



8.1 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

Motion in the Heavens and on Earth

Section Objectives

- _____ Relate Kepler's laws of planetary motion to Newton's law of universal gravitation.
- _____ Calculate the periods and speeds of orbiting objects.
- _____ Describe the method Cavendish used to measure G and the results of knowing G .

National Science Content Standards UCP.1, UCP.2, UCP.3, A.1, A.2, B.4, E.2, G.1, G.2, G.3
Georgia QCC 1, 1.1, 1.2, 1.3, 1.4, 2.2, 3.2, 3.3, 3.4, 4, 7, 7.1, 7.2, 24.1, 24.3, 24.4

Schedule

Block schedule: 1 session
 Single-period schedule: 2 sessions

Focus

- _____ Discrepant Event, TWE p. 176

Teach

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| <ul style="list-style-type: none"> _____ Pocket Lab, SE p. 177 _____ Physics & Technology, SE p. 178 _____ Physics Lab, SE p. 179 _____ Using a Calculator, SE p. 181 _____ Demonstration 8-1, TWE pp. 180–181 _____ Applying Physics, TWE p. 180 _____ Physics Journal, TWE p. 182 _____ Quick Demo, TWE p. 183 | <ul style="list-style-type: none"> _____ Transparencies 11, 12 Masters and Worksheets, pp. 23–26, TCR _____ Graphing Calculators in the Science Classroom _____ Physics Lab and Pocket Lab Worksheets, pp. 37–39, TCR _____ Laboratory Manual, Lab 8.1, TCR _____ Spanish Resources, TCR |
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Assess/Reteach

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| <ul style="list-style-type: none"> _____ Section Review, SE p. 184 _____ Checking for Understanding, TWE p. 183 _____ Reteaching, TWE p. 184 | <ul style="list-style-type: none"> _____ Study Guide, pp. 43–46, TCR _____ Supplemental Problems, TCR |
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Enrichment/Application

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| <ul style="list-style-type: none"> _____ Cultural Diversity, TWE p. 177 _____ Enrichment, TWE p. 183 | <ul style="list-style-type: none"> _____ Extension, TWE p. 184 _____ Enrichment, pp. 15–16, TCR |
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Close

- _____ Closing Strategy, TWE p. 184

Chapter Assessment

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| <ul style="list-style-type: none"> _____ Assessment, TWE p. 181 _____ Alternate Assessment in the Science Classroom | <ul style="list-style-type: none"> _____ Performance Assessment in the Science Classroom |
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Multimedia Options

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| <ul style="list-style-type: none"> _____ CD-ROM: Interactive Physics _____ CD-ROM: Velocity; Orbital Motion, PCA _____ Videotape: MindJogger Videoquizzes | <ul style="list-style-type: none"> _____ Videotape: The Mechanical Universe, Quads 1, 4 _____ TestCheck Software |
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