

SWALLOW SCHOOL DISTRICT CURRICULUM GUIDE

Curriculum Area: **Math**

Course Length: Full Year

Grade: **1st**

Date Last Approved: June 2015

Stage 1: Desired Results

Course Description and Purpose:

First grade emphasizes the following content strands:

- Operations and Algebraic Thinking
- Number and Operations in Base Ten
- Measurement and Data
- Geometry

Throughout first grade, emphasis is placed on:

- A realistic approach to problem solving in everyday situations, other applications, and purely mathematical contexts.
- Frequent and distributive practice of basic skills through ongoing program routines and mathematical games.
- An instructional approach that revisits topics regularly to ensure full concept development and long-term retention of learning.

Activities that explore a wide variety of mathematical content and offer opportunities for students to apply their skills and understandings to geometry, measurement, and algebra.

Enduring Understanding(s):

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning

Essential Question(s):

1. What are the different models for addition and subtraction?
2. What are efficient strategies for finding sums and differences?
3. How does the position of a digit affect its value?
4. How do we know which measurement tools to use?
5. How can shapes be manipulated to form other shapes?

Learning Targets:

1. Students can demonstrate number sense and create patterns (Skill).
2. Students can evaluate numbers and perform operations (Skill).
3. Students can organize information and produce strategies to solve real world mathematical problems (Skill).
4. Students can evaluate and manipulate geometric shapes (Skill).
5. Students can produce accurate measurements by applying the appropriate tool (Skill/Product).
6. Students can produce fractions and develop probability models (Product).

Stage 2: Learning Plan

I. Operations and Algebraic Thinking

- A. Number Line and Number Grid
- B. Money
- C. Number Stories
- D. Patterns
- E. Computation

Standards:CCSS:

- 1.OA: Represent and solve problems involving addition and subtraction.
- 1.OA: Understand and apply properties of operations and the relationship between addition and subtraction.
- 1.OA: Add and subtract within twenty.

1.OA: Work with addition and subtraction equations.

Learning Targets Addressed:1, 2, 3, 5

Assessment Map:

Type	Level	Assessment Detail
Practice	Knowledge/ Skill	* Whole group modeling: sorting and counting coins, making coin exchanges, using a number line/number grid, creating patterns * Small group centers: Tile Math, problem solving strategies * Independent practice: Math Journal pages * Partner games: Coin Top It, Addition Top It, Penny-Nickel-Dime Exchange * Technology resources
Formative	Skill	* Skill Checks: adding and subtracting, skip counting, counting coins, solving number stories, completing patterns * Teacher Observations
Summative	Skill	* Unit Assessment * Open Written Response

II.Numbers and Operations in Base Ten

- A. Number Identification, Recognition, and Association
- B. Compare Numbers
- C. Place Value
- D. Fractions

Standards:_CCSS:

1.NBT: Extend the counting sequence.

1.NBT: Understand place value.

1.NBT: Use place value understanding and properties of operations to add and subtract.

Learning Targets Addressed:1, 6

Assessment Map:

Type	Level	Assessment Detail
Practice	Knowledge/ Skill	* Whole group modeling: sorting and ordering numbers, counting objects, tally marks, writing the number before and after a given number, even/odd, greater than/less than, using base ten blocks, dividing shapes into equal parts * Small group centers: place value * Independent practice: Math Journal pages * Partner games: Number Top It * Technology resources
Formative	Skill	* Skill Checks * Teacher Observations

III. Measurement and Data

Standards:_CCSS:

- A. Time
- B. Measurement
- C. Probability
- D. Graphing

1.MD: Measure lengths indirectly and by iterating length units. 1.MD: Tell and write time.
1.MD: Represent and interpret data.

Learning Targets Addressed:3, 5, 6

Assessment Map:

Type	Level	Assessment Detail
Practice	Knowledge/Skill	* Whole group modeling: showing time to the hour, half hour, quarter hour, measuring inches and feet, answering simple probability questions, answering questions based on tally charts and bar graphs * Small group centers: time practice * Independent practice: Math Journal pages * Partner games * Technology resources
Formative	Skill	* Skill Checks * Teacher Observations
Summative	Skill/Product	* Unit Assessment * Open Written Response

IV. Geometry

- A. Three-dimensional Shapes
- B. Two-dimensional Polygons and Non-polygons
- C. Symmetry
- D. Patterns

Standards:_CCSS: 1.G: Reason with shapes and their attributes.

Learning Targets Addressed: 4

Assessment Map:

Type	Level	Assessment Detail
Practice	Knowledge/Skill	* Whole group modeling: identifying one-dimensional polygons and non-polygons, two-dimensional solids, using the line of symmetry * Small group centers: use pattern blocks to create/copy designs * Independent practice: Math Journal pages * Technology resources
Formative	Skill	* Skill Checks * Teacher Observations
Summative	Skill	* Unit Assessment * Open Written Response