



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

Change of State and Laws of Thermodynamics

Section Objectives

- _____ Define heats of fusion and vaporization.
- _____ State the first and second laws of thermodynamics.
- _____ Define heat engine, refrigerator, and heat pump.
- _____ Define entropy.

National Science Content Standards UCP.1, UCP.2, UCP.3, A.1, A.2, B.2, B.3, B.5, B.6, E.2, F.3, G.1, G.3

Georgia QCC 1, 1.2, 1.3, 3.4, 7.2, 9.1, 10, 10.2, 11, 11.1, 11.2, 11.4, 24, 24.3

Schedule

Block schedule: 2 1/2 sessions
Single-period schedule: 4 sessions

Focus

- _____ Discrepant Event, TWE p. 285

Teach

- _____ Help Wanted, SE p. 286
- _____ Pocket Labs, SE pp. 287, 294
- _____ Chemistry Connection, SE p. 289
- _____ Physics & Technology, SE p. 292
- _____ Demonstration 12-3, TWE pp. 286–287
- _____ Quick Demos, TWE pp. 288, 292
- _____ Tech Prep, TWE p. 291
- _____ Physics Journal, TWE p. 292
- _____ Transparencies 18, 19 Masters and Worksheets, pp. 37–40, TCR
- _____ Laboratory Manual, Lab 12.2, TCR
- _____ Physics Lab and Pocket Lab Worksheets, pp. 60–61, TCR
- _____ Spanish Resources, TCR

Assess/Reteach

- _____ Section Review, SE p. 294
- _____ Checking for Understanding, TWE p. 293
- _____ Reteaching, TWE p. 293
- _____ Study Guide, pp. 70–72, TCR
- _____ Supplemental Problems, TCR
- _____ Reviewing Physics: Mastering the Georgia QCC, TCR

Enrichment/Application

- _____ Enrichment, TWE pp. 288, 291
- _____ Cultural Diversity, TWE p. 290
- _____ Extension, TWE p. 293
- _____ Critical Thinking, pp. 17–18, TCR

Close

- _____ Activity, TWE p. 294

Chapter Assessment

- _____ Chapter Review, SE pp. 295–297
- _____ Assessment, TWE pp. 286, 291
- _____ Chapter Assessment, pp. 55–58, TCR
- _____ Alternate Assessment in the Science Classroom
- _____ Performance Assessment in the Science Classroom

Multimedia Options

- _____ **Videotape:** MindJogger Videoquizzes
- _____ **Videotape:** The Mechanical Universe, Quad 2
- _____ **Videodisc:** STVS Physics Disc 1, Side 1, Chs. 8, 9; Chemistry Disc 2, Side 1, Chs. 3, 8
- _____ **TestCheck Software**