Understanding by Design: School ___MHSD grade K_____

Designer Name(s): Andrea and Sami Date: 6-4-2014

Subject Area: Math Grade Level(s): Kindergarten

Unit Title/Focus: (Lessons 111-120)

Estimated Amount of Instructional Time: ~12 days

Stage 1 – (Desired Results)

State Content and Skill Standards: CCSS and section overview card

Domain: Operations and Algebraic Thinking

Cluster: Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Domain: Geometry

Cluster: Analyze, compare, create, and compose shapes.

Enduring Understandings:(what are the big ideas, what are the specific understandings desired) enduring understanding

Students will Understand

Know number names and count sequence
- K.CC.1
- K.CC.2
- K.CC.3

Count to tell the number of objects
- K.CC.4
- K.CC.4(b-c)
- K.CC.5

Compare numbers
- K.CC.6

Understands addition as putting together and adding to and understanding subtraction as taking apart and taking from.
- K.OA.1
- K.OA.2
- K.OA.3
- K.OA.4
- K.OA.5

Describe and Compare Measurable Attributes
- K.MD.1
- K.MD.2

Classify objects and count the number of objects in each category
- K.MD.3

Identify and Describe Shapes
- K.G.2
- K.G.3

Analyze, Compare, create, and compose shapes
- K.G.4
- K.G.5
- K.G.6

Saxon Language from section overview "enduring Understandings

- Different coins can be used to count to 30 cents.

Essential Questions: (what questions will foster inquiry, understanding, and transfer of learning)
Promoting the mathematical Practices from Saxon card

- How many pennies equal 30 cents?
- What coin combinations are worth 30 cents?
- What are the doubles to ten?
- What kinds of things can I use to act out a story problem?

Extend and Challenge Questions
- How did you know where to put the missing number cars?

- Pennies are used to pay for small amounts
- A double is a number plus itself
- Word problems can be acted out using manipulative.

Big Idea

Identifying Numbers to 30, Sphere, Ordering by Size, Identifying Quarter & Dollar, Using Coins, Finding Half, Doubles, Equivalent Sets, Acting out Word Problems with Manipulatives, Capacity, Length

From sausd.us/Page/23207

What Students will know: *(what knowledge will they acquire)*

Math Vocabulary –
New
Doubles, fifth, largest, matching sets, smallest, sphere, sum
Maintained
Capacity, estimate, flip, left, medium, more, one half, parallelogram, right, slide, total, turn, whole

Saxon Lessons Summary from titles of lesson cards

- Numbers 11-30
- Spheres
- Order Objects by Size
- Shorting Money and Time
- Exploring Tangrams
- Whole and Half Shapes
- Doubles
- Acting out "Some, Some, More"
- Estimating and Measuring Capacity
- Writing numbers through 30
- Solving a problem by guessing and checking

What Students will be able to do: *(what will they eventually be able to do as a result of their skills learned/knowledge)*

Objectives

- Identify the Numbers 11-30
- Identify and Ordering the Numbers 1-30
- Reading a Pattern in Two Ways
- Sorting and Graphing Coins
- Identifying Most and Fewest
- Identifying the Value of a Set of Nickels and a Set of Dimes
- Covering Designs Using Tangrams
- Paying for Items Using Nickels, Dimes, or a Quarter
- Identifying and Matching Equivalent Sets

Stage 2 - Assessment Evidence (acceptable assessment evidence that students understand)

Performance Tasks: *(what authentic performance task (s) will students demonstrate understanding; by what criteria will it be judged?)*

(what they do in Saxon Lessons)

- Identify number 11-30
- Ordering spheres by size
- Sort coins
- Cover designs using tangrams
- Identify parts of a shape
- Pay for items using coins
- Play dominos (Identifying doubles)
- Act out "Some, Some, More" using teddy bears
- Use linking cubes to measure/capacity
- Solve story problems by guessing and

