How Does Singapore's *My Pals are Here! International Edition* Science Curriculum Work?

Singapore's "My Pals are Here" Science has now been revised from the initial "Primary Edition" cycles-based model to the newer "International Edition" curriculum.

The "International Edition" of *Singapore My Pals Are Here!* science curriculum is now arranged by grade level, rather than the "cycles" in the older "Primary Edition." This has expanded the line from the older edition's Grade 3&4 and Grade 5&6 series to a standard Grade 1-6 model. Elements of each "cycle" are now included in each text, some additional topics have been added (i.e. hygiene and space science), and concepts have been re-arranged to better fit within the first-and-second semester structure of the "International Edition." Unlike other Singapore series that have been revised, the International Edition retains metric measurements as well as items, terms, and spellings that may be unfamiliar to US audiences.

The new series' curriculum book structure for each grade level requires the textbook (Part A & B), Activity Book (Part A & B), and Teacher's Guide (Part A & B).

This series follows a pathway of visual lessons & guided discovery, simultaneous development of concept knowledge and process skills, and the consolidation of understanding through scaffolded instruction. Based on the "5E Instructional Model" (Engagement, Exploration, Explanation, Elaboration, and Evaluation), students will develop their scientific thinking skills through a variety of learning channels.

In the **Student Textbook**, brightly colored chapters are highly engaging, with interesting facts and questions to think about in the margin. A word bank and "Teaching points" that give the main lesson objective are provided at the beginning of the lesson. The main portion of the lesson provides simple explanations of concepts based upon photos or illustrations; chapters end with a fill-in-the-blank "self-check." Graphic markers for the sold-separately "Activity Book" point to where teachers should integrate the activities.

The consumable (non-reproducible) **Activity Book** is correlated to the student textbook. Each activity notes the process skills at the heart of the exercise; the workbook-based project follows. Activities primarily include filling in diagrams, circling the correct answer, filling in the blank, and multiple-choice type questions; other worksheets are based on more teacher-intensive activities that might require gathering items.

The **Teacher's Guide** is designed to help equip teachers for inquiry-based instruction. A process-skill table defines and provides examples of the skills (observation, classification, inferring, etc.) that students should learn, along with a grade range where the skills are taught. A unit overview chart provides the unit name, page numbers, learning objectives, and cycle theme in one place for easy planning and review.

The detailed scope & sequence moves unit-by-unit, and highlights the lesson number & name; page numbers for the lesson plans, textbook, and activity book; number of 40-minute periods recommended for the concept; learning objectives; process skills; and a materials-needed list.

Detailed lesson information is provided, including notes on the “5E process,” background information on the concept, and lesson instructions for specific parts of the lesson. Student pages are reproduced in this teacher’s guide, and the overlaid answers make student lessons easy to grade. Margin-text information has arrows that point to certain spots in the student text to show where teachers should bring up certain points, highlight key inquiry areas, or draw attention to additional details.

Sidebars provide enrichment for advanced learners; tips & time-savers; vocabulary definitions; activity instructions (including where to potentially obtain materials); notes on answers; corrections of common misconceptions; and reinforcement for struggling learners.