

Understanding by Design: Mountain Home School District 193

Designer Name: 1st Grade Teachers edited by Kaye G. and Lisa R. **Date:** April 25, 2014
Subject Area: Math **Grade Level(s):** 1
Unit Title/Focus: 51-60-2
Estimated Amount of Instructional Time: ~12

Stage 1 – (Desired Results)

State Content and Skill Standards:

Domain: Operations and Algebraic Thinking CC.1.OA
 Domain: Number and Operations in Base Ten CC.1.NBT
 Domain: Geometry CC.1.G

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

Add and subtract within 20 CC.1.OA.5, CC.1.OA.6
 Extend the counting sequence CC.1.NBT.1
 Understand place value CC.1.NBT.2, CC.1.NBT.2b, CC.1.NBT.2c, CC.1.NBT.3
 Use place value understanding and properties of operations to add and subtract CC.1.NBT.4
 Tell and write time CC.1.MD.3
 Reason with shapes and their attributes CC.1.G.1, CC.1.G.2, CC.1.G.3

Students will understand that...

- We count by 10's when we count dimes
- Even numbers are numbers that end with 0, 2, 4, 6, 8, and odd numbers are numbers that end with 1, 3, 5, 7, 9.
- Two halves make a whole
- The same design can be covered in different ways using shapes
- Manipulatives can show the sum of two numbers.
- A line of symmetry divides a symmetrical design in half.

Essential Questions: *(what questions will foster inquiry, understanding, and transfer of learning)*

- How do I count a set of dimes and pennies?
- How do I know if a number is even? Odd?
- How can I divide an object into two equal pieces?
- How can I show all the different ways that I can cover the same design using shapes?
- Why is the sum of an even number and 2 always an even number?
- What is something in our classroom that has a line of symmetry?
- How do you know where to put the missing number cards?
- What do you look for when you try to find the two halves of a symmetric design?

Big Idea(s)

Counting by 10s with dimes, odd and even numbers, making a whole with 2 halves, covering designs with shapes, using manipulatives to make sums, lines of symmetry

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

Math vocabulary-after, before, between, digital time, equal parts, even, fraction, line of symmetry, odd, one half, symmetrical, whole

Time
 Adding 2
 Odd & even
 Line of symmetry
 Problem solving
 Patterning
 Write, compare, and order 2-digit numbers

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

- Counting by 2's identifying numbers on a hundred number chart
- Identifying numbers before, after, and between, counting dimes and pennies, making a symmetrical design
- Writing a two-digit story problem for a set of objects
- Comparing and ordering 2-digit numbers
- Identifying odd and even numbers
- Numbering a clock face
- Covering a design with pattern blocks

One half Money counting Ordering numbers to 100	
Stage 2 - Assessment Evidence (acceptable assessment evidence that students understand)	
<p><i>Performance Tasks: (what authentic performance task (s) will students demonstrate understanding; by what criteria will it be judged?)</i></p> <ul style="list-style-type: none"> • Draw a picture to solve addition and subtraction problems • Graphing • Counting on by 1's, 2's, 10's, • Extending a pattern • Counting objects • Counting money • Writing and solving addition and subtraction equations • Counting back • date 	<p><i>Other Evidence: (quizzes, tasks, academic prompts, homework, observations)</i></p> <p>Cumulative Written Assessments 10 & 11 Oral Assessment 6 Teacher Observations Homework Guided Practice</p>
Stage 3 - Learning Plan (sequence of teaching and learning activities that will produce desired understandings, engagement and development) Use WHERETO elements to help you:	
<p><i>Learning Activities:</i></p> <p>Lesson 51- Identifying the even numbers to 20 Lesson 52 identifying and locating numbers on a hundred number chart Lesson 53 counting dimes and pennies Lesson 54 creating a design with a line of symmetry, identifying a line of symmetry Lesson 55-1 drawing a line of symmetry, identifying one half of a whole, writing the fraction one half Lesson 55-2 estimating and measuring the capacity of containers using nonstandard units, writing a 2-digit number of a set of objects, comparing and ordering 2-digit numbers Lesson 56 Identifying odd and even numbers Lesson 57 numbering a clock face, showing time to the hour on a clock Lesson 58 adding 2 to an even number Lesson 59 adding 2 to an odd number Lesson 60-1 covering a design with pattern blocks, sorting, counting, and recording the pattern blocks used to cover a design Lesson 60-2 looking for a pattern to solve a problem</p>	

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	<input type="checkbox"/> Claim #1/DOK 1, 2, 3, 4 (circle one):
	<input type="checkbox"/> Claim #2/DOK 1, 2, 3, 4 (circle one):
	<input type="checkbox"/> Claim #3/DOK 1, 2, 3, 4 (circle one):
	<input type="checkbox"/> Claim #4/DOK 1, 2, 3, 4 (circle one):
Achievement Level Descriptors	ALD #1: ALD #2: ALD #3: ALD #4: (circle one):
Materials/Resources	Pennies, self-stick tags, dimes, construction paper, crackers to halve, 7 containers for volume, linking cubes, pattern blocks, big sheets, and fact cards

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