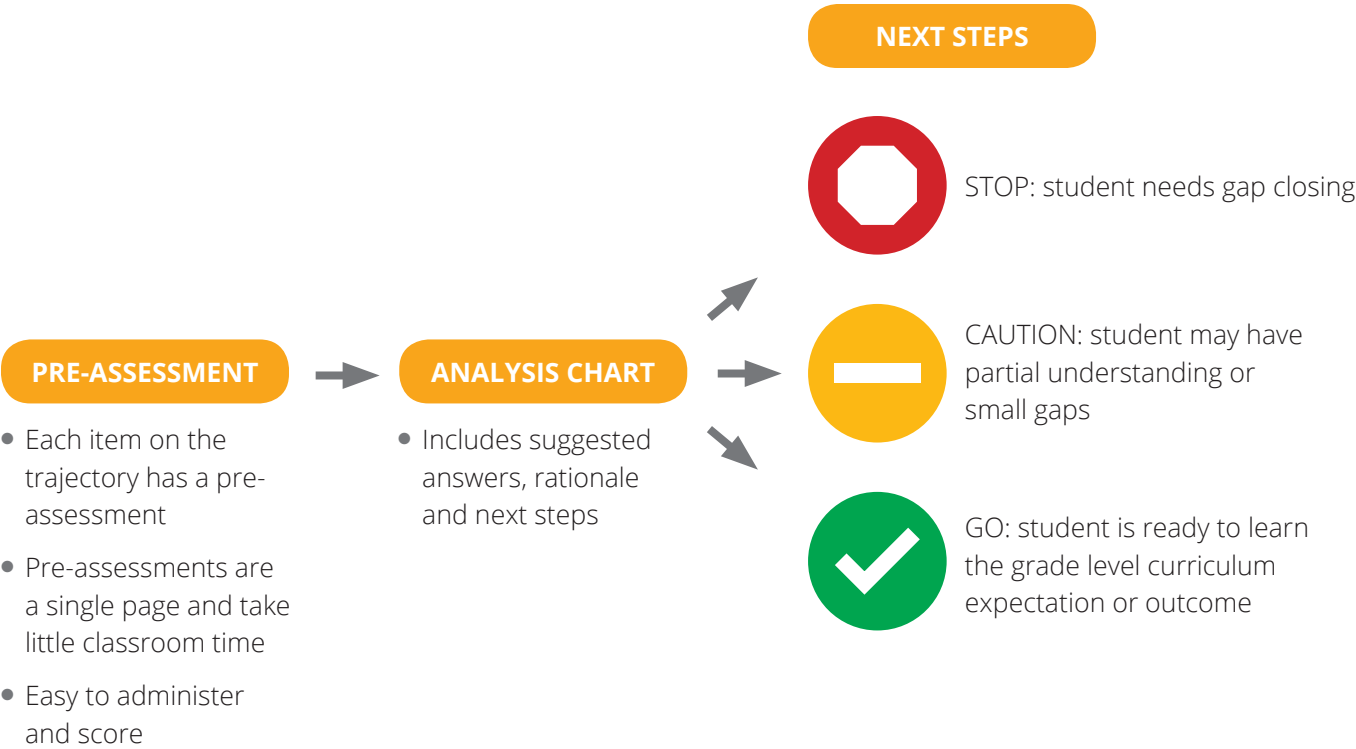
Key Features

- Provides the developmental trajectories to give a whole picture of math development from grade 1–6.
- Assesses whether students have the procedural knowledge and conceptual understandings for the grade specific curriculum.
- Pre-assessments identify where a student is on the developmental trajectory.
- Includes next steps for instruction, gap closing or intervention.
- Tracking tools are provided to keep a record of student readiness.

Developmental Trajectory



Answering The Question:
“Are My Students Ready?”



Resource Overview Grades 1–6
Developmental Trajectories For each of the 5 Strands
Math Pre-Assessments For each item on the trajectory
Scoring Guide and Analysis Charts Provided for each pre-assessment
Online Teaching Centre Digital access

Name _____

Date _____

Numbers to 1 000 000

MATERIALS

- counters (optional)
- a place value chart (optional)

1. Which number does the place value chart show? Circle it.

A. 30 125 B. 315 C. 3125 D. 3120

Thousands	Hundreds	Tens	Ones
● ● ●	●	● ●	● ● ● ●

2. Which number does the place value chart show? Circle it.

A. 2464 B. 24 064 C. 240 064 D. 20 064

Ten thousands	Thousands	Hundreds	Tens	Ones
● ●	● ● ● ●		● ● ● ●	● ● ● ●

3. Write the number.

a) 5 thousands + 1 hundred + 8 tens + 6 ones = _____

b) 80 000 + 200 + 20 + 5 = _____

4. Use the place value chart.

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
4	5	7	6	0	9

a) How many tens does the place value chart show? _____

b) Does the place value chart show more hundred thousands or ten thousands? _____

How do you know? _____

5. Draw lines to match the numbers.

63 859 600 000 + 90 000 + 3000 + 200 + 10 + 1

60 323 60 000 + 3000 + 800 + 50 + 9

693 211 60 000 + 300 + 20 + 3

Analysis Chart page XX

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Initial question reaches back to prerequisite learning.

