

Since *Quickcheck Math* was developed specifically for the Ontario Mathematics Curriculum, its uses should be guided by the Ontario Mathematics Curriculum documents, The Kindergarten Program or The Full-Day Early Learning-Kindergarten Program and the Guides to Effective Instruction in Mathematics produced by the Ontario Ministry of Education. Each of the five *Quickcheck Math* books contains content that is developed around one Overall Expectation per strand from the Ontario Mathematics Curriculum. Ontario primary teachers have found a variety of effective ways to use *Quickcheck Math* within this context. Several are summarized here.

Linking Assessment...

“Assessment is an ongoing awareness of students’ learning and their needs, rather than an occasional event in the program. Minute-by-minute observations of students, along with an understanding of how children learn, allow teachers to make valid decisions and judgments...”

— Ontario Ministry of Education (2006).

A Guide to Effective Instruction in Mathematics, Volume Four: Assessment and Home Connections, 3.

- **Diagnostic Assessment:** Go to the inside cover of the book. Select a group of activities for students to complete and conference with them about what they are doing. Use this information to support your instructional plan and to guide your next steps.
- **Formative Assessment:** *Quickcheck Math* activities are sequential and clustered. The answer key at the bottom of each activity provides immediate feedback to students and teachers about progress.
- **Summative Assessment:** It is important to plan your units of study with the end in mind. Pre-select a *Quickcheck Math* activity for the purpose of summative assessment prior to your unit of study. Design your own summative task using a selected page as the stimulus (no need to use the answer key at the bottom of the activity).

... to Instruction

“Teaching that is responsive to students’ needs uses moment-by-moment assessment information to modify instruction as it is taking place.”

— Ontario Ministry of Education (2006).

A Guide to Effective Instruction in Mathematics, Volume Four: Assessment and Home Connections, 12.

- **Before/Getting Started:** Based on the outcome of a previous lesson, select an activity that children can review to activate relevant prior knowledge for the new lesson.
- **During/At Work:** Use a selected series of activities for guided practice with a group of students who have the same instructional need.
- **After/Practice and Consolidation:** After completing one or more *Quickcheck Math* activity, students are asked to reflect on what they learned in their math journal. Select a series of activities for the purposes of further practice. This activity could be done at home or at school.

Quickcheck Math Tracking Sheets and Preamble concept inspired and developed by Maureen Baraniecki, Elementary Curriculum Coordinator, Hastings and Prince Edward District School Board.



ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET



Kindergarten: Measurement

Circle: **D (Diagnostic Assessment)**, **F (Formative Assessment)** or **S (Summative Assessment)** depending on use.

Levels of Achievement: **B**eginning, **P**rogressing, **S**ophisticated

OVERALL EXPECTATION:

Measure and compare length, mass, capacity, area, and temperature of objects/materials, and the passage of time, using non-standard and standard units, through free exploration, focused exploration, and guided activity

Compare and order objects by the measurable attribute of length Activities 1-6	Compare and order objects by the measurable attribute of capacity Activities 7-12	Compare and order objects by the measurable attribute of mass Activities 13-15	Compare objects by the measurable attribute of area Activities 16-18	Identify and describe appropriate dress and activities for a variety outdoor temperatures Activities 19-21	Identify standard and non-standard measuring tools appropriate for particular kinds of measurement Activities 22-24
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Student Name	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	Next Steps
																			IDEAS: ■ Have students build connecting cube trains of 5 cubes. "Find something that is the about the same length. How do you know? Find something that is shorter or longer. How do you know?" ■ Have students order a group of three objects. "Tell me about the length/size/mass of the objects." Listen for students' use of comparative language: shorter/shortest, longer/longest, taller/tallest, bigger/biggest, smaller/smallest.



ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET



Kindergarten: Geometry and Spatial Sense

Circle: **D (Diagnostic Assessment)**, **F (Formative Assessment)** or **S (Summative Assessment)** depending on use.
Levels of Achievement: **Beginning**, **Progressing**, **Sophisticated**

OVERALL EXPECTATION: Describe, sort, classify, build, and compare two-dimensional shapes and three-dimensional figures

Sort and classify shapes by colour Activities 1-4	Sort and classify shapes by size Activities 5-8	Compare non-traditional shapes using length and number of sides Activities 9-14	Compare and classify non-traditional shapes to traditional shapes Activities 15-18	Sort three-dimensional figures using attributes Activities 19-24
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Student Name	D F S			D F S			D F S			D F S			D F S			Next Steps
																<p>IDEAS:</p> <ul style="list-style-type: none"> ■ Re-teach basic shapes and their geometric properties: number of straight sides. ■ Guided practice for students with the same instructional need: Have students sort a variety of different triangles and rectangles into two groups. ■ Play games that involve orienting shapes in different ways. E.g. "Is it still a square? How do you know?"



ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET



Kindergarten: Patterning

Circle: **D (Diagnostic Assessment)**, **F (Formative Assessment)** or **S (Summative Assessment)** depending on use.

Levels of Achievement: **B**eginning, **P**rogressing, **S**ophisticated

OVERALL EXPECTATION:

Explore, recognize, describe, and create patterns, using a variety of materials in different contexts

Identify repeating patterns using colour Activities 1-4	Extend repeating patterns using colour Activities 5-6	Identify repeating patterns using shape Activities 7-10	Extend repeating patterns using shape Activities 11-12	Identify repeating patterns using size Activities 13-16	Extend repeating patterns using size Activities 17-18	Explore the same pattern reproduced in different ways Activities 19-21	Identify missing terms in repeating patterns Activities 22-24
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Student Name	D			F			S			D			F			S			Next Steps
	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	
																			IDEAS: ■ Lesson extensions: Identify repeating patterns in a story, song or poem ■ Make AB, or AABB patterns using clapping and stamping ■ Have students line up in various repeating patterns



ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET



Kindergarten: Data Management and Probability

Circle: **D (Diagnostic Assessment)**, **F (Formative Assessment)** or **S (Summative Assessment)** depending on use.

Levels of Achievement: **B**eginning, **P**rogressing, **S**ophisticated

OVERALL EXPECTATION:

Sort, classify, and display a variety of concrete objects, collect data, begin to read and describe displays of data

Student Name	Sort and classify objects by category Activities 1-5			Interpret representations of objects sorted by category Activities 6-8			Sort and classify objects by colour Activities 9-11			Interpret representations of objects sorted by colour Activities 12-16			Interpret representations of objects sorted by size Activities 17-20			Interpret representations of objects sorted by shape Activities 21-24			Next Steps	
	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S		
																				<p>IDEAS:</p> <ul style="list-style-type: none"> ■ Small group guided practice: Sort the same group of attribute blocks in different ways: "What is the sorting rule?" ■ Large group activity: Sort students by their shirt colour. Represent the number in each group using connecting cubes. "Which group has more/fewer? How do you know?" Question to probe for deeper meaning: "If we did the same activity next week would our answers be the same? Why/why not?"