Equality of Fractions: Exploring Equivalent Ratios

Student Name: _____

Class: _____

Due Date: _____

Introduction

Welcome to this homework assignment on equality of fractions! In this worksheet, you will learn about equivalent fractions, how to identify them, and apply them to real-world scenarios. This assignment is tailored to the UK Primary School Curriculum and caters to mixed ability differentiation for foundation, core, and extension levels.

Foundation Level Activities

Fraction Matching

Match the equivalent fractions:

- 1/2 = _____
- 3/4 = _____
- 2/3 = _____
- 1/4 = _____

Answers: 2/4, 6/8, 4/6, 1/4

Visual Fractions

Shade the equivalent fractions on a number line or using fraction strips:

- 1/2 = _____
- 3/4 = _____
- 2/3 = _____

Core Level Activities

Equivalent Fraction Search

Find and write five equivalent fractions for each of the following:

- 1/2
- 3/4
- 2/3

Real-World Applications

Solve the following problems:

1. A recipe calls for 1/4 cup of sugar. If you only have a 1/8 cup measuring cup, how many times will you need to fill it?
2. A bookshelf has 3/4 of its space filled with books. If the bookshelf can hold 24 books, how many books are currently on it?

Extension Level Activities

Fraction Puzzles

Solve the following puzzles to find the missing equivalent fractions:

1. 1/2 = x/6

2. 3/4 = x/12

3. 2/3 = x/9

Create Your Own

Design and create a real-world scenario where equivalent fractions are used. Write a short story or create a visual representation to demonstrate your understanding.

Extension Activities

Challenge 1: Fraction Bingo

Create a bingo card with different fractions and their equivalent ratios. Call out the fractions, and mark the equivalent ratios on your card. Get five in a row to win!

Challenge 2: Fraction War

Play a game of "War" using equivalent fractions. Deal two cards with fractions, and determine which one is greater. The player with the greater fraction wins the round. The player with the most wins after five rounds wins the game.

Success Criteria

To successfully complete this assignment, you should be able to:

- Identify and write equivalent fractions
- Apply equivalent fractions to real-world scenarios
- Demonstrate an understanding of the concept of equality of fractions
- Complete the activities with accuracy and attention to detail

Parent/Guardian Notes

To support your child's learning, please:

- Encourage them to use visual aids, such as fraction strips or number lines, to help with understanding equivalent fractions
- Assist them in finding real-world examples of equivalent fractions, such as measuring ingredients for a recipe
- Review their work and provide feedback, using the Success Criteria as a guide
- Encourage them to ask questions and seek help when needed

Time Management Guidelines

Allocate 30-40 minutes to complete the Main Activities

Spend an additional 20-30 minutes on the Extension Activities

Take regular breaks to review and reflect on the work completed

Self-Assessment Opportunities

Use the Success Criteria to evaluate your own understanding of equivalent fractions

Reflect on the challenges you faced and how you overcame them

Identify areas where you need additional support or practice

Conclusion

By completing this homework assignment, you have demonstrated your understanding of equivalent fractions and how to apply them to real-world scenarios. Remember to stay engaged, ask questions, and have fun learning!