# **Rio Americano High School AP Physics 2** AP2.08 Advanced Light and Optics [2/6/20]

**1. r 2/6 – Cosmos: A Spacetime Odyssey** Episode 7. The Clean Room

# 2. F 2/7 – Unfinished Refractions

Springboard: Snell's Law (with sine) Lab Springboard: Using Snell to Find *n* Q&P Page/s < > APFR:

## 3. M 2/10 – Unfinished Refractions

Critical Angle (with arcsine) Lab Springboard: Using TIR to Find n Q&P Page/s < > APFR:

# 4. B1 2/11 – Image Characterization

Job: Image Characterization Job: Magnification Q&P Page/s < > APFR:

# 5. B1 2/12 – Image Formation

Lab Springboard: Reflections II Lab Springboard: Mirror Experience Guide: Mirror Measures Guide: Principal Rays for Mirrors Job: Ray Tracing 1 and 2 Q&P Page/s < > APFR:

## 6. r 2/13 – Launch Into Lenses

Springboard: Lens Experience Guide: Lens Lengths, Principle Rays Job: Ray Tracing 3 and 4 Q&P Page/s < > APFR:

## 7. F 2/14 - Corrective Lenses

Vision Defects Q&P Page/s < > APFR:

## --- PRESIDENTS' WEEK ----

# 8. M 2/24 – Water Lenses & Air Lenses

Springboard: Water Lenses Springboard: Air Lenses Job: Inverted Index Lenses Q&P Page/s < > APFR:

## 9. B1 2/25 – Looking Through the Glass EXP

Data Collection and Analysis Q&P Page/s < > APFR:

**10. B2 2/26 – Look Through Unknown Glass** Data Collection and Analysis

Q&P Page/s < > APFR:

# 11. r 2/27 – Numbers

Job: Number Crunching Job: Image Meta-Analysis YTHW - Mech Univ: The Wave Nature of Light Q&P Page/s < > APFR:

## 12. F 2/28 – Wave Interference

PhETLab: The Fringe of Optics Q&P Page/s < > APFR:

**13. M 3/2 – Wave Optics Math** Practice Problems Q&P Page/s < > APFR:

**14. B1 3/3 – Wrap Up** TCM AP2.07: Advanced Electromagnetism

## 15. B2 3/4 - Unit Test AP2.08: Adv. Optics

Essentials of College Physics Textbook: Chapters 22 Reflection and Refraction and 23 Mirrors and Lenses

Hewitt Drew It Screencasts: LIGHT: Reflection and Refraction

Make Up Unit Test AP2.07 as soon as possible; no later than Friday, 2/14. AP make up tests are administered after school only. Remember, notecards cannot be used on make-up tests.