Other Evidence: *(quizzes, tasks, academic prompts, homework, observations)*

Assessment

- Oral Assessment 12
  (Counting by 10's to 100 Comparing and Measuring Length)
- Teacher Observations
- Lesson Practice

checking	

Stage 3 - Learning Plan (sequence of teaching and learning activities that will produce desired understandings, engagement and development) Use WHERETO elements to help you:

Learning Activities:

Saxon Table of Contents Lessons 111-120

Lesson 111- Identifying the Numbers 11-30
Lesson 112- Identifying a Sphere, Ordering Objects by Size
Lesson 113- Sorting Coins, Comparing Events According to Duration of Time, Identifying a Quarter and a Dollar
Lesson 114- Covering Designs using Tangrams, Exploring Slides, Turns and Flips
Lesson 115- Identifying Largest and Smallest Shapes, Identifying and Covering Half of a Shape
Lesson 116- Paying for Items using Pennies, Nickels, Dimes or a Quarter
Lesson 117- Identifying a Matching Equivalent Sets, Identifying Doubles
Lesson 118- Identifying and Matching Equivalent, Identifying Doubles
Lesson 119- Acting Out "Some, Some, More" Stories
Lesson 120-1- Estimating and Measuring the Capacity of Containers using Nonstandard Units, Ordering Containers by Capacity, Writing Numerals Through 30 to Label a Set
Lesson 120-2- Solving a Problem by Guessing and Checking

W=help the students know WHERE the unit is going and WHAT is expected/Help teacher to know where the students are coming from (prior knowledge, interests)
H=HOOK all students and hold their interest
E=EQUIP students, help them EXPERIENCE the key ideas and EXPLORE the issue
R=Provide opportunities to RETHINK and REVISE their understanding/work
E (2)=Allow students to EVALUATE their work
T=Be TAILORED (personalized) to different needs, interests, and abilities of learners
O=Be ORGANIZED to maximize initial and sustained engagement as well as effective learning

Assessment Tasks that Provide Evidence for Claims including DOK	☐ **Claim #1** *(Concepts and Procedures)* **Depth of Knowledge (DOK)** ***Circle One*** **1 - Recall and Reproduction** *(Below Basic)* **2 - Skills and Concepts** *(Basic)* **3 - Short Term Strategic Thinking** *(Proficient)* **4 - Extended Thinking** *(Advanced)*
	☐ **Claim #2** *(Problem Solving)* **Depth of Knowledge (DOK)** ***Circle One*** **1 - Recall and Reproduction** *(Below Basic)* **2 - Skills and Concepts** *(Basic)* **3 - Short Term Strategic Thinking** *(Proficient)* **4 - Extended Thinking** *(Advanced)*
	☐ **Claim #3** *(Communicating Reasoning)* **Depth of Knowledge (DOK)** ***Circle One*** **1 - Recall and Reproduction** *(Below Basic)* **2 - Skills and Concepts** *(Basic)* **3 - Short Term Strategic Thinking** *(Proficient)* **4 - Extended Thinking** *(Advanced)*
	☐ **Claim #4** *(Modeling and Data Analysis)* **Depth of Knowledge (DOK)** ***Circle One***

	1 - Recall and Reproduction *(Below Basic)* **2 - Skills and Concepts** *(Basic)* **3 - Short Term Strategic Thinking** *(Proficient)* **4 - Extended Thinking** *(Advanced)*
Achievement Level Descriptors	**ALD #1: ALD #2: ALD #3: ALD #4: (circle one):** *(Grade Level Goal ALD #3)*
Materials/Resources	**Spherical objects, nickels, dimes, quarters, pennies, one dollar bill, construction paper rectangles, bags, sticky notes, dominoes, containers of differing capacity, straws**

Math Domains Key

CC	Counting and Cardinality
OA	Operations and Algebraic Thinking
NBT	Number and Operation in Base Ten
MD	Measurement and Data
G	Geometry