**Carbon Chemistry Chapter 9**

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**See** [**https://www.learningctronline.com/courses**](https://www.learningctronline.com/courses) **for Materials and Resources.**

**Topics:**

1. Carbon Chemistry

**Objectives:**

* Use the valence electron structure of carbon to explain its bonding tendencies
* Give examples of different carbon structures
* Define "hydrocarbon" and "saturated hydrocarbon/alkane"
* Describe the features of alkanes
* Describe the features of unsaturated hydrocarbons
* Discuss the forms of hydrocarbons found in fossil fuels
* Apply the general combustion reaction type to the combustion of fossil fuels
* Discuss the effects of incomplete combustion

TAKE NOTE

1. Guided Reading Note-Taking Worksheet (Pearson Text) (1 week)
2. Pearson Concepts in Action Worksheets
3. Lab Carbon Chemistry
4. Class Song “Hello My Students” (Make Learning Fun)
5. Upcoming Carbon & Nuclear Chemistry Test (Chapters 9-10)
6. Upcoming Semester Exam (Chapters 1-10) … due within 10 days after week 16’s class … study guide available.
7. Week 15 Devotional (<https://www.learningctronline.com/devotional>)

**Text**: Chapter 9: Carbon Chemistry pp. 260-289

**Guided Reading Note-Taking Worksheet:**

Complete the worksheet for Chapter 9: Carbon Chemistry (9.1 – 9.2).

**Class Notes: PowerPoint or PDF**

**Homework**:

* 9.1 Carbon Compounds Worksheet (Pearson Concepts in Action)
* 9.2 Substituted Hydrocarbons Worksheet (Pearson Concepts in Action)
* Assignments will be “spot checked” during class or submitted via email.

**Lab**: Carbon Chemistry

* Perform the lab as directed using the worksheet provided.
* Complete all calculations and data, showing work whenever appropriate.
* Conclusions should be answered in complete sentences that convey a complete thought.
* Save the documents into your LAB folder in the Physical Science folder on your desktop.
* *Assignments will be “spot checked” during class or submitted via email.*

**TEST:** The test will be given after next week’s lesson.

1. Carbon & Nuclear Chemistry Test after next week’s class.
2. Semester Exam after Carbon/Nuclear Test.

Supplemental Resources (Optional)

<http://somup.com/cY1FYPQTW9> Carbon: The Basis of Life, Hydrocarbons & Fossil Fuels (5:41)

[**http://somup.com/cYfoq0iegP**](http://somup.com/cYfoq0iegP) **Combustion Reaction: Calcium Carbide Canon (2:47)**

**(CH)x + O2 🡪 CO2 + H2O**

<http://somup.com/cYhDY6jUzU> A Light Shining in a Dark Place 2 Peter 1:19; Thy Word (4:15)