School: Maple Hills Elementary School **Grade/Department:** K-5 **Content Area:** Math

CIP Goal: Based on the 2007 WASL scores, the number of students meeting standard in math will increase by 5% as measured by the 2010 WASL scores.

What are the Research-Identified Strategies?	What are the Desired Student Products and Behaviors?	How Will You Accomplish This? • Steps to implementing this strategy • Professional develop • Visits • Additional research	How Often? • Frequency • Timeline	What Evidence Will You Be Gathering Relative to the Desired Student Products and Behaviors? • Formative • Summative
1. Using a strong research-based curriculum is critical. *A viable and guaranteed curriculum has the greatest impact on student achievement.* ~Marzano: *What Works in Schools* *Standards based instructional materials –* *Everyday Mathematics, University of Chicago* *A curriculum is more than a collection of activities; it must be coherent, focused on important mathematics, and well-articulated across the grades.* ~NCTM	Students will increase their understanding of mathematics through actively engaging in the learning processes of math using *Everyday Math* curriculum. • Math journals • Skills/Home Links • Self-reflection • Open responses • Games/projects • Unit assessments • Home Connections	Teachers will implement *Everyday Math* as their primary resource for math instruction. And attend district directed trainings. Building staff development time will be used to support the implementation of EM and incorporate the pacing of units and unexpected challenges. Teachers will meet by grade level to plan, study and gain a better understanding of the EM curriculum.	August 2007- teachers were provided training in all components of the EM curriculum and will attend district directed trainings by grade levels during October, January, and March. Staff development: Monthly Grade level teams: Weekly	District common assessments will occur during January using the mid-year EM assessment and in June using the end-of-year EM assessment Teachers will collaboratively analyze selected student work samples each trimester to determine building needs, classroom needs and individual students' math abilities.

Research Based Strategies	Products & Behaviors	Implementation	Timeline	Evidence
2. Quality classroom instruction has a significant impact on student learning and understanding. The most important factor affectiving student learning is the teacher. ~*Wright, Horn & Sanders, 1997*	Students will demonstrate increased use of mathematical vocabulary, understanding of math strands, problem solving strategies and ability to communicate mathematically.	Teachers will expand instructional strategies to promote active engagement, increase learning, discourse and inquiry among students.	September 2007-June 2009	Teachers will gather data on students understanding of learning goals using: • Informal *Everyday Math* assessments • Unit Progress Checks. • Informal conversations with students • Homework and daily assignments
The strongest possibility of improving student learning emerges where schools implement multiple changes based on research-supported practice implemented by skilled teachers ~*Grouws & Cebulla*	Students will build on their foundation of existing knowledge of mathematics and apply this knowledge to gain understanding of new tasks and concepts.	Staff will be provided support to differentiate math instruction using the *Everyday Math* materials.	September 2007-June 2009	Teachers will measure student performance on common grade level formative assessments administered Fall, Winter, and Spring during a pre-determined window of time.
The individual classroom teacher could have the greatest impact on student achievement than any other school-level factor. The teacher factors are in the areas of instructional strategies and classroom management. ~Marzano: *What Works in Schools* ~Linda Darling Hammond: *Right to Learn*	Students will solve math problems that are relevant and are drawn from authentic scenarios and situations as provided by *Everyday Math*.	The EDM math trainers will provide training and modeling of effective math instructional strategies.	August, October, January and May 2007-2008 (2008-09 activities to be determined)	
		Other Staff development opportunities will be determined based on need.	Monthly	

Research Based Strategies	**Products & Behaviors**	**Implementation**	**Frequency**	**Evidence**
3. Students need multiple and varied learning opportunities. *Opportunities to learn have the strongest relationship to student achievement.* ~Marzano: *What Works In Schools* ~Grouws & Cabella: *Improving Student Achievement in Mathematics* *A common curriculum does not imply a common instructional method.* ~Strong, Silver & Perini: *Teaching What Matters Most* ✓ Direct & explicit instruction ✓ Time on task ✓ Integrate math across the curriculum ✓ Authentic Learning	Students will engage in math skill building through manipulatives, use of visual models and written applications. • Math Journals • Games/projects • Exit slips Students will demonstrate knowledge and skills in math across the curriculum.	Teachers will schedule math instruction daily for 70-90 minutes throughout the day. EM games and projects provide teachers with opportunities to meet the diverse needs of students. • Think-Pair-Share • Cooperative Learning groups Math in PE – Fitness goals Math in Music – timing Math in library – books purchased to support EM	September 2007- June 2009 As opportunities allow through curriculum and lesson planning.	Grade level assessments Student Math journal progress Staff will complete EM Teacher/Administrator checklist once each month to self monitor pacing and implementation. Building staff development