

Unit Guide

A Fractional Song

Ellen Shackelford

This unit can vary from two weeks to four or five, depending on the prior musical knowledge of the students. Classes who know how to write musical pitches as notes in the Treble Clef and rhythmic note values will need less time. Other classes will have to establish the foundation of musical notation before adding mathematics. The unit is geared for a fourth or fifth grade elementary classroom. The unit aims to integrate addition of fractions, using common denominators, as well as multiplication of fractions by two and one half. The students will be using melodies, both provided to the students and composed by the students. The rhythms of the melodies will be represented using conventional notation which is converted into fractions so that the students can access the mathematical concepts of combining fractions with uncommon denominators by converting them to a common denominator. After completing these tasks, students will then multiply the note value by two and then by one half. After the notes have been converted mathematically, the students will listen to the differences in the melodies in order to make conclusions about the differences they hear.