Introduction to Fractions

Read the following introduction to fractions and answer the questions that follow:

Understanding fractions is a critical component of mathematics education, as it lays the groundwork for more complex mathematical concepts. This lesson plan is designed to introduce 8-year-old students to the concept of fractional parts and comparing sizes, focusing on developing their understanding of fractions as a way to represent part of a whole.

1. What is a fraction?

2. Why are fractions important in mathematics?

What are Fractions?

Read the following explanation of fractions and complete the activities:

A fraction is a way to show part of a whole. It consists of a numerator (the top number) and a denominator (the bottom number), which represents the total number of equal parts the whole is divided into.

Activity:

Match the following fractions to their equivalent fractions:

Fraction	Equivalent Fraction
1/2	_____
1/4	_____ Page
3/4	_____

Real-Life Fractions

Identify the fraction of the shaded part in each picture:

Activity:

Look at the following pictures and write the fraction of the shaded part:

Picture	Fraction
Picture 1	_____
Picture 2	_____
Picture 3	_____

Fraction Comparison

Compare the sizes of the following fractions:

1. 1/2 and 1/4: _____

2. 3/4 and 2/3: _____

3. 1/6 and 1/8: _____

Creating Fractions

Create a fraction to represent the shaded part of each picture:

Activity:

Look at the following pictures and write the fraction of the shaded part:

Picture	Fraction
Picture 1	_____
Picture 2	_____
Picture 3	_____

Word Problems

Solve the following word problems:

1. If I have 1/2 of a cake and I eat 1/4 of it, what fraction of the cake is left?

2. A bookshelf has 5 shelves, and 2/5 of the books are fiction. If there are 50 books in total, how many fiction books are there?

Assessment

Complete the following assessment activities:

1. Complete the activities and word problems.
2. Draw a picture to represent a fraction of your choice.
3. Write a short paragraph explaining what you learned about fractions.

Extension

Choose one of the following extension activities:

Activity:

1. Create a fraction chart to show the relationship between different fractions.
2. Design a recipe that involves measuring ingredients using fractions.
3. Create a piece of art that incorporates fractions.

[Space for extension activity]

Glossary

Define the following terms:

- Fraction: _____
- Numerator: _____
- Denominator: _____
- Equivalent Fractions: _____

Answer Key

Check your answers with the following answer key:

Answer Key:

Activity 1:

- 1/2 = 2/4
- 1/4 = 2/8
- 3/4 = 6/8

Activity 2:

- Picture 1: 1/2
- Picture 2: 1/4
- Picture 3: 3/4

Activity 3:

- 1/2 and 1/4: 1/2 is larger
- 3/4 and 2/3: 3/4 is larger
- 1/6 and 1/8: 1/6 is larger