Grade 2 – Unit 1

Welcome to 2nd Grade Math! We are beginning Unit 1: Graphing and Fact Strategies (+/-) Up to 20. In this unit students will be reviewing classroom routines which include representing their thinking using models, questioning their peers to deepen and clarify understanding, and justifying their reasoning. Students will build on fact strategies learned in previous years such as doubles facts, doubles plus or minus one, and the commutative property. This unit will highlight the relationship between addition and subtraction. A student’s ability to take numbers apart (decompose) and put them back together (compose) flexibly is the basis for developing good number sense and place value understanding. They will also explore multiple ways in which data can be represented and will organize, analyze and interpret data. Students will investigate which type of graph best represents a specific type of data. Students will solve word problems and record their strategies.

Some examples of the work your child will be doing are:

* Students will use the benchmark number 10 to compute with 9’s and 8’s. Students will identify patterns that help us make generalizations.

Examples:

* 9 + 8 = (10 + 8) -1
* 8 + 6 = (8 + 2) + 4 = 14
* Explore sums when joining odd + odd, even + even, even + odd
* Students will compose and decompose numbers through 20 using algebraic properties

Examples:

* Finding all the possible combinations for a particular sum
* Decomposing numbers into 3 or more parts (14 = 5 + 5 + 4)
* Investigating the inverse relationship between addition and subtraction

(7 + 3 = 10 and 10 - 3 = 7)

* Investigating related facts/fact families
1. 5 = 18, 5 +13 = 18, 18 – 5 = 13, 18 – 13 = 5)
* Students will use number bonds to represent the decomposition of a number

 10

 14

 10

 14

 8

 7

* Students can use doubles facts to help them solve other problems

Examples:

* 6 + 7 = (6 + 6) + 1 = 13
* 8 + 9 = (9 + 9) – 1 = 17
* Students will explore multiple ways in which data can be represented

Examples:

* Collecting data using a survey and organizing the data on an appropriate graph
* Making mathematical statements about a particular graph
* Answering questions using data on a graph
* Developing mathematical questions that can be answered by a particular graph

Here is how you can help your child while our class is working on this unit:

* Practice basic addition and subtraction facts
* Point out graphs in the real world
* Reinforce strategies that help your child think flexibly about numbers. Encourage them to think about how to compose and decompose numbers.
* Encourage your child to explain her/his thinking as she/he solves problems.

If you have any questions, please contact your child’s teacher or the Math Science Teacher.

For additional information, take a look at the Fairfield Public School Parent Guide at <http://fairfieldpublicschoolsk5math.wikispaces.com/home>