

# Unit 10: Waves and Sound

Content Area: **Template**

Course(s):

Time Period:

Length:

Status: **Published**

## State Mandated Topics Addressed in this Unit

<u>State Mandated Topics Addressed in this Unit</u>	
N/A	N/A

## Unit Name

---

## Learning Objectives

---

- Can cell phones ring in space?
- How do waves interact?
- How do waves transfer energy?

## Essential Skills

---

- Contrast transverse and longitudinal waves.
- Describe how waves are reflected and refracted at boundaries between media and explain how waves diffract.
- Identify how waves transfer energy without transferring matter.
- Relate a wave's speed to the medium in which the wave travels.
- Relate the physical properties of sound waves to the way we perceive sound.

## Standards

---

SCI.HS-PS4-5

Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.

## Instructional Tasks/Activities

---

- Common assessment chapter test

- Common assessment quiz
- Constructed response
- Do now's and/or exit slips
- Exit Cards (answer to daily objective questions)
- Graphic organizers or models
- Guided practice
- Homework
- Homework
- Individual, small, and large group work
- Laboratory investigations within small groups
- Review Activity
- Section Review Questions
- Study Guide Packets
- Vocabulary flash cards or map (word, picture, sentence, example)

## **Assessment Procedure**

---

- Flashcards and/or drill and practice
- Inquiry based activities with reflective discussion
- Laboratory groups
- Lecture with note taking or guided notes
- Online models and simulators
- Power point presentations
- Whole and small group discussions

## **Recommended Technology Activities**

---

- Appropriate Content Specific Online Resource
- Chromebook
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Gimkit
- GoGuardian
- Google Classroom
- Google Docs
- Google Forms
- Google Slides
- Kahoot

- MagicSchool AI
- Other- Specified in Lesson
- Quiziz
- Screencastify

## **Accommodations & Modifications & Differentiation**

---

Accommodations and Modifications should be used to meet individual needs. Their IEP and 504 plans should be used in addition to the following suggestions.

## **Gifted and Talented**

---

- Compare & Contrast
- Conferencing
- Debates
- Jigsaw
- Peer Partner Learning
- Problem Solving
- Structured Controversy
- Think, Pair, Share
- Tutorial Groups

## **Instruction/Materials**

---

- alter format of materials (type/highlight, etc.)
- color code materials
- eliminate answers
- extended time
- extended time
- large print
- modified quiz
- modified test
- Modify Assignments as Needed
- Modify/Repeat/Model directions
- necessary assignments only
- Other (specify in plans)
- other- named in lesson
- provide assistance and cues for transitions

- provide daily assignment list
- read class materials orally
- reduce work load
- shorten assignments
- study guide/outline
- utilize multi-sensory modes to reinforce instruction

## **Environment**

---

- alter physical room environment
- assign peer tutors/work buddies/note takers
- assign preferential seating
- individualized instruction/small group
- modify student schedule (Describe)
- other- please specify in plans
- provide desktop list/formula

## **Honors Modifications**

---

## **Resources**

---

- Resource 1
- Resource 2
- Resource 3
- Resource 4
- Resource 5