Lesson 5.02: EarSketch Music ## Learning Objectives Students will be able to... * Define and identify: **rhythm**, **beat**, **tempo**, **measures**, `setEffect()`, `makeBeat()` * Demonstrate beats using the functions * Demonstrate a loop through items in a list ## Materials/Preparation * [Do Now] * [Lab - EarSketch Music] ([printable lab document]) ([editable lab document]) * [EarSketch Editor] * Associated Reading in EarSketch * Read through the do now, lesson, and lab so that you are familiar with the requirements and can assist students ## Pacing Guide | **Duration** | **Description** | | ---------- | ----------- | | 5 Minutes | Do Now | | 10 Minutes | Lesson | | 35 Minutes | Lab | | 5 Minutes | Debrief | ## Instructor's Notes ### 1. Do Now * Students should be given time to read unit 2 of the EarSketch documentation. * Students should answer the questions included in the do now and be prepared to discuss them as a class. ### 2. Lesson * Call on students to discuss the answers to the questions from the Do Now. #### Recap t**he following key concepts from the reading * **Rhythm**: describing how the music moves through time. * **beat** is the basic unit of time in music. * clapped along to a song, you are clapping on each beat. * The length of a beat depends on the overall speed of the song, called the *tempo*. * Beats are grouped into **measures**. In EarSketch, measures always have four beats. * **`makeBeat()`:** instead of composing at the measure-level, we can work at the note-level. * **parameters:** clip name, track number, measure number, beat string * **Tempo** is measured in beats per minute (bpm). * Clapping at 60 bpm, each beat lasts one second. * At 120 bpm, each beat takes half a second. * The higher the bpm, the faster the song and the shorter the duration of each beat. * **`setEffect()`:** add an effect to a track. * **Takes parameters:** track number, effect name, effect parameter, effect value ### 3. Lab * Follow the EarSketch instructions in the lab to use the `makeBeat()` function * Create a simple song with 2 uses of `fitMedia()`, 2 uses of `makeBeat()` and 1 use of an effect. ### 4. Debrief * Talk about the new functions learned today, and go over any questions about data types and using strings. * Have students write down two things they have learned so far in Earsketch. ## Accommodation/Differentiation Students can use looping and if statements to their song as an extension activity to make their songs more complex. Students will likely bring a wide range of background knowledge around music and the related terminology. Offer additional support to those students that are less familiar with the terms being introduced in this lesson. ## Forum discussion [Lesson 5.02: EarSketch Music (TEALS Discourse Account Required)](https://forums.tealsk12.org/c/2nd-semester-unit-5-earsketch/lesson-5-02-earsketch-music) [Do Now]: do_now.md.html [Lab - EarSketch Music]: lab.md.html [EarSketch Editor]: http://earsketch.gatech.edu/earsketch2/ [printable lab document]: https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/5_unit/02_lesson/lab.pdf [editable lab document]: https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/5_unit/02_lesson/lab.docx