

Teacher Candidate: Daniel Eckel

Date Lesson Taught: September 11th, 2019

Lesson Title: Rounding Decimals

Grade Level and Course: 4th Grade Math and Science and Inquiry

Time Segment of Lesson: 40 minutes

Standard(s) Addressed in Lesson:

CCSS.MATH.CONTENT.4.NBT.A.3

Use place value understanding to round multi-digit whole numbers to any place. (the students will be using their knowledge of rounding whole numbers to round decimals).

Objective(s) of the Lesson: Students will be able to ...

Students will be able to match numbers with decimals that are not rounded and rounded to the nearest tenths, hundredths, thousandths, and ten-thousandths place. Students will be able to round numbers accurately to the nearest tenths, hundredths, and thousandths place by answering 80% of the problems.

Vocabulary (and other literacy skills):

Tenths place, hundredths place, thousandths place

Student Diversity and Differentiation of Instruction

| Student Diversity | Differentiation of Instruction |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>ESL Learners</i> | 1. The center groups are going to be according to abilities (how well students did on the place value test). The instructions are going to be reviewed prior to doing the centers. One of the centers is going to be with me giving small group instruction. The lowest group will start with me first. |
| <i>High Level Students</i> | The higher level students will start with the worksheets which require more previous knowledge the other students might not have. |
| <i>Middle Level Students</i> | These students will start with the games so as to have some review, and then they will rotate to small group instruction. |

Formative and Summative Assessments

| Formative Assessment | Summative Assessment |
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| I will be directly involved in the small group instruction and will be able to measure the needs of the students during this discussion time – I will have some exercises during small group to help the students. | The summative assessment which will be a multiple choice and matching exercise will take place the day after centers on Thursday. |
| The worksheet station will also be assessed to see how students did during the centers | |
| The matching rounding tally sheet will also help measure the understanding of the students. | |

Big Ideas to be Addressed in the Lesson:

There are numerous effective strategies when working with both whole and other types of numbers

Decimals represent parts of things and its necessary to think of numbers as representative of concrete things.

Discussion Questions

- Which way do place values that get bigger go (the answer is left)?
- Which way do place values go that get smaller (the answer is right)?
- How many pieces of something are in the tenths place, hundredths place, thousandths place etc?
- When and why is it necessary sometimes to round a number?

21st Century Knowledge and Skills

| 21st Century Knowledge and Skills | Teaching Strategies |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Collaboration</i> | Students will need to rely on each other to understand instructions, complete the tasks, and see what they did wrong and right. |
| <i>Communication</i> | Students will have to utilize English (not their native language) to discuss decimals and rounding decimals and to complete the activities – two of which are games where they need to work together. |

| | |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Critical Thinking</i> | Students will need to solve the problems found in each center without asking the teacher's aid because the teacher is giving small group instruction. The students will have to think how to solve the activities through the aid of their peers and the knowledge they gained in the previous classes. |
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Teaching Strategies and Related Student Activities (Include Web 2.0 activities as appropriate):

Teaching Strategies and Activities:

1. Instruction – A brief review of each center will be given to the students (there are four centers). The students will then be given pre-planned groups but they won't be told why. The students. The students will then be put into the centers and given roughly 8.5 minutes at each center. (5 minutes center time and approx 8.5 minutes at each center). (I do, we do)

Center 1: Small Group Instruction: (This will be the first activity for the lower level esl students) This center is based on the previous week and the worksheet on Tuesday that helped see whether students understood. I am going to use what the students got wrong to pinpoint where they need to work, and then review starting with the tenths place and do some practice with the students. (I do, we do)

Center 2: Matching activity (This will be the first activity for the midlevel students) – students are going to be matching unrounded decimals and rounded decimals and then writing their observations on a table. They can work together to do the matching and time themselves on how fast they complete their answers. This allows for multiple run throughs. (You do)

Center 3: Workbook worksheet practice (this will be the first center for the higher level students) – students will work alone but in a table group and they can help each other with questions and understanding instructions on how to do the worksheets which practice rounding decimal numbers in different places. (You do)

Center 4: Decimal Board game to review decimals (this will be the first game for the intermediate group to help them review decimals). Students will be answering questions to uncover a hidden picture on the board which they will use crayons to discover. (You do)

Review: The worksheets and game recording sheets will be used to see how the students did on their own rather than having the teacher help them. The small group section will be a moment of review of the material to see where the students had challenges in their previous lessons (it might not necessarily cover rounding decimals if there is a missing piece elsewhere).

Materials and Resources for Lesson

| Materials, Technology, and Websites | Required Preparation |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <i>Number and number sense game pdf pages 44-53</i> | Print the instruction and simplify them so students can understand, printout 26 practice. Have crayons ready. |
| <i>Harcourt Math Practice Book 4th grade</i> | Page 15 |
| <i>Rounding Decimal worksheets pdf</i> | Print problem pages (10 pages) |
| <i>Project and smart board for small group instruction along with previous test</i> | |

References

Number Sense Games PDF
 Rounding Decimals PDF
 Harcourt Math Book 4th Grade