About Math in Focus and FZ Math Curriculum:

- Requires students to understand how something works (like adding and subtracting with regrouping), but also why it works.
- All children benefit: based on understanding number sense, understanding the concepts and applying what they know to problem-solving
- New concepts are constantly using/applying concepts that were previously learned so there is less "I forgot how to… "
- Follows the Concrete-Pictorial-Abstract approach to developing understanding and fluency with computation
    - Use physical objects (concrete) to demonstrate how to add (subtract, multiply, divide, etc.)
    - Move from using concrete materials to drawing/sketching (pictorial) the concept that is being developed.
    - Connect the pictorial to abstractly lining up the numbers (abstract) in an equation or number problem.
- Uses model drawing as a tool to "unlock" word problems
    - Diagram the parts of the word problem
    - Helps "see" what is known and what has to be figured out
    - From the diagram, students can determine which computation strategy to use to solve the problem – then do the math

A Parent's Role – What can you do?

- Eliminate the statement "It's okay, I wasn't good in math either."
- The right answer is important, but your child must also know why it is the right answer. Ask:
  - What do you know that can help you with this…..?
  - How do you know? (not okay to say "I just knew it." Help him/her tell their thinking)
  - Can you figure it out another way?
  - What did you do in class to help you work problems?
- If your child is stuck on homework, encourage them to try different things, use objects, drawings to help them, etc. Rescuing them will not increase their understanding.
- Working more problems does not translate to better understanding – being able to explain the thinking behind 2-3 problems will impact understanding and retention of content.
- Play games that rely on reasoning, math skills. (some commercial games are Reset, Life, Quirkle, Blokus, dominoes)
- Point out math in the environment – shape of kitchen cabinets, cost of things in the store, change from buying items, number of forks needed for company, total number of pieces of silverware on the table (4 people with knife, fork, spoon each is 4 groups of 3 = 12) and so on.

Websites

Ipad Apps

- Bar Modeling Ipad App

Models some computation strategies

You Tube:

- Khan Academy Singapore Math Grade 3a Unit 1 Part 1 (there are 9 parts to Unit 1)
- Khan Academy Singapore Math Grade 3a Unit 2 Part 1 (there are 11 parts to Unit 2)

National PTA Parent Guides to Student Success – by grade level

- http://pta.org/parents/content.cfm?ItemNumber=2910