Interventions That Help with Math

1. Reading Math Text

- a. Make sure that students understand, "Reading math text is different than reading other text". More time, work, effort will be expended.
- b. Have students preview the text and ask themselves "What do I need to know when I'm finished?"
- c. Have student reread and underline important words
- d. Ask students to define difficult vocabulary words

2. Visualize to Develop Number Sense and Memory

- a. CRA (concrete to representational to abstract)
 - i. Concrete Teacher models each step with concrete materials/objects (manipulatives)
 - ii. Representational Use number lines, sketches, drawings, diagrams, tallies, etc.
 - iii. Abstract Use only math words, numerals, and symbols

3. Using Think-Alouds for Explicit Instruction

- a. Model and articulate the thinking for carrying out each step and using fix-up strategies
- b. Have students try it (verbalize) with partners

4. Self-Monitoring Through Corrective Feedback

- a. Help students see that mistakes are opportunities to learn. Promote a growth mindset.
- b. Tell students WHY the problem is wrong and then ask them to rework it correctly
 - i. Teacher models correct procedure
 - ii. Teacher prompts student to correct his or her own response
 - iii. Teacher reinforces the strategy again
- c. Use personalized checklists and rubrics to help them check for most common errors
- d. Provide students with an incorrect problem and ask them "what would you tell the person who incorrectly worked this problem."

5. Cumulative Review Strategies

- a. Short daily cumulative reviews
- b. Quick verbal recaps
- c. Associating difficult concepts with sayings or visualizations
- d. "Interactive Notebooks" are a good resource for students. Students notes are organized and students can located needed information. Students should also be encouraged to frequently go back and review as well as add to their notes.

6. Drill and Practice for Fact Fluency

- a. Go beyond "mad minutes" and practice strategies that emphasize number relationships (e.g., number families, doubling patterns, number line activities, etc.)
- b. Allow students time to "play" with numbers to develop understanding, flexibility, and number sense.
- c. Set specific, challenging, but achievable goals.