Assessment question focused on trajectory item.

ANALYSIS CHART

Identifies the Strand, the Application(s) and the item(s) for the application.

Student needs gap closing.

Answer provided.

Recommended intervention.

Contains the “Look Fors” and an explanation for why the question is included.

Look at: Identify possible items on the trajectory to close gaps.

Numbers to 1 000 000: Pre-assessment page xx

<div><div>NUMBER</div><div>Place Value and Representing Numbers Represent Whole Numbers Concretely, Pictorially, Symbolically</div></div>			
QUESTIONS	RATIONALE	SCORING	NEXT STEPS
1. Which number does the place value chart show? Circle it. C	Students identify the standard form of a number less than 10 000 modelled with counters on a place value chart. Connecting concrete and pictorial representations with the standard form of numbers is integral in understanding place value.	incorrect	Provide experience: • modelling numbers to 1000 with base 10 blocks on a place value chart For deeper intervention, go to <i>Leaps and Bounds</i> 5/6, pages 8–9.
2. Which number does the place value chart show? Circle it. B	Students identify the standard form of numbers less than 100 000 modelled with counters on a place value chart. The model and the number focus on the role of 0 as a place holder.	incorrect	Provide experience: • using counters on a place value chart to model numbers to 100 000 that are related to other subjects and to the media
3. Write the number. a) 5 thousands + 1 hundred + 8 tens + 6 ones = 5186 b) 80 000 + 200 + 20 + 5 = 80 225	Students write numbers less than 100 000 in standard form given the expanded form. Relating different representations of numbers establishes the meaning of each digit in a number.	incorrect	Look at: • composing and decomposing numbers Provide experience: • connecting standard-form and expanded-form representations for numbers less than 100 000 using a place value chart
4. a) How many tens does the place value chart show? 0	Students relate a digit on a place value chart with the value represented by the digit. A place value chart provides a visual representation that shows the meaning of each digit.	incorrect	Provide experience: • modelling numbers less than 1 000 000 that have the digit 0, emphasizing the use of 0 as a placeholder

QUESTIONS	RATIONALE	SCORING	NEXT STEPS
b) Does the place value chart show more hundred thousands or ten thousands? How do you know? more ten thousands For example, I know because 6 is greater than 5.	Students compare digits on a place value chart and explain their thinking about the comparison. Communicating about place value enhances the understanding of numbers and the ability to talk about them.	inappropriate explanation	Provide experience: • talking with classmates about connections among place value charts, expanded form, and standard form
5. Draw lines to match the numbers. 63 859: 60 000 + 3000 + 800 + 50 + 9 60 323: 60 000 + 300 + 20 + 3 693 211: 600 000 + 90 000 + 3000 + 200 + 10 + 1	Students match the standard form and expanded form of numbers. Matching standard form with expanded form focuses on the meaning of each digit in numbers.	incorrect	Provide experience: • identifying place value for numbers less than 1 000 000 in both standard and expanded forms and comparing the representations
		correct	Provide experience: • researching online and in reference material real-life examples of numbers in the hundred thousands and millions, such as long distances and populations, and expressing them in standard form, in expanded form, and in words

Student has partial understanding and small gaps.

Provide experience: suggestions for scaffolding understanding of concepts and skills identified in the question.

Student is ready to learn the trajectory item.

Sample answer provided.

Math Pre-Assessment Order Information

Title	ISBN
Math Pre-Assessment Grade 1	
Book + Online Teaching Centre (Ontario)	9780176830892
Book + Online Teaching Centre (WNCP)	9780176833497
Book + Online Teaching Centre (BC)	9780176833558
Math Pre-Assessment Grade 2	
Book + Online Teaching Centre (Ontario)	9780176830908
Book + Online Teaching Centre (WNCP)	9780176833503
Book + Online Teaching Centre (BC)	9780176833565
Math Pre-Assessment Grade 3	
Book + Online Teaching Centre (Ontario)	9780176830915
Book + Online Teaching Centre (WNCP)	9780176833510
Book + Online Teaching Centre (BC)	9780176833572
Math Pre-Assessment Grade 4	
Book + Online Teaching Centre (Ontario)	9780176830922
Book + Online Teaching Centre (WNCP)	9780176833527
Book + Online Teaching Centre (BC)	9780176833589
Math Pre-Assessment Grade 5	
Book + Online Teaching Centre (Ontario)	9780176830939
Book + Online Teaching Centre (WNCP)	9780176833534
Book + Online Teaching Centre (BC)	9780176833596
Math Pre-Assessment Grade 6	
Book + Online Teaching Centre (Ontario)	9780176830946
Book + Online Teaching Centre (WNCP)	9780176833541
Book + Online Teaching Centre (BC)	9780176833602
Math Pre-Assessment Grade 7	
Book + Online Teaching Centre (Ontario)	9780176903992
Math Pre-Assessment Grade 8	
Book + Online Teaching Centre (Ontario)	9780176904005

