

Name: _____

Period: _____ Date: _____

SUPPLEMENTAL READING ACTIVITY

The Physics of Rollercoasters

Accelerometers: Theory and Operation

1. Read the articles *The Physics of Rollercoasters (thru "H")*, *Accelerometers: Theory and Operation*, and *Busch Gardens Ride and Accelerometer Information* from the class website.
2. Use the Cornell Notes system to take notes on the three articles. You have the following options:
 - a. You can print multiple copies of one of the forms on the following pages of this document and handwrite your notes.
 - b. You can use the MS Word form supplied below and type your notes.
 - i. You can then print your work and submit a hardcopy, or
 - ii. Upload the assignment to Focus. If you choose this option, you must use a filename in the format, "LastnameFirstinitialPerXAsgmtName". For example, "PhysDayMeasTool.doc"
 - c. You can take notes on notebook paper using the Cornell Notes format and submit the hardcopy.
3. When using this form, remember the **Five R's of Notetaking**:
 - a. **Record** – the most important or emphasized information
 - b. **Reduce** – and synthesize information wherever possible, making it as concise as you can
 - c. **Recite** – read your notes out loud
 - d. **Reflect** – and consider how this information is connected to your personal experiences and what you already know
 - e. **Review** – look over your notes more than once
4. As a minimum, you must include notes on the following topics:
 - a. From *The Physics of Rollercoasters*
 - i. Use of Stopwatches
 - ii. Use of Vertical Accelerometers
 - iii. Use of Horizontal Accelerometers
 - iv. Time Measurements
 - v. Vertical Acceleration Measurements
 - vi. Horizontal Acceleration Measurements
 - vii. Forces
 - b. From *Accelerometers: Theory and Operation*
 - i. Accelerometer

- ii. Vertical Accelerometer
- iii. Horizontal Accelerometer
- iv. Using Horizontal Accelerometer to Measure Height
- c. From *Busch Gardens Ride and Accelerometer Information*
 - i. Which rides have mounted accelerometers
 - ii. Which rides allow hand-held accelerometers with wriststraps
- 5. Notes may be typed or neatly printed. Drawings may be freehand, but try to make use of the ‘Shapes’ or ‘Insert Clipart’ functions of MS Word.
- 6. ***A reading assignment may contain drawings that would be useful in your notes. If you have scanning capability, you should practice scanning pictures and inserting them into documents. As you prepare for college, you should consider investing in a desktop printer-scanner-copier. Just remember that for formal reports you have to cite any images that you insert into your document. You don’t have to cite scanned images for this exercise unless you use a source other than the textbook.***

CORNELL NOTES and the 5 R's

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Name:
Date:
Topic:

Questions/Key Points	Notes
SUMMARY:	

