

Rio Americano High School Conceptual Physics

CP.09 Heat [Chapters 21 & 22]

[12/20/17]

1. T 1/9 – Temperature + Mechanical Universe

- __Read §21.1 Temperature
- __Answer q. 1, 2, 3, 29, 30
- __Mech Univ: *Temperature & The Gas Laws*

2. W 1/10 – Heat & Thermal Equilibrium

- __Read §21.2 Heat
- __Answer q. 4, 5
- __Read §21.3 Thermal Equilibrium
- __Answer q. 6, 7
- __Hewitt Drew It 71. Heat and Temperature

3. r 1/11 – Internal Energy & Measurement of Heat

- __Read §21.4 Internal Energy
- __Answer q. 8, 33
- __Read §21.5 Measurement of Heat
- __Answer q. 9, 10

4. F 1/12 – Specific Heat Capacity & The High Specific Heat Capacity of Water

- __Read § 21.6 Specific Heat Capacity
 - __Answer q. 11, 12, 22, 36, 38
 - __Read §21.7 The High Specific Heat Capacity of Water
 - __Answer q. 13, 14, 34, 35, 37, 39, 42
 - __Hewitt Drew It 72. Specific Heat
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5. T 1/16 – Thermal Expansion + Demonstration

- __Read §21.8 Thermal Expansion
- __Answer q. 15, 16, 43, 44, 45, 46, 48
- __Demonstration: Ball & Ring
- __Hewitt Drew It 73. Thermal Expansion of Solids

6. W 1/17 – Expansion of Water + Conceptual Physics Alive

- __Read §21.9 Expansion of Water
- __Answer q. 17, 18, 19, 20, 41, 49
- __CPA: Temp, Heat, & Expansion
- __Hewitt Drew It 74. Thermal Expansion of Water

7. r 1/18 – Conduction

- __Read §22.1 Conduction
- __Answer q. 1, 2, 3, 4, 5, 21, 22, 24, 25
- __Hewitt Drew It 75. Heat Transfer

8. F 1/19 – Convection & Radiation

- __Read §22.2 Convection
 - __Answer q. 7, 8, 26, 31
 - __Read §22.3 Radiation
 - __Answer q. 9, 10, 11, 32
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9. M 1/22 – Conceptual Physics Alive

- __CPA: *Heat Transfer*

10. T 1/23 – Absorption & Emission of Radiation + Demonstration

- __Read §22.4 Absorption of Thermal Radiation
- __Answer q. 12, 13, 33
- __Read §22.5 Emission of Thermal Radiation
- __Answer q. 14, 15
- __Demonstration: Radiometer
- __Hewitt Drew It 76. Radiation

11. W 1/24 – Newton's Law of Cooling & Global Warming and the Greenhouse Effect

- __Read §22.6 Newton's Law of Cooling
- __Answer q. 16, 17, 35, 37
- __Read §22.7 Global Warming and the Greenhouse Effect
- __Answer q. 18, 19, 20, 39

12. r 1/25 – The Leidenfrost Effect + Demonstration

- __Kinetic Karnival: *The Leidenfrost Effect*
- __Demonstration: Leidenball

13. F 1/26 – Conceptual Physics Alive + Demonstration

- __Conceptual Physics Alive: *Radiation*
 - __Demonstration: Miracle Thaw
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14. M 1/29 – Clickers

- __Clicker Quiz CP.09 - Heat
- __Classwork Return
- __PracTest

15. T 1/30 – Unit Test CP.09 – Heat

- __Get Crossword CP.10 - Electrostatics
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Unit Test CP.09 will cover

Conceptual Physics Textbook: Ch. 21 & 22 – Heat, Temperature, and Expansion & Heat Transfer*****

Demos/Activities + Kinetic Karnival: *The Leidenfrost Effect*, Mechanical Universe: *Temperature and the Gas Laws****

Conceptual Physics Alive: *Heat, Temperature, and Expansion & Heat Transfer & Radiation***