

# Finlandia University Lesson Plan

Name: LeAnn Larson

Subject: Mathematics

Grade Level: 4

Number of Students: 20

Length: 40 minutes

## **Pre-Instructional:**

*Mathematics Section*

*Patterns, Relationships, and Functions*

Content Standard 1: Students recognize similarities and generalize patterns, use patterns to create models and make predictions, describe the nature of patterns and relationships, and construct representations of mathematical relationships.

### Benchmark- Elementary

1. Recognize, describe and extend numerical and geometric patterns.
4. Explore various types of numeric and geometric patterns (repeating, growing, and shrinking).
5. Apply their experiences with patterns to help solve problems and explore new content.

*Number Sense and Numeration*

Content Standard 1: Students experience counting and measuring activities to develop intuitive sense about numbers, develop understanding about properties of numbers, understand the need for and existence of different set of numbers, and investigate properties of special numbers. (Concepts and Properties of Numbers)

### Benchmark- Elementary

1. Develop an understanding of whole numbers and read, write, and count using whole numbers; investigate basic concepts of fractions and decimals.

Content Standard 3: Students investigate relationships such as equality, inequality, inverses, factor and multiples, and represent and compare very large and very small numbers. (Number Relationships)

Benchmark- Elementary

2. Use part-whole relationships to explore numbers, develop number concepts and understand computation.

*Probability and Discrete Mathematics*

Content Standard 2: Students investigate practical situations such as scheduling, routing, sequencing, networking, organizing, and classifying, and analyze ideas like recurrence relations, induction, iteration, and algorithm design. (Discrete Mathematics)

Benchmark- Elementary

1. Use manipulatives and diagrams to explore problems involving counting and arranging objects.

Number and Operations

Understand Fractions:

N.ME.04.20- Understand fractions as parts of a set of objects.

N.ME.04.21- Explain why equivalent fractions are equal, using models such as fraction strips or the number line for fractions with denominators of 12 or less, or equal to 100.

Objectives

1. As a result of this lesson students will have a basic understanding of what fractions are.
2. As a result of this lesson students will be able to use a chocolate bar as a manipulative to show examples of real life fractions.
3. As a result of this lesson students will be able to make a list of fractions that they see or use in their everyday lives.

Materials/ Special Arrangements/ Individual Modifications

- Pallotta, Bolster. The HERSHEY'S Mile Chocolate Fractions Book. Scholastic Inc, 1999.
- Chalkboard/Chalk
- HERSHEY'S Chocolate bars (one per student)

## **During Instruction**

1. The teacher will introduce the learning goal to the students: "Understand fractions as parts of a set of objects." (write the learning goal on the board, have the students repeat the goal twice) The teacher will then define the term fraction: a part or portion of a whole. Ask the students if they can think of any real life examples of fractions. The teacher will then explain that today they will be using chocolate to learn math!

### 2. Developmental Activities

- The teacher will read the book "The Hershey's Milk Chocolate Fractions Book" to the students and have them follow along with the directions the book is giving at the time.
- The teacher will take each page step by step with the students using each page as a new learning opportunity for new concepts and numbers.
- Students will follow the directions of the teacher and the book as instructed.
- Once the teacher is finished reading the book the class will have a discussion about the activity that they just completed.

## Concluding Lesson

The teacher will again ask the students about their learning goal for today and have them repeat it. The teacher will explain that the chocolate bar is only one example of fractions that you can find in the real world.

## Follow- Up Activity or Assignment

The students will be encouraged to go home and make a list of examples of fractions that they see or encounter in their lives.

## **Post-Instructional**

### Evaluation of Student Learning

Students will be evaluated on their behavior and participation during the lesson and activity as well as their general understanding of fractions.