Curriculum Unit Title	Using Model-Based Representation to Improve Addition and Subtraction Problem Solving in the First Grade	Kristen King

KEY **LEARNING, ENDURING UNDERSTANDING, ETC.**

Word problems can be solved by first identifying the problem as a joining or separating problem, then representing the problem, and lastly, solving for the unknown.

ESSENTIAL QUESTION(S) for the UNIT

How can I identify a problem as a joining or separating problem?
How can I represent word problems?
How do I solve for start, change, and result unknown joining or separating problems?

CONCEPT A	**CONCEPT B**	**CONCEPT C**
Word problems must first be identified as either joining or separating problems.	Once identified as either joining or separating problems word problems should be represented.	Once a problem has been represented, it should be solved for the unknown (which may be the start, change, or result).
*What is a joining problem? *What is a separating problem? *How do I identify a word problem as	How do I represent a word problem?	How do I solve for an unknown in an addition or subtraction equation?

VOCABULARY A	**VOCABULARY B**	**VOCABULARY C**
Joining Problem Separating Problem	Math Mountains Circle Drawings Pictures	Start Unknown Change Unknown Result Unknown

ADDITIONAL INFORMATION/MATERIAL/TEXT/FILM/RESOURCES

See unit appendices, for all unit equations, pre- and post- assessments, handouts, and exit tickets.
Will need access to chart paper, markers, and dry-erase board.