



PLANIT
TEACHERS

Introduction to Fractions and Decimals: Division Made Easy

Student Name: _____

Class: _____

Due Date: _____

Introduction

Welcome to our homework assignment on fractions and decimals! In this worksheet, you will learn about the concept of fractions and decimals, and how to apply division skills to solve problems. This assignment is tailored to your individual needs, with mixed ability differentiation to cater to foundation, core, and extension learners.

Learning Objectives

By the end of this assignment, you will be able to:

- Understand the concept of fractions and decimals
- Apply division skills to solve problems involving fractions and decimals
- Demonstrate an ability to work with mixed numbers and improper fractions
- Show an understanding of the relationship between fractions, decimals, and percentages

Task 1: Foundation - Fraction Basics

Visual Learners: Watch the video on fractions and decimals to understand the basics. [Video Link]
(<https://www.bbc.co.uk/bitesize/articles/zp78wmn>)

Auditory Learners: Listen to the audio explanation of fractions and decimals. [Audio Link]
(<https://www.mathantics.com/lesson/fractions-decimals-percents>)

Kinesthetic Learners: Use the fraction wall to visualize and explore equivalent fractions. [Interactive Tool]
(https://www.mathplayground.com/fraction_wall.html)

1. What is a fraction? _____
2. What is the difference between a numerator and a denominator?

3. Write the fraction $\frac{1}{2}$ as a decimal: _____

Task 2: Core - Division with Fractions

Visual Learners: Use the visual aid to understand the concept of dividing fractions. [Image]
(https://www.mathsisfun.com/fractions_division.html)

Auditory Learners: Listen to the audio explanation of dividing fractions. [Audio Link]
(<https://www.khanacademy.org/math/cc-6th-fractions/dividing-fractions/v/dividing-fractions>)

Kinesthetic Learners: Use the interactive tool to practice dividing fractions. [Interactive Tool]
(<https://www.mathgoodies.com/lessons/fractions/dividing.html>)

1. Divide $\frac{1}{2}$ by $\frac{1}{4}$: _____
2. Divide $\frac{3}{4}$ by $\frac{1}{2}$: _____
3. Write the division problem $\frac{1}{2} \div \frac{1}{4}$ as a multiplication problem: _____

Task 3: Extension - Real-World Applications

Imagine you are a chef, and you need to measure out ingredients for a recipe.

Write a short paragraph explaining how you would use fractions and decimals to measure out the ingredients.

Guidance for Parents/Guardians

To support your child without doing the work for them:

- Encourage your child to read the instructions carefully and ask questions if they're unsure
- Provide a quiet and comfortable workspace with minimal distractions
- Offer guidance on time management and organization
- Encourage your child to use visual aids, such as diagrams or charts, to help with problem-solving
- Be available to answer questions and provide feedback, but avoid giving away the answers

Reflection

After completing the assignment, take a few minutes to reflect on your learning:

- What did you find challenging or easy?
- What did you learn about fractions and decimals?
- How can you apply what you've learned to real-world situations?
- What would you like to learn more about in the future?

Note for Teachers

This assignment incorporates mixed ability differentiation to cater to foundation, core, and extension learners. The adaptive tasks are designed to progressively adjust in difficulty based on the student's performance, ensuring that each student is challenged and engaged. The incorporation of visual, auditory, and kinesthetic learning styles caters to different learning preferences, promoting a positive and inclusive learning environment.

Additional Activities

- Create a word search using vocabulary related to fractions and decimals
- Draw a picture that represents a real-world application of fractions and decimals
- Write a short story that incorporates fractions and decimals in a creative way

Assessment

Complete the tasks and questions to the best of your ability

Use the reflection questions to think critically about your learning

Share your work with your teacher or parent/guardian for feedback and assessment

Conclusion

Congratulations on completing the assignment! You have learned about the concept of fractions and decimals, and how to apply division skills to solve problems. Remember to always use visual aids, such as diagrams or charts, to help with problem-solving, and don't be afraid to ask for help when you need it. Keep practicing, and you will become a master of fractions and decimals in no time!