Rachel B Manspeaker\* (rbm001@math.ksu.edu), 126 Cardwell Hall, Manhattan, KS 66502, and Andrew Bennett, Hien Nguyen and Peter Nguyen. Using Art to Inspire Conceptual Understanding of Fractions.

Fractions and units are difficult concepts for many students. The literature indicates that many teachers rely on only one or two models of the notion of a fraction (typically pie slices) and this may limit their pedagogical success. During a two-week workshop for middle-level mathematics teachers, we worked on strengthening the teachers' understanding of mathematical concepts and their abilities to explain those concepts to students of varied backgrounds and interests by making connections between mathematics and art. In this talk we will discuss several unusual and illuminating models of fractions in the context of art and music that were developed with teachers during the workshop. (Received September 21, 2010)