

Marsh Valley School District
Quick Reference Curriculum Guide
1st Grade/Mathematics
August 2004

Skills are identified with Introduced (I), Practiced (P), Mastered (M)

Mathematical Reasoning and Problem Solving

Problem Solving

- ❑ Solve grade level appropriate math problems using addition, subtraction, money, time, weight, measurement. (M)
 - ❑ Experiment with manipulatives and real world experiences to identify and solve problems. (P)
 - ❑ Apply the four step problem solving process:
 - Understand
 - Plan
 - Solve
 - Look back
 - ❑ Select strategies appropriate to solve a problem. (M) **268.01.a**
 - ❑ Select appropriate operations. (M) **268.01.b**
 - ❑ Draw a picture and generate a number sentence from a problem solving situation. (P) **268.02.a**
 - ❑ Select appropriate models to represent math ideas. (P) **268.03.a**
 - ❑ Use a variety of: (P) **268.04.a**
 - Methods
 - Words
 - Numbers
 - Symbols
 - Charts
 - Graphs
 - Tables
 - Diagrams
 - Models
- To communicate math information.

Reasoning

- ❑ Use estimation to predict computation results and to evaluate the reasonableness of an answer. (I-P) **267.03b.c**

Mathematics Processes

Communication

- ❑ Express math ideas using: (P) **268.04.a**
 - Words
 - Numbers
 - Symbols
 - Tables
 - Charts
 - Graphs
 - Diagrams
 - Models
- ❑ Use appropriate grade level vocabulary. (I-M) **268.04.b**
- ❑ Make generalizations and justify math conclusions. (P)

Number Sense

Whole Numbers

- ❑ Explain how numbers are used in real world contexts. (P)
- ❑ Demonstrate and match one-to-one correspondence with ten. (M)
- ❑ Recognize instantly a set of one to ten objects instantly. (M)
- ❑ Explore and apply the concept of part-part-whole using manipulatives, models, and symbols. (I-P)
- ❑ Read and write numbers 1-100 (M) **267.01.b**
- ❑ Count backwards from 20. (M)
- ❑ Skip count by: (M)
 - 2's
 - 5's
 - 10's
- ❑ Count on from 1-100 by ones. (M)
- ❑ Apply numerical patterns for numbers through 100. (M)

Place Value

- ❑ Identify place value to the hundreds place. (I-M)

- ❑ Organize base ten materials to 99. (I-P) **267.01.c**

Comparing/Ordering

- ❑ Compare and order numbers to 10 using :
 - Vocabulary
 - Greater than
 - Less than
 - Equal to
 - Before
 - Between
 - After
 - Ordinals ranging from first to tenth.

Money

- ❑ Identify and name: (P-M) **267.01.d**
 - Penny
 - Nickel
 - Dime
- ❑ Match coin to their value. (P-M) 267.01.d
- ❑ Solve grade appropriate money problems. (P-M)

Concepts and Language of Algebra, Functions, and Math Models

- ❑ Represent vertical/horizontal notation. (M) **270.01.a**
- ❑ Write a number sentence given an addition/subtraction problem. (M) **270.01.b**
- ❑ Compare numbers using vocabulary: (M) **270.01.c**
 - Less than
 - Greater than
 - Equal to

 - More
 - Less
 - Same
 - Fewer
 - Bigger
 - Smaller

- Explore the relationship between addition and subtraction and demonstrate inverse of operations. (I-P) **270.01.d**
- Explore and use the commutative property of addition. (M) **270.02.a**

Estimation and Accurate Computation

- Build Family of facts through 18 to explore the relationship between addition and subtraction. (I-P)
- Solve addition and subtraction story problems using a variety of means. (I-M)
- Develop fluency with addition and subtraction up to 10. (I-M) **267.02.a**
- Add three 1 digit numbers. (I-M)
- Add/subtract simple two digit numbers without regrouping. (M)
- Extend patterns and identify rule/function that creates the pattern. (P) **273.01.a**
- Sort and classify objects by more than one attribute. (P) **273.01.b**
- Estimate the number of objects in a set. (P) **267.03.a**

Concepts and Principles of Measurement

- Use standard and non-standard tools for measuring: (I-P) **269.01.a**
 - Time
 - Length
 - Volume
 - Weight
 - Temperature
- Apply estimation of measurement to real world and content problems using actual measuring devices. (P) **269.01.b**
- Use a calendar to explore measurement of time. (P) **269.01.c** such as:
 - Events
 - Dates
 - Days
 - Holidays
 - Month
- Understand span of : (P)

- Time
- Seasons
- Yesterday
- Today
- Tomorrow
- Months
- Days of the week
- Determine time to the nearest:
 - Hour (M)
 - Half hour (M)
 - Quarter after (P)
 - Quarter before
 Using analog and digital time.
- Identify: circles, square, rectangle, triangle, ovals. (M)
- Identify two and three dimensional shapes: (M) **271.01.a**
 - Circles
 - Square
 - Rectangle,
 - Triangle
 - Oval
 - Cone
 - Cylinder
 - Cube
- Knowledge or two and three dimensional shapes: (I-P) **271.01.a**
 - Recognize
 - Name
 - Build
 - Draw
 - Compare
- Recognize and create shapes that have symmetry. (P) **671.01.b**
- Explore slides, flips, and turns. (P) **671.01.c**
- Apply ideas about direction and distance. (P) **271.02.a**

Data Analysis, Probability, and Statistics

- Interpret information found in simple graphs. (I-P) **272.01.a**
- Gather and display data in graphs in order to answer questions. (I-P) **272.02.a**
- Predict, perform, and record results of simple probability experiments. (I-P) **272.03.a**
- Make predictions or decisions based on probable results or past experiences. (I-P) **272.04.a**