

## **Learning Science through the Sound of Music**

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The topic of this unit is “Learning Science through the Sound of Music.” Understanding sound is part of the School District of Philadelphia’s Core Curriculum for ninth grade students in Physical Science. This unit will help students understand the nature of waves, and the properties of sound waves. Properties such as frequency, amplitude, and their relation to human’s perception of sound will be covered. It will extend for two weeks with ten days of class periods of 58 minutes each. Classes will be conducted in classroom, science lab, and music room and computer lab.

Students enthusiastically create, enjoy, and carry sound everywhere. In this unit students will learn principles of sound and sound waves to get a better understanding of what sound is, how sound travels, and how it is affected by the medium through which it travels. Activity-based learning skills will be an important part of the unit to enrich the learning experience for students. The unit will incorporate different activities, such as teacher demonstrations, computer animations, and lab experiments. Throughout the unit students will be developing math skills as well as reading and writing skills. Students will have opportunities to use the computer lab to view animations of concepts, conduct research, and learn the role technology plays for both the teaching and learning process.