

## Math Fact Fluency

Fluency defined is the ability to quickly and accurately retrieve the correct answer. Fluency with math facts takes practice and repetition as understanding of number operations is developed.

## **Strategies for Math Fluency Success**

- Teach math vocabulary and require students to use vocabulary frequently in written assignments and oral discussions (e.g. go on number walks and have students tell the story of math)
- Display math vocabulary on wall charts. Use Anchor charts as a visual reference.
- Provide practice with simpler problems that can be divided into sequential steps.
- Provide practice with identifying important information in word problems. Rewrite the problem. Draw a picture, or use a table, object, symbol or write it out with words to help understand the problem and figure out the solution.
- Provide and use hands on objects your child can move and see to help visualize the problem and solution. (e.g. buttons, duplex squares, unifex cubes, base-ten blocks)
- Teach learning strategies, such as mnemonics, to support student performance during lessons (UPSR = "Understand, Plan, Solve, Review" PEMDAS = "Please Excuse My Dear Aunt Sally" = parentheses, exponents, multiply and divide, add and subtract)
- Cut an intimidating math paper into strips or sections to do them at different times of the day.
- Alter the presentation of the assignment (e.g. mechanically enlarge the page 125% or more, use graph paper)
- Teach math vocabulary and require students to use vocabulary frequently in written assignments and oral discussions (e.g. go on number walks and have students tell the story of math)
- Use clearly distinguishable cues such as color or arrows when teaching basic math concepts (e.g. perimeter is outlined in black and area is shaded in green, ones are in green, tens are in blue, and hundreds are in red)
- Provide graphic organizers, such as Venn diagrams and tables, for students to practice writing about similarities and differences.
- Create a math journal to reflect and interact with math on a daily basis through written expression too! This is also a good place to write steps to solve a problem, draw a picture and have your student make up his/her own problems to refer back to if needed.

