

Rio Americano High School Conceptual Physics

CP.09 Heat [Chapters 21 & 22]

[7/20/17]

1. T 1/9 – Temperature + Mechanical Universe

- __ Read §21.1 Temperature
- __ Answer q. 1, 2, 3, 30, 32
- __ 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, 37, 38
- __ Read §21.7 The High Specific Heat Capacity of Water
- __ Answer q. 13, 14, 34, 35, 36, 39, 40, 42
- __ Hewitt Drew It 72. Specific Heat

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, 50
- __ 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, 23, 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

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, 34
- __ 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 Carnival: *The Leidenfrost Effect*
- __ Demonstration: Leidenball

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

- __ Conceptual Physics Alive: *Radiation*
- __ Demonstration: Miracle Thaw

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

Unit Test CP.09 will cover

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

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

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