PERCENTAGES

Subject

Mathematics

Prepared By

[Instructor Name]

Grade Level

4

Overview

This lesson plan covers teaching content for;

1. Percentages

Objectives

Students should be able to;

1. Change fractions to decimals and decimals to percentages and vice versa.
2. Solve quantitative problem relating to percentages

Activity Starter/Instruction

1. Hand out copies of 10 × 10 grid paper and ask pupils to shade various fractional parts e.g. Shade half of the blocks, shade a quarter of all the blocks, etc.
2. Revisit the 10 × 10 grid activity, point out that the grid contains a total of 100 blocks.
3. Ask pupils to shade a chosen number of blocks e.g. 20, 25, etc. and to write the number of shaded blocks over the total number of blocks in the grid. They should obtain fractions with denominators of 100.

Guided Practice

Day 2/ Lesson 2: 15 Mins

1. Make the connection with the starter activity by pointing out that fractions with denominators of 100 are called percentages.
2. Therefore, percentage means "per 100" and the symbol % is used.
3. Explain that in order to change any fraction to a percentage (i.e. a value out of 100), the denominator must be converted to 100.

Teacher Guide

Day 1/ Lesson 1: 15 Mins

1. Explain that the word decimal is derived from the Latin word for 10 and therefore implies that a unit can be broken up into ten equal parts.
2. Explain that decimal numbers can be obtained by dividing a number by ten e.g. 5 can be converted into decimal by simply dividing by 10 (5 ÷ 10 = 0.5). By writing these numbers in the form of a fraction i.e. $\frac{5}{10}$ the fraction can be simplified to obtain $\frac{1}{2}$
3. Make the connection with the starter activity by pointing out that fractions with denominators of 100 are called percentages. Therefore, percentage means "per 100" and the symbol % is used.

Guided Practice

Day 3/ Lesson 3: 15 Mins

1. Display the prices of two or three food or clothing items.
2. Ask students: Has any of you ever purchased one of these items?

Materials Required

- Fraction-decimal conversion chart.
- Fraction-percentage chart.
- Decimal-percentage conversion chart
- Percentage-decimal conversion chart
- Flash cards
- 10 × 10 grid paper

Additional Resources

- https://www.teacher.org/lesson-plan/prices-and-perc
- https://www.brighthubeducation.com/middle-school-lessons/128710-solving-problems-using-percent/
- https://www.scribd.com/doc/29584776/P5-Maths-Le on-percentage
- https://www.homeschoolmath.net/teaching/percent/
- https://www.teachingideas.co.uk/subjects/percentag

Additional Notes

1. Identify a percentage
2. Change fractions to percentage.

3. Allow students to give responses, ask what they paid for the items.
4. Ask students if they paid a tax or had a discount.
5. Point out the regular price of one of the items.
6. Tell students it is on sale for 15% off.
7. Ask if they know how to reduce the cost by 15%. (If not known, demonstrate)
8. Next, tell students there is a 6% sales tax on the purchase.
9. Have students figure the sales tax total and then the final cost of the item.

Summary

1. Ask for volunteers to share their answers to the problems assigned.
2. As the problems are reviewed in front of the class, have the students check their answers for accuracy

Assessment Activity

Check whether pupils can:

1. Change fractions to decimals and percentages with confidence.
2. Give extra practice if needed.