THE SOLO MODEL APPLIED TO MATHEMATICS

Learning Intentions		Success Criteria
SOLO 1: Represent and solve problems involving addition and subtraction.		
Uni-/Multi-Structural	Know basic facts for addition and subtraction.	I know my sums to twenty in both addition and subtraction.
	Represent addition and subtraction using multiple models (manipulatives, number lines, bar diagrams, etc.).	I can show my thinking using manipulatives and pictures.
Relational	Understand the meaning of addition or subtraction by modeling what is happening in a contextual situation (Carpenter, Fennema, Franke, Levi, & Empson, 2014).	When I read a word problem, I can describe what is happening and use addition or subtraction to find a solution.
	Recognize when either addition or subtraction is used to solve problems in different situations.	
Extended Abstract	Use addition and subtraction to solve problems in a variety of situations.	I can use what I know about addition and subtraction contexts to figure out how to use addition and subtraction to solve problems beyond those I solve in class.
SOLO 2: Reason with shapes and their attributes.		
Uni-/Multi-Structural	Know the definitions and key attributes for shapes.	I can identify and name the attributes of shapes.
Relational	Recognize relationships among shapes.	I can explain how two shapes are related to each other.
Extended Abstract	Classify two-dimensional shapes based on properties.	I can create a diagram to show how different quadrilaterals are related to each other.

Source: Adapted from Biggs and Collis (1982).

Figure 1.3