AP PHYSICS
Name:
Period: Date:



## GIANCOLI READING ACTIVITY

## Section 6-10

- 1. Big Idea(s): Changes that occur as a result of interactions are constrained by conservation laws.
- 2. Enduring Understanding(s): The energy of a system is conserved.
- 3. Essential Knowledge(s):
  - a. Energy can be transferred by an external force exerted on an object or system that moves the object or system through a distance; this energy transfer is called work.
  - b. Energy transfer in mechanical or electrical systems may occur at different rates.
  - c. Power is defined as the rate of energy transfer into, out of, or within a system. [A piston filled with gas getting compressed or expanded is treated in Physics 2 as a part of thermodynamics.]
- 4. Read section 6-10 in your textbook.
- 5. Use the Cornell Notes system to take notes on the lesson material. 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. You can upload the file to FOCUS. If you choose this option, you must use a filename in the format, "LastnameFirstinitialPerXAsgnmtName". For example, "SmithKPer4ReadActT9-3.doc"
  - c. You can take notes on notebook paper using the Cornell Notes format and submit the hardcopy.
- 6. 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
- 7. As a minimum, you must include notes on the following topics:
  - a. Power
  - b. Average Power
  - c. Watt
  - d. Horsepower

- e. Distinction Between Power and Energy
- 8. Note: The following computer skills should be practiced, but are not required:
  - a. Use Microsoft Equation to type any equations.
  - b. Drawings may be freehand, but try to make use of the 'Shapes', 'Insert Picture' or 'Insert Clipart" functions of MS Word.
  - c. 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.
  - d. 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.
- 9. Answers may be typed or neatly printed. You do not need to include this page of instructions with your assignment.

Reading Activity Lsn 6-10 Updated: 20-Jan-16 Page 2 of 4

Reflect – and consider how this information experiences and what you review – look over your notes more	Торіс:		
Questions/Koy Points	Notes		
Questions/Key Points	Notes		
SUMMARY:			

Name:

Date:

Topic:

**CORNELL NOTES** and the 5 R's

as you can **Recite** – read your notes out loud

**Record** – the most important or emphasized information

**Reduce** – and synthesize information wherever possible, making it as concise

Reading Activity Lsn 6-10 Updated: 20-Jan-16 Page 3 of 4

Name			
Date			

CORNELL **NOTES** 

Topic \_\_\_\_\_

Questions/key points	Notes
Summary	

Copyright © 2010 by John Wiley & Sons, Inc.

Graphic Organizers for Note Taking and Study Skills

77