# "If A Student..., Then..."

# Math Interventions Menu Based on Research

Original by Jennifer Jones for Reading | www.helloliteracy.blogspot.com

Adapted by JV Washam Elementary for Math

Math Challenges Classroom Adaptation/Intervention Strategies in Response to Math Challenges

number sense skills in the following areas  *Number Id *Missing Number *Quantity Discrimination *Number Representation *Place Value  following areas  *Baseline  from calling out the number.  *Manipulate numbers using a variety of textures (sand, shaving cream etc)  Manipulate numbers and digits using magazines, task cards etc  Organic number line- on the # line; show different ways to represent the given number  Fill the missing number charts  Number of the day- write the number, make it, trace it, hit it on the door on the way out  Graphic organizers (i.e place value chart)  Manipulative (Cubes, Base to blocks etc)  Investigation Intervention guide in your math books  Number ID using flashcards  Deck of cards, tell me the number or add/subtract  Find numbers around the room  Missing number line/chart  Compare using cubes  Decompose numbers  Place Value mats  Touch Math (http://www.touchmath.com)	IF A STUDENT	THEN (try some of the following)
<ul> <li>See Kathy Richardson Books (Counting Objects, Changing Numbers, More/Less, Number arrangements, Ten Frames)</li> <li>Easy CBM</li> <li>Intervention Central Site</li> </ul>	struggles with number sense skills in the following areas  *Number Id * Missing Number *Quantity Discrimination * Number Representation * Place Value	<ul> <li>Roll a number cube, call out the number rolled. Children who don't know the number will learn from calling out the number.</li> <li>Manipulate numbers using a variety of textures (sand, shaving cream etc)</li> <li>Match word or visual numbers and digits using magazines, task cards etc</li> <li>Organic number line- on the # line; show different ways to represent the given number</li> <li>Fill the missing number charts</li> <li>Number of the day- write the number, make it, trace it, hit it on the door on the way out</li> <li>Graphic organizers (i.e place value chart)</li> <li>Manipulative (Cubes, Base 10 blocks etc)</li> <li>Investigation Intervention guide in your math books</li> <li>Number ID using flashcards</li> <li>Deck of cards, tell me the number or add/subtract</li> <li>Find numbers around the room</li> <li>Missing number line/chart</li> <li>Compare using cubes</li> <li>Decompose numbers</li> <li>Place Value mats</li> <li>Touch Math (http://www.touchmath.com)</li> <li>Baseline</li> <li>See Kathy Richardson Books (Counting Objects, Changing Numbers, More/Less, Number arrangements, Ten Frames)</li> <li>Easy CBM</li> </ul>

#### struggles with computation skills in the Manipulatives to add/sub (Cuisenaire Rods, base 10 blocks, money etc) following areas . . . Make trains to demonstrate addition and subtraction facts Counter to form arrays that show combining groups \* Addition Use of the number line (in notebook) \* Subtraction Act out \*Multiplication Investigation Intervention guide in your math books \* Division Reference sheet (picture associated with steps to solve) \* Mixed Computation Hands on equations Skills "Check Box" i.e.- check subtraction with addition Use 100 board Read aloud problems Flashcards/xtramath.org Sorting/highlighting keywords Color code operation signs Baseline See Kathy Richardson Books (Combination Trains, Hiding Assessments, Grouping 10's, Two Digit addition and Subtraction) Easy CBM Intervention Central Site Mathematical Reasoning Inventory struggles with **Advanced** Computation skills in the Manipulatives (fraction bars, tiles etc) following areas . . . Investigation Intervention guide in your math books Study Island/ Web tutorials \* Fractions Kahn Academy Videos \* Percents Compare fractions on a ruler \* Rounding Number line and pictures (rounding) \*Estimating Reference sheet \* Exponents Baseline Easy CBM Intervention Central Site Mathematical Reasoning Inventory

struggles with spacial/geometry skills in the following areas *recognition *attributes	<ul> <li>Physically touch the shape</li> <li>Trace the shape</li> <li>Vocabulary words- anchor charts</li> <li>Draw with sidewalk chalk, sand or other gooey substance</li> <li>Investigation Intervention guide in your math books</li> <li>Manipulatives- to create shapes, 3d shapes</li> <li>Videos/Kahn Academy</li> <li>Graphic Organizers (i.e Quad chart)</li> </ul>
	<ul> <li>Real World Pictures</li> <li>Make a chart or flashcards (word and pictures)</li> <li>Use geoboard</li> </ul>
	Baseline
	Easy CBM     Interpretation Control Site
	<ul><li>Intervention Central Site</li><li>Mathematical Reasoning Inventory</li></ul>
	i Mathematical Reasoning Inventory
struggles with word	
problems	<ul> <li>Graphic Organizers – can create place mats</li> <li>Visual Representation with Manipulatives</li> <li>Acting Out</li> <li>Investigation Intervention guide in your math books</li> <li>Color code symbols (if students are overlooking)</li> <li>Have students "think out loud" with steps</li> <li>Study "office" with key words</li> <li>Singapore Math- question into a sentence i.e There are cars in each group</li> <li>Underline keywords</li> </ul>
	Baseline

# **Compiled from the following Websites & Professional Books:**

## Websites:

www.interventioncentral.org

http://ies.ed.gov/ncee/wwc

www.easycbm.com

https://mathreasoninginventory.com

www.interventiondepot.com

http://www.rtinetwork.org/professional/rti-talks/transcript/talk/36

http://www.bhs.k12.oh.us/RtI/RTI-InterventionBank.pdf

### **Books in our bookroom:**

<u>Math in Plain English (Literacy Strategies for the Mathematics Classroom)</u> Amy Benjamin My Kids Can-Making Math Accessible to All Learners
Number Sense Routines by Jessica Shumway
Kathy Richardson Books