

## Contents of Sound and Music Folder

There are 12 folders inside of the Sound and Music folder. Each folder contains a PowerPoint slide deck. The slide deck can be used as a PowerPoint or be imported into Google Slides. The folder also contains a PDF and Microsoft Word version of the Lesson Notes. Finally, there is an **Images** folder inside each of the folders. The images folder contains animations (usually .gif or .mp4), movies (usually .mp4), and graphics (usually .png) used in the slide deck. Often times there is a Microsoft Word document that contains the source of one or more line graphics. The availability of the MS Word document will allow teachers to manipulate any of the graphics as desired. All the images included in the PowerPoint slide deck are not necessarily saved in the Images folder. They can be edited within PowerPoint or Google Slides (if needed).

	<b>PowerPoint Topic</b>	<b>File Name</b>
1.	Sound as a Mechanical Wave	MechanicalWaves
2.	Sound as a Longitudinal and Pressure Wave	PressureWaves
3.	Sound Properties: Frequency, Wavelength, and Speed	SoundProperties
4.	Sound Intensity and the DeciBel Scale	DecibelScale
5.	Calculating Intensities and DeciBel Ratings	dBIntensityCalcns
6.	Sound Interference and Beats	SoundInterference
7.	Natural Frequency, Forced Vibration, and Resonance	Resonance
8.	Harmonic Frequencies and Standing Waves	Harmonics
9.	Physics of Open-End Air Columns	OpenEndAC
10.	Mathematical Analysis of Open-End Air Columns	OpenEndMath
11.	Physics of Closed-End Air Columns	ClosedEndAC
12.	Mathematical Analysis of Closed-End Air Columns	ClosedEndMath

In addition to the PowerPoints and Lesson Notes, the Sound and Music folder contains several animations and videos (and also graphics). You will find the following animations and videos included in the Sound and Music folder:

<b>Folder</b>	<b>File Name</b>	<b>Format</b>	<b>Duration</b>
MechanicalWaves	ParticleWave	.mp4, .gif	0:14
	TuningForkAnimn	.gif	0:05
SoundProperties	TuningForkAnimn#2	.mp4, .gif	0:15
DecibelScale	AmplitudeAnimation	.gif	0:15
SoundInterference*	CandRinterference	.gif	0:07
	ipl	.gif	0:08
	BeatsMovie	.mp4, .gif	0:42
	LongStandingWave	.mp4	0:25
Resonance*	InvertedPendula	.mp4, .gif	0:24
Harmonics	Harmonic1	.gif	0:08
	Harmonic2	.gif	0:08

	Harmonic3	.gif	0:08
	Harmonic4	.gif	0:08

\* We provided a second PowerPoint designed for importing into Google Slides.