



15.2

Lesson Plans



KEY
 SE = Student Edition, TWE = Teacher Wraparound Edition, TCR = Teacher Classroom Resources, STVS = Science and Technology Videodisc Series, PCA = Physics for the Computer Age

The Physics of Music

Section Objectives

- _____ Describe the origin of sound.
- _____ **Demonstrate** an understanding of resonance, especially as applied to air columns.
- _____ **Explain** why there is a variation among instruments and among voices using the terms *timbre*, *resonance*, *fundamental*, and *harmonic*.
- _____ **Determine** why beats occur.

National Science Content Standards UCP.1, UCP.2, UCP.3, A.1, A.2, B.6, C.6, G.1, G.3

Georgia QCC 1, 1.1, 1.2, 1.3, 1.4, 12, 12.3, 13, 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 24.1, 24.3

Schedule

Block schedule: 1 1/2 sessions
 Single-period schedule: 3 sessions

Focus

- _____ Activity, TWE p. 358

Teach

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| <ul style="list-style-type: none"> _____ Pocket Labs, SE pp. 360, 365 _____ Physics Lab, SE p. 362 _____ Biology Connection, SE p. 363 _____ Demonstration 15-2, TWE pp. 358–359 _____ Demonstration 15-3, TWE pp. 364–365 _____ Demonstration 15-4, TWE p. 366 _____ Quick Demos, TWE pp. 359, 361, 363 _____ Connections to Biology, TWE p. 363 | <ul style="list-style-type: none"> _____ Tech Prep, TWE p. 365 _____ Physics Journal, TWE p. 366 _____ Transparency 24 Master and Worksheet, pp. 49–50, TCR _____ Laboratory Manual, Lab 15.2, TCR _____ Physics Lab and Pocket Lab Worksheets, pp. 75–78, TCR _____ Spanish Resources, TCR |
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Assess/Reteach

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| <ul style="list-style-type: none"> _____ Section Review, SE p. 367 _____ Checking for Understanding, TWE p. 367 _____ Reteaching, TWE p. 367 _____ Study Guide, pp. 89–90, TCR | <ul style="list-style-type: none"> _____ Reteaching, p. 20, TCR _____ Supplemental Problems, TCR _____ Reviewing Physics: Mastering the Georgia QCC, TCR |
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Enrichment/Application

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| <ul style="list-style-type: none"> _____ Enrichment, TWE p. 361 _____ Cultural Diversity, TWE p. 361 _____ Extension, TWE p. 367 | <ul style="list-style-type: none"> _____ Enrichment, pp. 29–30, TCR _____ Critical Thinking, p. 21, TCR _____ Tech Prep Applications, pp. 23–26, TCR |
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Close

- _____ Closing Strategy, TWE p. 367

Chapter Assessment

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| <ul style="list-style-type: none"> _____ Chapter Review, SE pp. 368–371 _____ Assessment, TWE pp. 360, 366 _____ Chapter Assessment, pp. 69–72, TCR | <ul style="list-style-type: none"> _____ Alternate Assessment in the Science Classroom _____ Performance Assessment in the Science Classroom |
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Multimedia Options

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| <ul style="list-style-type: none"> _____ Videotape: MindJogger Videoquizzes | <ul style="list-style-type: none"> _____ TestCheck Software |
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