Unit 5 - Music Programming (Optional Unit)

This unit is a tremendous unit to learn how to use Python to code Music. If this is a stand alone computer science course, it is a great way to expose students to a great example of the power of Python. If you are preparing your students for the AP Computer Science A course and/or a certification, we recommend prioritizing units 6 and 7 and coming back to unit 5 if there is time at the end of the semester.

Essential Questions

* What is Modulo and how can you apply it to a loop in Python?
* How do you loop through the items in a list?

Pacing Guide

Timing

1 Day = 50 minute class period

Lesson	Days	Resources
5.01:	1	[5.01 Slide Deck]
5.02:	1	[5.02 Slide Deck]
5.03:	1	[5.03 Slide Deck]
5.04:	1	[5.04 Slide Deck]
5.05:	5	[5.05 Slide Deck]
Total Days	9	
Total Minutes	450	

Key Terms

* Digital Audio Workstation
* Sound tab
* fitMedia()
* setTempo()
* Modulo
* Section
* A-B-A form

[5.01 Slide Deck]: https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/5_unit/slidedecks/Intro%20Python%205.01%20TEALS.pptx
[5.02 Slide Deck]: https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/5_unit/slidedecks/Intro%20Python%205.02%20TEALS.pptx
[5.03 Slide Deck]: https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/5_unit/slidedecks/Intro%20Python%205.03%20TEALS.pptx
[5.04 Slide Deck]: https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/5_unit/slidedecks/Intro%20Python%205.04%20TEALS.pptx
[5.05 Slide Deck]: https://github.com/TEALSK12/2nd-semester-introduction-to-computer-science/raw/master/units/5_unit/slidedecks/Intro%20Python%205.05%20TEALS.pptx