

ASSESSMENT FOR LEARNING AND TEACHING TRACKING SHEET

Grade 2: Patterning and Algebra



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

Levels of Achievement: **Beginning**, **Progressing**, **Sophisticated**

OVERALL EXPECTATION:

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

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
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Student Name	D	F	S	D	F	S	D	F	S	D	F	S	Next Steps
													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."

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.