



Manhattan Beach Unified School District

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Elementary CGI/Mathematics Schedule 2016-17

Minimum minutes of Math Instruction Per Day:

- TK-K: 35 - 60 minutes
- 1-5: 60 - 75 minutes

Components of Math Instruction:

- Warm-ups
- Number Talks
- Counting Collections (TK-3)
- Math Wall
- Problem Solving
- Note: these are a menu to choose from, you will not engage in each component everyday

Minimum Number of Traditional CGI Word Problems Per Week:

- Grades TK-3: 3 CGI problems per week
- Grades 4-5: 2-3 CGI problems per week
- CGI Word Problems
 - See types on p.2 of this document
 - Differentiation
 - It is recommended to have multiple number sets for students to choose from
 - Incorporate Depth and Complexity Icons as appropriate (K-5)
 - Rich problems are “low floor, high ceiling” meaning that all students can access the problem, there are supports for students who struggle, and it has a high level of challenge for those who need it.
 - Rich problems also: have multiple solution paths, provide opportunities for rich discussion, and engage student interest.

MATH STORY PROBLEM TYPES

JOINING PROBLEMS

Join (Result Unknown) $6 + 3 = \underline{\quad}$	Join (Change Unknown) $4 + \underline{\quad} = 7$	Join (Start Unknown) $\underline{\quad} + 4 = 6$
Mr. Smith had 6 cookies. Suzy gave him 3 more cookies. How many cookies does Mr. Smith have now?	Mr. Smith had 4 cookies. Suzy gave him some more. Then, Mr. Smith had 7 cookies. How many cookies did Suzy give Mr. Smith?	Mr. Smith had some cookies. Suzy gave him 4 more cookies. Then, he had 6 cookies. How many cookies did Mr. Smith start with?

SEPARATING PROBLEMS

Separate (Result Unknown) $7 - 4 = \underline{\quad}$	Separate (Change Unknown) $5 - \underline{\quad} = 1$	Separate (Start Unknown) $\underline{\quad} - 4 = 4$
Mr. Smith had 7 cookies. He gave 4 of them to Suzy. How many cookies did Mr. Smith have left?	Mr. Smith had 5 cookies. He gave some to Suzy. Then, he had 1 cookie left. How many cookies did Mr. Smith give to Suzy?	Mr. Smith had some cookies. He gave 4 to Suzy. Then, he had 4 cookies left. How many cookies did Mr. Smith have to start with?

PART - PART - WHOLE PROBLEMS

Part - Part - Whole (Whole Unknown) $6 + 3 = \underline{\quad}$	Part - Part - Whole (Part Unknown) $7 - 4 = \underline{\quad}$ or $4 + \underline{\quad} = 7$
Mr. Smith had 6 white cookies and 3 pink cookies. How many cookies did Mr. Smith have altogether?	Mr. Smith had 7 cookies. 4 were pink and the rest were white. How many white cookies did Mr. Smith have?

COMPARING PROBLEMS

Compare (Difference Unknown) $5 - 3 = \underline{\quad}$ or $3 + \underline{\quad} = 5$	Compare (Quantity Unknown) $3 + 2 = \underline{\quad}$	Compare (Referent Unknown) $8 - 5 = \underline{\quad}$
Mr. Smith had 5 cookies. Suzy had 3 cookies. How many more cookies did Mr. Smith have than Suzy?	Mr. Smith had 3 cookies. Suzy had 2 more cookies than Mr. Smith. How many cookies did Suzy have?	Mr. Smith had 8 cookies. He had 5 more than Suzy. How many cookies did Suzy have?

MULTIPLYING AND DIVIDING PROBLEMS

Multiplication $3 \times 3 = \underline{\quad}$	Measurement Division $9 \div 3 = \underline{\quad}$	Partitive Division $12 \div 3 = \underline{\quad}$
Mr. Smith had 3 piles of cookies. There were 3 cookies in each pile. How many cookies did Mr. Smith have?	Mr. Smith had 9 cookies. He put 3 cookies in each box. How many boxes did he need?	Mr. Smith had 12 cookies. He wanted to give them to 3 friends. How many cookies did each friend get?

*WORD PROBLEM CHART BASED ON COGNITIVELY GUIDED INSTRUCTION PROBLEM TYPES