



Subject Area: Mathematics
Unit Title: Introduction to Fractions and Decimals
Grade Level: 6-8
Lesson Number: 1 of 10

Duration: 60 minutes
Date: [Insert Date]
Teacher: [Insert Teacher Name]
Room: [Insert Room Number]

Introduction

Welcome to the Introduction to Fractions and Decimals with Online Manipulatives lesson plan. This lesson is designed to introduce 12-year-old students to the fundamental concepts of fractions and decimals, utilizing online manipulatives to enhance their understanding and engagement.

Lesson Objectives

Learning Objectives:

- Students will be able to define and identify the basic concepts of fractions and decimals.
- Students will be able to explain the relationship between fractions and decimals.
- Students will be able to apply their knowledge of fractions and decimals to solve real-world problems.



Materials and Resources

Online Manipulatives:

- GeoGebra
- Math Playground

Whiteboard and Markers:

- For note-taking and illustrations

Fraction and Decimal Worksheets:

- For practice and assessment

Online Resources:

- Khan Academy
- Math Open Reference

Lesson Plan

Introduction (10 minutes):

- Introduce the topic of fractions and decimals.
- Ask students to share prior knowledge or experiences.
- Provide a brief overview of the lesson.

Direct Instruction (20 minutes):

- Provide direct instruction on the basics of fractions.
- Use online manipulatives to provide interactive activities.



Guided Practice

Activity 1: Simplifying Fractions (10 minutes)

- Provide students with a set of fractions to simplify.
- Have students work in pairs to simplify the fractions.

Activity 2: Comparing Fractions (10 minutes)

- Provide students with a set of fractions to compare.
- Have students work in pairs to compare the fractions.

Independent Practice

Activity 1: Fraction and Decimal Word Problems (15 minutes)

- Provide students with a set of word problems.
- Have students work individually to solve the problems.

Activity 2: Fraction and Decimal Conversion (15 minutes)

- Provide students with a set of fractions and decimals to convert.
- Have students work individually to convert the fractions and decimals.



Assessment and Evaluation

Formative Assessment:

- Observe students during guided and independent practice.
- Review student worksheets and assignments.

Summative Assessment:

- Administer a quiz or test to assess student understanding.

Conclusion

In conclusion, the Introduction to Fractions and Decimals with Online Manipulatives lesson plan is designed to introduce 12-year-old students to the fundamental concepts of fractions and decimals, utilizing online manipulatives to enhance their understanding and engagement.



Teacher Reflection Space

Pre-Lesson Reflection:

- What challenges do I anticipate?
- Which students might need extra support?
- What backup plans should I have ready?

Post-Lesson Reflection:

- What went well?
- What would I change?
- Next steps for instruction?



Additional Resources

Online Resources:

- Khan Academy
- Math Open Reference

Textbooks and Workbooks:

- Fractions and Decimals textbook
- Fractions and Decimals workbook



Appendices

Appendix A: Fraction and Decimal Worksheets

- Worksheets for practice and assessment

Appendix B: Online Manipulatives

- GeoGebra
- Math Playground

