

# Rio Americano High School Physics

## PHY.03 Circular Motion and Gravity

[6/6/18]

### 1. B1 10/9 – Cosmos: A Personal Voyage

\_\_ Episode II. *One Voice in the Cosmic Fugue*

### 2. B2 10/10 - Uniform Circular Motion Kinematics

\_\_ Springboard: Uniform Circular Motion

\_\_ Demonstration: Will It Go 'Round In Circles?

\_\_ Springboard: Forced to Go In Circles

\_\_ Read Guide: UCM Kinematics

\_\_ Complete Q&P < > Due \_\_\_\_\_

### 3. r 10/11 - Uniform Circular Motion Dynamics

\_\_ Kinetic Carnival: Rotation (Part 1)

\_\_ Springboard: Centripetal Force Bill

\_\_ Demonstration: Will It Go 'Round in More Circles?

\_\_ Complete Job: Proportional Reasoning—UCM

\_\_ Complete Q&P < > Due \_\_\_\_\_

### 4. \*F 10/12 – UCM in Space

\_\_ Video Demonstration: Space Oddity

\_\_ Examples: UCM & Gravity/Ref: Planetary Data

\_\_ YouTube: FedEx—The First Moon Office

\_\_ Complete Q&P < > Due \_\_\_\_\_

### 5. M 10/15 – The History of Gravity: SSR + More

\_\_ Read Guide [provided]: The History of Gravity 1

\_\_ Read Guide [provided]: The History of Gravity 2

\_\_ Complete Job: Superheroes of Gravity + Clickers

\_\_ Complete Q&P < > Due \_\_\_\_\_

### 6. T 10/16 – From Kepler to Newton

\_\_ Mechanical Universe: Kepler's Laws

\_\_ Springboard: Be Newton for a Day

\_\_ Complete Q&P < > Due \_\_\_\_\_

### w 10/17 – Top Gear: Rolling in a Reliant Robin

### 7. r 10/18 – Be Newton for a Day

\_\_ TechLab: The Laws of Attraction

\_\_ Complete Q&P < > Due \_\_\_\_\_

### 8. F 10/19 – Be Newton for Another Day

\_\_ LabQuiz: The Laws of Attraction

\_\_ Mechanical Universe: The Apple and the Moon

\_\_ Complete Job: Proportional Reasoning—Gravity

\_\_ Complete Q&P < > Due \_\_\_\_\_

### 9. †M 10/22 - Gravitational Constant and Orbits

\_\_ TechLab: Worlds of Wonder (Data Acquisition)

\_\_ Read Guide: Weighing the Earth

\_\_ Complete Q&P < > Due \_\_\_\_\_

### 10. B1 10/23 -- Orbits

\_\_ Worlds of Wonder (Data Share, Analysis)

\_\_ LabQuiz: Worlds of Wonder

\_\_ Complete Q&P < > Due \_\_\_\_\_

### 11. B2 10/24 – Test Correction Journal Day

\_\_ TCJ Quiz PHY.01 and TC Journal PHY.02

### 12. r 10/25 – Hewitt: Gravity I

\_\_ Conceptual Physics Alive: *Gravity I*

\_\_ Unit Work Return

\_\_ PracTest PHY.03 (Online)

### 13. F 10/26 – Unit Test PHY.03: UCM & Gravity

*Conceptual Physics* Textbook: Chapter 10 (UCM), Chapters 13-14 (Gravity)

Hewitt Drew It! YouTube Screencasts: (See <http://phys.org/hewittdrewit>) MECHANICS

Rotational Motion – Episodes 34, 36-38 (Circular Motion) (35=bonus lesson), Gravity – Episodes 44-48 (Gravity), Satellite Motion – Episodes 49-50 (Orbits)

**PhysGuides are available online at [phys.org](http://phys.org).**

\*Make up Unit Test PHY.02 as soon as possible; no later than F 10/12. Check the availability schedule on the board to see when you can come in. Unit tests made up after the posted date may result in the loss of the in-class TCJ journaling privilege on TCJ Day. In that case, journaling will have to be made up at lunch or after school.

†Your TCJ for the previous unit must be complete by this date. Only students with complete TCJs can take the TCJ Quiz and earn back up to half the points they missed on the corresponding unit test.