

# 6th Grade - Unit 3 (Sound of Science)

Content Area: **Music**  
Course(s): **Music 6**  
Time Period: **Generic Time Period**  
Length: **6 Lessons**  
Status: **Published**

## Established Goals/Standards

---

MU.6-8.1.3A.8.Cn	Connecting
MU.6-8.1.3A.8.Cr	Creating
MU.6-8.1.3A.8.Pr	Performing
MU.6-8.1.3A.8.Re	Responding
MU.6-8.1.3A.8.Cr1	Generating and conceptualizing ideas.
MU.6-8.1.3A.8.Cr2	Organizing and developing ideas.
MU.6-8.1.3A.8.Pr4	Selecting, analyzing, and interpreting work.
MU.6-8.1.3A.8.Pr6	Conveying meaning through art.
MU.6-8.1.3A.8.Re7	Perceiving and analyzing products.
MU.6-8.1.3A.8.Re9	Interpreting intent and meaning.
MU.6-8.1.3A.8.Cn10	Synthesizing and relating knowledge and personal experiences to create products.
MU.6-8.1.3A.8.Cn11	Relating artistic ideas and works within societal, cultural and historical contexts to deepen understanding.
MU.6-8.1.3A.8.Cr1a	Generate and improvise rhythmic, melodic and harmonic phrases and harmonic accompaniments within basic forms (e.g., AB, ABA, Theme & Variations) and expanded forms (e.g., introductions, transitions, codas) that convey expressive intent. Explain connection to specific purpose and context (e.g., social, cultural, historical).
MU.6-8.1.3A.8.Cr2a	Select, organize and document personal musical ideas for arrangements, songs and compositions within expanded forms that demonstrate concepts such as tension and release, unity and variety, balance, and convey expressive intent.
MU.6-8.1.3A.8.Cr2b	Use standard and/or iconic notation and/or recording technology to document personal rhythmic phrases, melodic phrases and harmonic sequences.
MU.6-8.1.3A.8.Pr4a	Apply collaboratively and personally developed criteria for selecting music of contrasting styles for performance and explain expressive qualities, technical challenges and reasons for choices.
MU.6-8.1.3A.8.Pr4b	Compare the structure of contrasting pieces of music selected for performance, explaining how the elements of music are used in each.
MU.6-8.1.3A.8.Pr4c	Analyze selected music by sight-reading in treble or bass clef using simple rhythmic, melodic and/or harmonic notation.
MU.6-8.1.3A.8.Pr4d	Identify and explain how cultural and historical context inform performances and result in different musical effects.
MU.6-8.1.3A.8.Pr4e	Perform contrasting pieces of music, demonstrating as well as explaining how the music's intent is conveyed by their interpretations of the elements of music and expressive qualities (e.g., dynamics, tempo, timbre, articulation/style, phrasing).
MU.6-8.1.3A.8.Pr6a	Perform music with technical accuracy, stylistic expression and culturally authentic practices to convey the creator's intent.
MU.6-8.1.3A.8.Pr6b	Demonstrate performance decorum (e.g., stage presence, attire, behavior) and audience

	etiquette appropriate for venue, purpose, context, and style.
MU.6-8.1.3A.8.Re7a	Select programs of music (e.g., a playlist, live performance) and demonstrate the connections to an interest or experience for a specific purpose.
MU.6-8.1.3A.8.Re7b	Classify and compare how the elements of music and expressive qualities relate to the structure within programs of music (e.g., a playlist, live performance).
MU.6-8.1.3A.8.Re7c	Identify and compare the context of programs of music from a variety of genres, cultures and historical periods.
MU.6-8.1.3A.8.Re9a	Support with evidence personal interpretation of contrasting programs of music and explain how the application of the elements of music and expressive qualities, within genres, cultures and historical periods convey expressive intent.
MU.6-8.1.3A.8.Cn10a	Demonstrate how interests, knowledge and skills related to personal choices and intent when creating, performing, and responding to music.
MU.6-8.1.3A.8.Cn11a	Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.

## Essential Questions

---

- How do context and the manner in which musical work is presented influence audience response?
- How do performers interpret musical works?
- How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music?
- When is creative work ready to share?

## Enduring Understanding

---

- Explore how sound manipulation is done in studios for pop music, television, and film.
- Explore properties of sound using instruments manipulated by students.
- Groups add finishing touches to Science of Sound presentations.
- Introduce and define waveforms, frequency, amplitude, and reverberation.
- Introduce project and establish project goals.
- Students present their Science of Sound projects to the class and invited audience.

## Purpose

---

- The purpose of this lesson is for students to present their Science of Sound project to the class and to an audience.
- The purpose of this lesson is to assist groups in adding the finishing touches to their science of sound presentation.
- The purpose of this lesson is to establish the project goal, which is for groups to create a five-minute presentation that exemplifies an understanding of the science of sound. Students will present their research on sound waves and will include a demonstration of a QSynth original sound.
- The purpose of this lesson is to explore how sound manipulation is done in studios for television and film, and to continue working on the final project presentation.

- The purpose of this lesson is to explore properties of sound using instruments manipulated by students and to review project checklist.
- The purpose of this lesson is to reinforce the project objective and review other elements needed to build a foundation for the project. Introduce and define reverberation.

## **Key Student Objectives**

---

- Apply understanding of vibration, frequency, and amplitude to five found sounds.
- Define Amplitude.
- Define and recognize Waveforms.
- Define Frequency.
- Define Reverberation.
- Define Sound and Vibration.
- Discover how materials affect the sound of an instrument.
- Examine different found sounds and how they produce sound.
- Explain project goals and rubric for science of sound presentation.
- Explore a sound studio and understand the job of sound engineers.
- Finalize presentation points and ideas.
- Finalize projects in groups.
- Finish written and graphic presentations.
- Graciously receive congratulations for our group presentations.
- Present the science of sound project in a clear and well organized way.
- Thank the audience for coming.
- Trace the path of a sound wave through different materials.
- Understand the aural influence digital effects have when added to a piece of music.