Model Lesson Plan: Fractions as Numbers

Background Information	
Content/Grade Level	Mathematics/Grade 3 Domain-3.NF Number and Operations—Fractions Cluster: Develop understanding of fractions as numbers. • The Common Core stresses the importance of moving from concrete fractional models to the representation of fractions using numbers and the number line. Concrete fractional models are an important initial component in developing the conceptual understanding of fractions. However, it is vital that we link these models to fraction numerals and representation on the number line. This movement from visual models to fractional numerals should be a gradual process as the student gains understanding of the meaning of fractions.
Unit	Develop Understanding of Fractions as Numbers
Essential Questions/Enduring Understandings Addressed in the Lesson	• What is a fraction? • How are fractions related to whole numbers? • Why is the unit fraction an essential concept in understanding fractions in general? • How can I use what I know about whole numbers to help me better understand fractions of a whole? • How can I represent fractions in multiple ways? • Why is it important to compare fractions as representations of equal parts of a whole or of a set? • If you have two fractions, how do you know which is greater or has more value? • How does the size of the whole or set impact the relative value of the fraction named? • Is $\frac{1}{4}$ of a large pizza necessarily smaller than $\frac{1}{2}$ of a small pizza? How do you know? • Fractions are numbers. • Fractions are an important part of our number system. • Fractions are an integral part of our daily life and an important tool in solving problems. • Fractions can be used to represent numbers equal to, less than, or greater than 1. • Fractional parts are relative to the size of the whole or the size of the set. • There is an infinite number of ways to use fractions to represent a given value. • A fraction describes the division of a whole (region, set, segment) into equal parts. When dividing whole units to into equal parts, some part of the whole must be given to each sharer. • The more fractional parts used to make a whole, the smaller the parts. .
Standards Addressed in This Lesson Topic	3.NF.1 Fractions--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*.