

HIGH SCHOOL PHYSICAL SCIENCE A
Course Outline: 4305

I. Textbook Assignment Options:

- A. *Science Insights: Exploring Matter and Energy*, Part I (5.0 credits)
- Read: Chapters 1-12.
 - Complete: Questions 1 and 2 of all “Check and Explain” exercises.
 - Complete: “Chapter Review” exercises (**Omit: Make Connections**)
 - Complete one Extension Activity listed below.
- B. *Glencoe Physical Science*, Part I (5.0 credits)
- Read: Chapters 1-11.
 - Complete: “Section Review” questions 1 and 2.
 - Complete the following Chapter “Review” exercises:
 - a. “Reviewing Vocabulary”
 - b. “Checking Concepts”
 - c. “Understanding Concepts”
 - d. “Thinking Critically”
 - Complete one Extension Activity listed below.
- C. *Exploring Matter and Energy: Physical Science*, Part I (5.0 credits)
- Read: Chapters 1-11.
 - Complete: “Section Review” Definition Exercises.
 - Complete the following “Chapter Review” exercises:
 - a. “Building Vocabulary”
 - b. “Summarizing”
 - c. “Interpreting Information”
 - d. “Think and Discuss”
 - e. “Competency Review”
 - Complete one Extension Activity listed below.
- D. *Science Interactions*, Part I (1.0-5.0 credits: direct instruction or course contract required)
- E. *Conceptual Physical Science*, Part I (1.0-5.0 credits: direct instruction or course contract required)

II. Extension Activity Options:

1. Using the scientific method, design an experiment to test any concept discussed in this course. Use at least 10 slides to create a power point presentation that will outline each of the steps in your experiment.

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2. Write a 1-page essay about either nuclear, chemical, electromagnetic or heat energy. Use at least two resources in your research. Discuss how the energy is created, how it is used, and the pro's and con's of that energy form. Use Writing Rubric Exp. H.S.
3. Teacher generated activity, approved by the site administrator.

III. Evaluation

- See your teacher for a unit test.
- All Writing assignments must meet the proficient level of the rubric provided by the teacher.
- All textbook work must meet 70% accuracy level for a "C" grade.

HIGH SCHOOL PHYSICAL SCIENCE B
Course Outline: 4306

I. Textbook Assignment Options:

A. *Science Insights: Exploring Matter and Energy*, Part I (5.0 credits)

- Read: Chapters 13-25.
- Complete: Questions 1 and 2 in all “Check and Explain” exercises.
- Complete: “Chapter Review” exercises (**Omit**: Make Connections”)
- Complete one Extension Activity listed below.

B. *Glencoe Physical Science*, Part I (5.0 credits)

- Read: Chapters 12-25.
- Complete: “Section Review” Questions 1 and 2.
- Complete the following Chapter “Review” exercises:
 - a. “Reviewing Vocabulary”
 - b. “Checking Concepts”
 - c. “Understanding Concepts”
 - d. “Thinking Critically”
- Complete one Extension Activity listed below.

C. *Exploring Matter and Energy: Physical Science*, Part I (5.0 Credits)

- Read: Chapters 12-23.
- Complete: “Section Review” Definition Exercises.
- Complete the following “Chapter Review” exercises:
 - a. “Building Vocabulary”
 - b. “Summarizing”
 - c. “Interpreting Information”
 - d. “Think and Discuss”
 - e. “Competency Review”
- Complete one Extension Activity listed below.

D. *Science Interactions*, Part II (1.0-5.0 credits: direct instruction or course contract required)

E. *Conceptual Physical Science*, Part II (1.0-5.0 credits: direct instruction or course contract required)

II. Extension Activity Options:

1. Draw a computer graphics picture of how five separate pairs of elements bond with each other when they meet. Show at least two kinds of bonds. Include a caption telling what the new chemical is that each pair makes.
2. Create a PowerPoint presentation that includes at least ten slides that depict what happens during three different chemical reactions.

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3. Use the Internet to research endothermic and exothermic reactions. Write a 1-page essay based upon your research. Using a search engine such as Yahoo.com, and the search terms of “endothermic and exothermic,” you will find a supply of information. Use Writing Rubric Exp. H.S.
4. Teacher generated activity, approved by the site administrator.

III. Evaluation

- See your teacher for a unit test.
- All Writing assignments must meet the proficient level of the rubric provided by the teacher.
- All textbook work must meet 70% accuracy level for a “C” grade.