MUSIC & FRACTIONS CONNECTION

Learning Target OR Standards & Connections

- CCSS.MATH.CONTENT.3.NF.A.3.B - 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.
- CCSS.MATH.CONTENT.3.NF.A.3.A - Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
- NCAS Anchor Standard #1 - Generate and conceptualize artistic ideas and work.
- NCAS Anchor Standard #2 - Organize and develop artistic ideas and work.

Essential Outcome(s)	Level(s)
Students will… • Identify equivalent fractions and be able to compare fractions to musical notes.	Elementary

Activity/Project

1. **Review/Prework:** Discuss and review music notes as fast or slow and why. Also know what those note speeds are called.
2. Discuss and review sizes of each fraction when comparing to each other.
3. Discuss/demonstrate/review how to use the piano roll within Soundtrap.
4. Discuss and review the quantization used for each 1/2, 1/4, and whole.
5. In a large group, discuss equivalencies from the Soundtrap demonstration.
6. **Activity:** Break the group up in smaller groups (establish group norms/roles).
7. Then students in small groups will try each note to get a feel for how the notes in the piano roll work using the information they have about fractions.
8. Perform – each group will play their creation for the class (be sure to have them plug into the front board so there is a visual for the other students).
9. **Closure:** As a class, discuss the fractions and notes what they learned about fractions and how they relate to musical notes. Make a cut and paste chart of notes as a resource to tell how the notes are written as and equivalent to fractions.

Extended Learning

1. Work with a small group to create musical creations of fast and slow notes.
2. Illustrate your creations with the class or your group
3. Add loops from the pre-recorded loop library to snazz it up!

The author of this is Meredith Allen. Meredith is currently an Educational Specialist for Soundtrap. Prior to joining the Soundtrap team, Meredith served as an Instructional

Technology Consultant at Prairie Lakes Area Education Agency in Iowa. Preceding her consulting, Meredith taught instrumental music, K-7 technology and facilitated a district's Virtual Reality Education Pathfinders program. She also served on their District Leadership Team, served as the district's Technology Integrationist, and assisted with implementation of the district's 1:1 computing initiative.Meredith has a Master's of Science in Technology for Education and Training and participated in the 2016 Iowa cohort of the national Teacher Leadership Initiative.