Student Name: _____

Kindergarten Numeracy Development: Rote Counting

Developmental aspects	Emerging With direct support…	Developing With guided support…	Applying With minimal support…	Extending
The Child	With direct support, and teacher modeling, may participate and may attempt to make sense of mathematical experiences.	With guided support, demonstrates a willingness to explore mathematical ideas while participating in problem solving experiences. Is beginning to show an awareness of numbers, space and time used in everyday life.	With minimal support, demonstrates interest in and a willingness to explore mathematical ideas while purposefully participating in problem solving experiences. Communicates an awareness of how numbers, space, and time are used in everyday life.	Shows interest and curiosity while purposefully exploring mathematical problem solving experiences. Perseveres. Makes and explains connections to numbers, space and time as used in everyday life.
Understanding Number				
Rote counting	With direct support, may join in to a choral count.	With guided support, rote counts with some consistency	With minimal support, rote counts with consistency	Rote counts extensively, with fluency and consistency.
The Support/Scaffolding*	The Model: showing, instructing, explaining, directing, making explicit, demonstrating, giving examples	The Coach: structuring, sequencing, focusing, cueing, guiding, organizing, supporting	The Advisor: suggesting, reminding, prompting, monitoring, asking for elaboration	The Mentor: extending, stretching, wondering aloud, exploring, "what if-ing"
***a variety of supports (teachers, peers, environmental, etc.) can be provided at any stage of development**				

Scenario: These kindergarten students have learned a game called, "Pop the Balloon." (For a full description see the BC Early Numeracy Project K-1 Whole Group Follow-up, p. 13.) In the gym, the students stand in a circle. Everyone counts to a given number while taking steps backward, blowing up the balloon by making the circle bigger. Students clap and say "POP!" when they reach the number, then run back to their places in the original circle.

Direct Support

Shea-Lynn is given direct support by her educational assistant (EA), who *shows* her how to participate by holding her hands and helping her take one step back for each number said. At the same time, the teacher provides direct support to Harpreet and Donal by taking each child by the hand, one on each side, and *instructing* them to take one step back as each number is said.

Guided Support

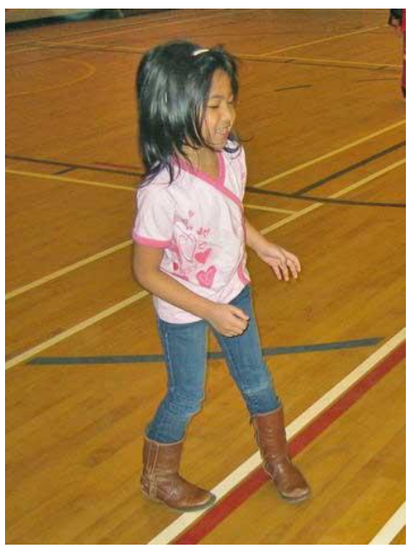
During the next gym period, Harpreet and Donal again stand beside the teacher. Now they need only guided support, so he does not hold their hands. Instead, the teacher *cues* them with hand signals to take one step backward for each number, and another hand signal to indicate when it is time to pop the balloon.

Minimal Support

After several rounds of popping the balloon, Harpreet and Donal need only minimal support to match the counting sequence with backward steps. The teacher *reminds* them, "Remember, just one step!" He *prompts* them by asking, "How many steps are we going to take before we pop the balloon?"

Without Support

Without support, Rafiq calls out, "Let's try counting to 100!" The teacher *stretches his thinking* by wondering aloud, "How far will we get? Do you think we will have enough room?" Rafiq suggests, "What if we take really baby steps. Then we can do more…."



As in other subject areas, it is essential when teaching mathematics that concepts are introduced to students in a variety of ways….Most students need a range of concrete or representational experiences with mathematics concepts before they develop symbolic or abstract understanding.

Mathematics Kindergarten Integrated Resource Package, 2007, p. 31