

# LESSON PLAN

**Subject:** Math 3<sup>rd</sup> Grade

**Lesson:** Concept of Fractions

**North Carolina Essential Standards Addressed:**

NC.3.NF.1  
NC.3.NF.2  
NC.3.NF.3  
NC.3.NF.4

**Learning Objectives:**

- Develop understanding of fractions as numbers.
- Understand a fraction  $1/b$  as the quantity formed by 1 part when a whole is partitioned into  $b$  equal parts; understand a fraction  $a/b$  as the quantity formed by  $a$  parts of size  $1/b$ .
- Explain equivalence of fractions in special cases and compare fractions by reasoning about their size.
- Recognize and generate simple equivalent fractions, e.g.,  $1/2 = 2/4$ ,  $4/6 = 2/3$ . Explain why the fractions are equivalent, e.g., by using a visual fraction model.
- Express whole numbers as fractions and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form  $3 = 3/1$ ; recognize that  $6/1 = 6$ ; locate  $4/4$  and 1 at the same point of a number line diagram.
- Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols  $>$ ,  $=$ , or  $<$ , and justify the conclusions, e.g., by using a visual fraction model.

By the end of this lesson the student should be able to understand fractions as being part of a whole. They should be able to convey that fractions compiled together make up a whole and can be added, subtracted, multiplied, and divided.

**Presentation of Knowledge, Ideas, and Objectives:**

- Present information, findings, and supporting evidence such that students can follow the line of reasoning and the organization.
- Present information, findings, and supporting evidence in such a way that the development of the lesson and style of the lesson are appropriate to task, purpose, and audience.
- Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentation.
- Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English.

**Materials Needed:** Video Review, worksheets, and pencils.

# LESSON PLAN

## Understanding Fractions:

Use the photos and what they represent to solve the problems.



1 or a Whole



equal to  $\frac{1}{2}$



equal to  $\frac{1}{4}$



equal to  $\frac{1}{8}$

1. The Spanish Coin pictured below represents 1 or a whole. Write the answer to the photo problem in fraction. Write the equation and the answer.



Minus or take away -



This would be or equal what fraction?

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} =$$

2. The Spanish coin pictured below represent 1 or a whole. Write the answer to the photo problem in a fraction. Write the equation and the answer.



Minus or take away -



This would be or equal what fraction?

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} =$$

3. The Spanish coin pictured below represent 1 or a whole. Write the answer to the photo problem in a fraction. Write the equation and the answer.



Minus or take away -



This would be or equal what fraction?

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} =$$

# LESSON PLAN

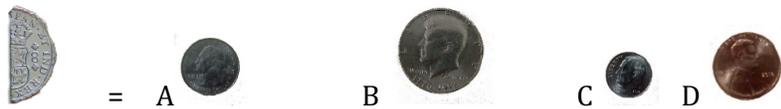
## Comparisons and Equivalents:

Look at the Spanish dollar and circle the equivalent of a coin or money we would use today.

1.



2.



3.



### 4. Bonus

This one is tricky so be careful!!! It may take several coins and a fraction to make the equivalent:



## LESSON PLAN

Answer Key:

1. A, the coin dollar
2. B, the half dollar
3. C, the quarter
4. Bonus Answer A. The equivalent of  $\frac{1}{8}$  of a dollar is 12.5 cents. It takes 8 parts to make up the whole dollar. Multiplying  $8 \times 12.5 = 1.00$  is a way they can check their answer.

Answer Key:

1. C, China
2. B, China
3. The Spanish Dollar
4. D, Marco Polo
5. An Equivalent Answer: The Spanish Coin or Pieces of Eight was made from silver because it was a soft metal and could easily be cut into smaller portions such as  $\frac{1}{2}$ ,  $\frac{1}{4}$  and smaller fractions for bits.
6. An Equivalent Answer: To trade an item or service that you have to someone for payment or for another item that they have that you need or want.