

Student Name: _____**Class:** _____**Student ID:** _____**Date:** {{DATE}}

Assessment Details

Duration: 60 minutes**Total Marks:** 100**Topics Covered:**

- Identifying and Writing Fractions
- Comparing Fractions
- Adding and Subtracting Fractions
- Real-World Applications

Instructions to Students:

1. Read all questions carefully before attempting.
2. Show all working out - marks are awarded for method.
3. Calculator use is permitted except where stated otherwise.
4. Write your answers in the spaces provided.
5. If you need more space, use the additional pages at the end.
6. Time management is crucial - allocate approximately 1 minute per mark.

Section 1: Identifying and Writing Fractions [20 marks]

Question 1

[5 marks]

What fraction is represented by the shaded area in the picture?

A) $\frac{1}{2}$

B) $\frac{1}{4}$

C) $\frac{3}{4}$

D) $\frac{2}{3}$

Question 2

[5 marks]

Write a fraction to represent the scenario: "If you have 2 groups of 5 pencils, what fraction of the total pencils are in one group?"

Question 3

[10 marks]

Create a visual model to represent the fraction $\frac{2}{3}$.

Section 2: Comparing Fractions [20 marks]

Question 4

[5 marks]

Which fraction is larger: $\frac{1}{2}$ or $\frac{1}{3}$?

A) $\frac{1}{2}$

B) $\frac{1}{3}$

Question 5

[5 marks]

Explain why $\frac{3}{4}$ is larger than $\frac{2}{4}$.

Question 6

[10 marks]

Create a number line to compare the fractions $\frac{1}{2}$ and $\frac{2}{3}$.

Section 3: Adding and Subtracting Fractions [30 marks]

Question 7

[10 marks]

What is the result of adding $\frac{1}{6} + \frac{2}{6}$?

A) $\frac{1}{6}$

B) $\frac{2}{6}$

C) $\frac{3}{6}$

D) $\frac{4}{6}$

Question 8

[10 marks]

Solve the word problem: "If you have $\frac{1}{4}$ cup of juice and your friend gives you $\frac{1}{4}$ cup, how much juice do you have now?"

Question 9

[10 marks]

Create a visual model to represent the addition of $\frac{1}{4} + \frac{1}{4}$.

Question 10

[15 marks]

Solve the real-world problem: "If a recipe calls for $\frac{3}{4}$ cup of flour and you want to make half the recipe, how much flour do you need?"

Question 11

[15 marks]

Create a visual model to represent a real-world scenario involving fractions.

This assessment is designed to evaluate students' understanding of fractions and their ability to apply fractions to real-world problems.

Answer Key

1. 1. B) $\frac{1}{4}$
2. 2. $\frac{1}{5}$
3. 3. Visual model of $\frac{2}{3}$
4. 4. $\frac{1}{2}$
5. 5. $\frac{3}{4}$ is larger than $\frac{2}{4}$ because it has a larger numerator.
6. 6. Number line with $\frac{1}{2}$ and $\frac{2}{3}$
7. 7. $\frac{3}{6}$
8. 8. $\frac{1}{2}$ cup
9. 9. Visual model of $\frac{1}{4} + \frac{1}{4}$
10. 10. $\frac{3}{8}$ cup
11. 11. Visual model of a real-world scenario involving fractions

Marking Guide

* Section 1: Identifying and Writing Fractions (20 points)

- Question 1: 5 points
- Question 2: 5 points
- Question 3: 10 points

* Section 2: Comparing Fractions (20 points)

- Question 4: 5 points
- Question 5: 5 points
- Question 6: 10 points

* Section 3: Adding and Subtracting Fractions (30 points)

- Question 7: 10 points
- Question 8: 10 points
- Question 9: 10 points

* Section 4: Real-World Applications (30 points)

- Question 10: 15 points
- Question 11: 15 points

Differentiation Options

* For students with special needs:

- Provide a graphic organizer to help with visual representation
- Offer one-on-one support during the assessment

* For English language learners:

- Provide a bilingual dictionary or glossary
- Offer visual aids to support understanding

* For gifted students:

- Provide additional challenging questions or tasks
- Encourage students to create their own real-world problems involving fractions

Teaching Tips and Strategies

Use visual models and real-world examples to introduce and reinforce fractions concepts.

Provide opportunities for students to work in pairs or small groups to discuss and compare their answers.

Encourage students to use mathematical language and vocabulary when explaining their thinking.

Use formative assessments to monitor student progress and adjust instruction accordingly.

Bloom's Taxonomy Alignment

- * Knowledge/Remembering: Identify and write fractions, compare fractions
- * Comprehension/Understanding: Explain why one fraction is larger than another, solve word problems involving fractions
- * Application/Applying: Add and subtract fractions, apply fractions to real-world problems
- * Analysis/Analyzing: Compare and contrast fractions, identify patterns and relationships
- * Synthesis/Creating: Create visual models to represent fractions, solve real-world problems involving fractions
- * Evaluation/Evaluating: Justify and explain answers, provide feedback to peers

Clear Success Criteria

- * Students can identify and write fractions with accuracy
- * Students can compare and order fractions with like denominators
- * Students can add and subtract fractions with like denominators
- * Students can apply fractions to real-world problems
- * Students can communicate their thinking and justify their answers using mathematical language and vocabulary

Evidence Collection Methods

- * Completed assessment tasks and questions
- * Observations of student behavior and participation during the assessment
- * Student self-assessment and reflection
- * Peer feedback and assessment

Feedback Opportunities

- * Immediate feedback during the assessment through self-assessment and peer feedback
- * Delayed feedback through review of assessment results and provision of feedback to students
- * Feedback opportunities for teachers to reflect on their instruction and adjust their teaching practices accordingly