ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET

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.

KINESIS EDUCATION
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ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET

Grade 2: Number Sense and Numeration

QUICKCHECK MATH

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:
Solve problems involving the addition and subtraction of one-and two-digit whole numbers using a variety of strategies, and investigate multiplication and division

Student Name	Solve addition and subtraction problems to 18 using mental strategies Activities 1-9			Solve part-part-whole and compare problems Activities 10-12			Solve addition and subtraction problems with and without borrowing and regrouping Activities 13-15			Solve addition and subtraction problems with and without borrowing using money Activities 16-18			Understand the concept of multiplication as the combining of equal groups Activities 19-21			Understand the concept of division as the fair share of a whole into equal amounts Activities 22-24			Next Steps
	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	IDEAS:
																			■ Review: Individual coins and their values
																			■ Guided instruction: Model using open number lines to solve part-part-whole problems.
																			■ Question to probe for deeper meaning: "How is multiplication like addition?"

Date:

ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET

Grade 2: Measurement

QUICKCHECK MATH

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:
Compare, describe and order objects using attributes measured in non-standard units and standard units

Student Name	Compare, order and represent objects by the measurable attribute of length, using non-standard units — Activities 1-4			Compare, order and represent objects by the measurable attribute of height, using non-standard units — Activities 5-7			Compare, estimate and represent objects by the measurable attribute of length, width or height using standard units — Activities 8-9			Compare, order and represent area measured using a variety of non-standard units — Activities 10-13			Compare, order and represent perimeter measured using a variety of non-standard units — Activities 14-15			Compare, order and represent mass or capacity measured using a variety of non-standard units — Activities 16-18			Tell time to the hour, half hour and quarter hour using analogue and digital clocks — Activities 19-24			Next Steps
	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	D	F	S	
																						IDEAS: ■ Further practice: Partners take turns writing digital time shown on analog clocks. ■ Communication: Students relate through words, pictures, actions or writing, activities in their day to benchmark times shown. ■ Question to probe for deeper meaning: "What would you use to measure _____? Why?"

Date:

ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET

Grade 2: Geometry and Spatial Sense

QUICKCHECK MATH

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:
Compose and decompose two-dimensional shapes and three-dimensional figures

Student Name	Sort and classify polygons by their geometric properties **Activities 1-6**			Compose and decompose pictures, patterns and designs using shapes **Activities 7-12**			Use smaller shapes to compose larger shapes and understand that these larger shapes can be composed in a variety of ways **Activities 13-18**			Sort and classify three-dimensional figures by the number and shape of their faces and by the number of their vertices and edges **Activities 19-24**			Next Steps
	D	F	S	D	F	S	D	F	S	D	F	S	IDEAS: ■Review: Geometric figures and find examples of them in the classroom or at home. ■Guided instruction: Represent the composition of a geometric design using a bar graph ■Question to probe for deeper understanding: "How are a cone and a cylinder the same and how are they different? What changes can you make to a rectangle and have it remain a rectangle?"

Date:

ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET

Grade 2: Patterning and Algebra

QUICKCHECK MATH

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:
Identify, describe, extend, and create repeating patterns, growing patterns and shrinking patterns

Student Name	Conclude that patterns result from repeating an operation or repeating a change to an attribute of objects **Activities 1-5**			Identify and extend growing and shrinking patterns that use repeated addition and subtraction of ones, twos, fives, tens, and 25s **Activities 6-13**			Identify, extend and recognize equivalent growing and shrinking patterns that use addition and subtraction **Activities 14-19**			Identify repeating, growing and shrinking patterns that occur in real life and that are represented in a variety of ways **Activities 20-24**			Next Steps
	D	F	S	D	F	S	D	F	S	D	F	S	IDEAS: ■ Practice: Repeated addition of ones, twos, fives and tens using a hundreds chart. ■ Explicit instruction: Model using open number lines in repeated addition and subtraction ■ Question to probe for deeper understanding: "Can you make two equivalent patterns? Prove they are equivalent."

Date:

ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET

QUICKCHECK MATH

Grade 2: 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:
Read and describe primary data presented in tally charts, concrete graphs and pictographs, line plots, simple bar graphs and other graphic organizers

Student Name	Sort and classify objects using two attributes simultaneously — Activities 1-4			Read data presented in pictographs, bar graphs, line plots and other graphic organizers — Activities 5-11			Distinguishe between numbers that represent data values, on the x-axis and numbers that represent the frequency of an event on the y-axis — Activities 12-17			Demonstrate understanding of data presented in graphs by comparing parts of the data with the whole — Activities 18-24			Next Steps
	D	F	S	D	F	S	D	F	S	D	F	S	IDEAS: ■ Explicit instruction: Show students how a line plot works by relating it to a concrete graph made by the class using sticky notes with X's or happy faces on them. ■ Review Mathematical language: Highlight the difference between numbers that represent data values and numbers that represent frequency of an event/answer. ■ Question for deeper understanding: "What does the data tell us? Can you make a number sentence that compares one part of the data with another part?

Date: