

DECIMAL FRACTIONS UP TO TENTH AND HUNDREDTH

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Subject

Mathematics

Prepared By

[Instructor Name]

Grade Level

3

Overview

This lesson plan covers teaching content for;

1. Understanding the relationship between a fraction and Decimal
2. Identifying tenth and hundredth place
3. Writing decimal fractions in words and figures
4. Converting fractions to decimal and vice versa

Objectives

Students should be able to;

1. Explain the relationship between a fraction and a decimal.
2. Show a fraction with a denominator of 10 or 100 as a decimal.
3. Identify the tenths and hundredths place.
4. Show a decimal on a number line.
5. Pupils should be able to write decimal fractions in figures and in words

Activity Starter/Instruction

1. Engage students in a discussion about any nicknames they may have. Give several examples of full names and shorter names, such as Matthew and Matt.
2. Ask your students if calling someone by a nickname changes who the person is.
3. Relate fractions to decimals by making a comparison to nicknames.
4. Explain that fractions and decimals are different names for the same value.
5. Let students understand that to write a number in decimal form, they need to know the place value of each digit in a number. Therefore, in the number 38.7, 3 is the tens place while 7 is the tenths place.

Guided Practice

Day 2/ Lesson 2: 15 Mins

1. The teacher explains how to say tenth and hundredth to the students.
2. In explaining tenth, the teacher says when we see this decimal number (the teacher

Teacher Guide

Day 1/ Lesson 1: 15 Mins

1. The teacher explains that decimal numbers are numbers whose place values are based on 10s.
2. The place-value representation can be extended to include numbers less than one, they are sometimes called decimal fractions.
3. A decimal point is used to separate the whole number part of the number and the fraction part of the number.
4. Let's say you are measuring the length of a driveway and find that it is 74 feet. You would say this number as seven hundred forty-five.
5. Then, a more accurate measurement shows that it is 74.36 feet. Let's see how this number is represented.

Decimal numbers	Hundreds	Tens	DP	Tenth	Hundredth
74.36	7	4	.	3	6

Materials Required

- Hundreds grid/ chart
- Blank sheet
- Marker
- Pencils
- Colored pen

Additional Resources

- <https://www.education.com/lesson-plan/whats-in-a-fraction>
- <https://www.onlinemathlearning.com/decimals-fraction>
- <https://betterlesson.com/lesson/586405/decimal-introduction>
- <http://www.montereyinstitute.org/courses/DevelopmentalMath>

Additional Notes

writes 0.2 on the board) we sometimes call it "zero point two". However, this number has a special name (I wrote "two tenths" off to the side).

3. Next, the teacher writes the number, 0.6, and asks: If 0.2 is "two tenths," then how do you think you should say 0.6?
4. A few moments later, students say, "Six tenths!"
5. We continue in this same fashion, discussing, and writing the correct way to read and write decimals next to each of the following numbers 1.5, 0.8, and 5.4. We also discussed how we say "and" at the decimal point when there is a whole number in the decimal number.
6. Then, we move on to making a list with How to Say Hundredths. Again, I started off by writing "0.01" and explaining, the special name for this number is "one hundredth." We then discussed how to read and write 0.12, 0.56, 0.08, and 1.99.

Guided Practice

Day 3/ Lesson 3: 15 Mins

1. Just as you can write a decimal as a fraction, every fraction can be written as a decimal.
2. To write a fraction as a decimal, divide the numerator (top) of the fraction by the denominator (bottom) of the fraction.
3. Use long division, if necessary, and note where to place the decimal point in your answer. For example, to write $\frac{3}{5}$ as a decimal, divide 3 by 5, which will result in 0.6.

6. To the left of the decimal point are the ones, tens, and hundreds places, where you put digits that represent whole numbers that are greater than or equal to zero.

7. To the right of the decimal point are the tenths and hundredths, where you put digits that represent numbers that are fractional parts of one, numbers that are more than zero and less than one.

Guided Practice

Day 4/ Lesson 4: 15 Mins

1. Let's start off by looking at the decimal, 0.01. How do you say and write this decimal? Students said, "One hundredth!". The teacher writes these words on the chart.
2. Teacher glues down a hundreds grid/chart and asks: How many squares should I color in out of 100 squares to represent this decimal number? students answer, "1 out of 100!"
3. The teacher colors in one square out of the hundreds grid.
4. Teacher suggest other numbers e.g. 0.44, 0.70, 0.32 etc. He then asks how many squares would be shaded for each of them.
5. The teacher then explains how to convert the numbers to fractions by writing the tenth and hundredth as the numerator and 100 as the denominator (since we are working with a total of 100 squares in the hundreds grid/chart).

Assessment Activity

Assessment Activity

1. Write decimal numbers of tenths and hundreds on the board.
2. Explain to pupils that they can write the numbers as proper fractions, for example, nine tenths can be written as $\frac{9}{10}$ and twenty three hundredths can be written as $\frac{23}{100}$.
3. Give the pupils other decimal numbers to write as common fractions.

Assessment Activity

Give the pupils the following question:

In the 100 m race three pupils ran the following times:

- Thomas ran the race in 13.89 seconds.
- Ama ran the race in 13.85 seconds.
- Adela ran the race in 13.88 seconds.

Who came first, second and third?

Summary

Review and Closing

1. Decimal notation is another way to write numbers that are less than 1 or that combine whole numbers with decimal fractions, sometimes called mixed numbers.
 2. When you write numbers in decimal notation, you can use an extended place-value chart that includes positions for numbers less than one.
 3. You can write numbers written in fraction notation (fractions) in decimal notation (decimals), and you can write decimals as fractions.
 4. You can always convert between fractional notation and decimal notation.
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