

Rio Americano High School AP Physics 1

AP1.10 Waves & Resonance

[WASC+3/6/20]

1. M 3/9 – Introduction to Waves

- __Springboard: Introduction to Waves
- __TechLab Springboard: High Quiet Low Loud
- __Read Guide: Making Waves 1 & 2
- __Complete Job: Wave Basics
- __Complete Q&P < >

2. B1 3/10 – Vibrations and Sound

- __Demonstration: Slow-Motion Wobbler
- __Demonstration: Bell Jar
- __Complete Q&P < >

3. B2 3/11 – Waves Simulation

- __PhETLab: Water Waves in an Electric Sink
- __Read Guide: Wave Anatomy
- __Examples: Waves
- __YTHW: Mechanical Universe E18: *Waves*
- __Complete Q&P < >

4. r 3/12 – Vibrations and Sound

- __Demo: Back Masking+Science is Fun!
- __Read Guide: Making Waves 3 & 4
- __Complete Q&P < >

5. F 3/13 – Conceptual Physics Alive

- __Hewitt: Vibrations and Sound I
- __Read Guide: The Speed of Sound
- __Complete Q&P < >

6. M 3/16 – Candy Waves

- __Lab: Connect the Dots
- __Demonstration: Wave Machine 1
- __Complete Q&P < >

7. T 3/17 – Shock and Bow

- __Demonstration: Moving Sources
- __Video: Shock Waves and Sonic Booms
- __Complete Q&P < >

8. W 3/18 – Superposition and Interference

- __Read Guide: Harmonics
- __Demonstration: Wave Machine 2
- __Springboard: Interference in One Dimension
- __Complete Q&P < >

9. r 3/19 – Beats by db

- __TLSB: Wah-Wahs & Touch Tones
- __YTHW: Mechanical Universe E17: *Resonance*
- __Complete Q&P < >

10. F 3/20 – The Speed of Sound in Room B8

- __Lab: Fork it Over
- __Complete Q&P < >

11. M 3/23 – Interference in Two Dimensions

- __Springboard: Interference in 2 Dimensions
- __Complete Q&P < >

12. T 3/24 – Wrap-Up TCM

Test Correction Mastermind AP1.09 – SHM

13. W 3/25 - Test AP1.10: Waves+Resonance

Essentials of College Physics Textbook: Chapter 13 (Waves), 14 (Sound)

Hewitt Drew It Physics Screencasts: SOUND – Vibrations and Waves, Sound

*Make up Unit Test AP1.09 SHM as soon as possible; no later than F 3/20. AP make up tests are administered in two parts during ExploratoRio Season: one for multiple choice; one for free response.