

Rio Americano High School AP Physics 2 - 2016

AP2.03a Temperature and Heat [SUBJECT TO CHANGE]

1. B1 9/22 – Cosmos: A Spacetime Odyssey

Episode 2. Some of the Things That Molecules Do

2. B2 9/23 – Temperature Demos

demo: thermoscopes

Demo: Tower of Bottle

Guide*: Temperature Scales

Guide*: What IS Temperature?

Q&P < ____ >

3. r 9/24 – Kinetic Theory

TechLab: Bouncing Off the Walls

Q&P < ____ >

4. F 9/25 – Kinetic Theory by the Numbers

Springboard: Kinetic Theory

Job: Kinetic Theory

MU: Temperature and the Gas Laws

Q&P < ____ >

5. M 9/28 – Thermal Expansion

Demo: Ball & Ring

demo: bimetallic strips

Q&P < ____ >

6. B1 9/29 – Thermal Expansion

Demo: Pinocchio Pipe

Job: Felix Digby Desert

Q&P < ____ >

7. B2 9/30 – Heat

Springboard: Iceberg & Java

Guide*: The Compleat Guide to Heat

Q&P < ____ >

8. r 10/1 – Heat Capacity

Springboard: Specific Heat

Guide*: Specific Heat

Q&P < ____ >

9. F 10/2 – Hot Video!

Hewitt on Temperature, Heat, and Expansion

Q&P < ____ >

10. M 10/5 – Conduction

Springboard: The Conduction Bridge

Demo: Conductivity Spider

Guide*: Conduction

demo: flameproof paper

Q&P < ____ >

11 & 12. B 10/6 – Absorption/Emission Lab

TechLab: Canned Heat

demo: miracle thaw

Q&P < ____ >

13. r 10/8 – Convection

demo: the candle

Demo: Convectionator

Guide*: Convection

Q&P < ____ >

14. F 10/9 – Radiation

Demo: "Radiometer"

Guide*: Thermal Radiation

Q&P < ____ >

15. B 10/12 – Leidenfrost Effect + WeatherSchool

Kinetic Karnival: The Leidenfrost Effect

Skepticism: Firewalking

demo: bubble ball

PhyzJob: WeatherSchool 101/102

Hewitt on Heat Radiation

Q&P < ____ >

16. w 10/14 – Wrap-up [crazy short day]

Q&P < ____ >

17. r 10/15 – Test Correction Mastermind

18. F 10/16 - Unit Test AP2.03a

*PhyzGuides are available at phyz.org and via Schoology. They are no longer printed.

Essentials of College Physics Textbook: Chapters 10 and 11

Hewitt Drew It Screencasts: HEAT (All sections except for Thermodynamics)

Make up the previous unit test as **soon as possible**; no later than F 10/9. AP make up tests are administered after school only.