**1st Grade Singapore**

**Math**

**Number Bonds**

**Summary:** In this domain, students will continue adding to their knowledge of number bonds. Students will be able to make up stories to illustrate number bonds within ten, and be able to divide a set of objects into two parts in different ways. Students will also write number bonds for a given number within ten, and name the missing part in a number bond. They will identify number pairs that make ten.

**The Big Idea:** Every number can be broken down into parts.

**Colorado State Standards:**

1.1.1.a. Count, read, and write numbers to 100.

1.1.1.d. Locate numbers up to 100 on a number display.

1.1.2.a. Use addition when putting sets together and subtraction for breaking sets apart or describing the difference between sets

1.1.2.b. Use number relationships such as doubles, one more or one less, and the relationship between composing and decomposing to solve addition and subtraction problems

**Common Core Standards**:

1.NBT 1. Count to 120, starting at any number less than 120. In this range, read and write numerals

and represent a number of objects with a written numeral.

1.OA 6.Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use

strategies such as counting on; making ten (e.g., 8 +6 = 8 + 2 + 4 = 10 + 4 = 14**);** decomposing a number

leading to a ten(e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 =9); using the relationship between addition and

subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8= 4); and creating equivalent but easier or known sums (e.g., adding 6 +7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

**Singapore Unit:**

1. Number Bonds
2. Number Stories: introduction of identifying parts in a whole
3. Number Stories of Different Combinations: (i.e. color and size)
4. Number Bond Diagrams: filling in the parts of a number bond
5. Numbers That Make a Given Number: whole and parts
6. Number Bonds of a Given Number: identify parts of a given whole
7. Missing Part in a Number Bond: find the missing part of a whole
8. Number Pairs That Make Ten

**Core Knowledge Language Arts:**

I. Listening and Speaking

A. Presentation of Ideas and Information

* Follow multi-step, oral directions.
* Provide simple explanations.

**Previous Unit:** Numbers 0-10

**Prior Knowledge:**

Kindergarten

* Using the word “altogether” in number stories
* Counting two parts (in a picture) and finding the whole
* Counting the two parts and stating how many there are altogether
* Recognizing and using a number bond
* Find two parts that make six, seven, eight, nine and ten

**Next: Unit:** Addition

**What Students will Learn in Future Grades:**

Second Grade

* Meanings of addition and subtraction
* Using the terms “part” and “whole”
* Methods of mental addition and subtraction: find the missing part

**Cross Curricular Links:**

Language Arts

I. Phonics and Phonemic Awareness

* Phonograms are parts of whole words
* Syllables are parts of whole words
* Compound words are two small parts that make a whole

II. Grammar

* Parts that make up a whole sentence

**Additional Resources:**

For Teachers:

* *Singapore Standard Edition Primary Mathematics Extra Practice,* Tay Choon Mong
* *New Enrichment Mathematics for Primary,* Pan Pacific Publications, Pauline Ong
* *Know Your Maths: Topical Exercises for Primary One*, Tinoh Chan