

"Lily Pad"



Student Objectives: "I can round numbers to the nearest 10."

Standards to Measure	Mathematical Practices
3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	1. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 6. Attend to precision. 8. Look for and express regularity in repeated reasoning.

Materials:

- Sidewalk Chalk
- Number line, or 0-99 chart

G Engage Students with the Goal	<u>State and Rate</u> Objective: "I can round numbers to the nearest 10." Students rate themselves to the goal (1, 2, 3, 4).	Setting Objectives and Providing Feedback
A Access Prior Knowledge	The teacher will now set the stage for rounding. You can start by asking a series of questions: What is estimating? Does anyone know why we estimate? Discuss and take notes with students.	Cues, Questions, and Advance Organizers
N New Information	The teacher will begin the lesson outside on the sidewalk. S/he will introduce the decade numbers. The teacher may have the students count by 10s to 100. As the students are counting the teacher will use sidewalk chalk to draw "Lily Pads" on the side walk. Be sure to leave enough room in between each decade number to make the tick marks for the numbers in between. Next, the class will discuss what can go in between the decade numbers. Have the groups of students, using sidewalk chalk, record the numbers that are in between the decade numbers. <i>Measurement between the numbers will probably not be equal. As long as they do not skip any numbers it should be fine.</i>	Similarities and Differences Nonlinguistic Representation Cues, Questions, and Advance Organizers Generating and Testing Hypotheses

	Explain to the students that today they will learn a new estimation strategy. They are going to round to the nearest 10. “Let’s look at the lily pads with the decade numbers, what do you notice?” Students may respond with things like, the “Lily pad,” count by 10s, or they are decade numbers. When rounding, you are looking for nice numbers like the decade numbers. Ask a student to stand on a number such as 43. The student will locate 43 on the number line and stand there. The teacher will lead the students into a discussion about the nearest decade number. They can even walk/hop to the closest lily pad by counting the steps. Continue this with other students allowing them gain an understanding of the nearest “nice number”. Avoid teaching such things as, “5 or higher, and 4 or lower”. We want students to conceptualize the rounding and not memorize rules.	
A Application	Students will use the task sheet to answer questions about rounding. Students should use a number line (cut the attached 0-99 chart to create) or use the 0-99 chart to complete the task. When back in the classroom, give students several numbers to round for practice. Have them record their work in their interactive journal.	Cooperative Learning Providing Feedback Generating and Testing Hypotheses Practice and Homework
G Revisit the Goal	<u>State and Rate</u> Objective: “I can round numbers to the nearest 10.” Students rate themselves to the goal (1, 2, 3, 4). Have students write how to round numbers in their own words in their interactive journals.	Setting Objectives and Providing Feedback

Evaluation of Students

Formative:

- How do you determine the closest 10?
- Have you found all of the possible answers? Explain.
- When might rounding be useful?
- Can you create an additional number clue?

Plans for Individual Differences

Intervention:

Students can work with only 2 decade numbers at a time. They could use counters to mark their spots.

Extension: Have students practice rounding to the nearest ten using three numbers.

Lilypad Scavenger Hunt

Round each number below to the nearest 10



34 rounded to the nearest 10 would be _____

97 rounded to the nearest 10 would be _____

68 rounded to the nearest 10 would be _____

61 rounded to the nearest 10 would be _____

53 rounded to the nearest 10 would be _____

85 rounded to the nearest 10 would be _____

67 rounded to the nearest 10 would be _____

11 rounded to the nearest 10 would be _____

3 rounded to the nearest 10 would be _____

5 rounded to the nearest 10 would be _____

25 rounded to the nearest 10 would be _____

16 rounded to the nearest 10 would be _____

94 rounded to the nearest 10 would be _____

12 rounded to the nearest 10 would be _____

59 rounded to the nearest 10 would be _____

Number Line

Cut the chart below to represent a number line

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99
100									