



19.2

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

Applications of Diffraction

Section Objectives

- _____ Explain how diffraction gratings form interference patterns and how they are used in grating spectrometers.
- _____ Discuss how diffraction limits the ability of a lens to distinguish two closely spaced objects.

National Science Content Standards UCP.2, UCP.3, A.1, A.2, E.1, E.2, F.6, G.3

Georgia QCC 1, 12.2, 12.4, 14.9, 15.1, 24, 24.3, 24.4, 24.5, 24.6, 24.7, 24.9, 24.10

Schedule

Block schedule: 1 1/2 sessions

Single-period schedule: 2 sessions

Focus

- _____ Activity, TWE p. 452

Teach

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| <ul style="list-style-type: none"> _____ How It Works, SE p. 453 _____ Help Wanted, SE p. 454 _____ Pocket Lab, SE p. 455 _____ Tech Prep, TWE p. 453 _____ Demonstration 19-2, TWE pp. 454–455 _____ Physics Journal, TWE p. 454 | <ul style="list-style-type: none"> _____ Quick Demo, TWE p. 454 _____ Physics Lab and Pocket Lab Worksheets, p. 105, TCR _____ Laboratory Manual, Lab 19.2, TCR _____ Spanish Resources, TCR |
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Assess/Reteach

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| <ul style="list-style-type: none"> _____ Section Review, SE p. 456 _____ Checking for Understanding, TWE p. 456 _____ Reteaching, TWE p. 456 _____ Study Guide, pp. 113–114, TCR | <ul style="list-style-type: none"> _____ Reteaching, p. 24, TCR _____ Supplemental Problems, TCR _____ Reviewing Physics: Mastering the Georgia QCC, TCR |
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Enrichment/Application

- _____ Extension, TWE p. 456

Close

- _____ Closing Strategy, TWE p. 456

Chapter Assessment

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| <ul style="list-style-type: none"> _____ Chapter Review, SE pp. 457–459 _____ Assessment, TWE pp. 455, 456 _____ Chapter Assessment, pp. 87–92, 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"> _____ CD-ROM: Diffraction and Interference of Waves, PCA _____ Videotape: MindJogger Videoquizzes | <ul style="list-style-type: none"> _____ TestCheck Software |
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