Your Name:	
	Date

The Carbon Cycle - A CrashCourse Summary

Use the information presented in the Crash Course video, Chemistry #46, to answer the following questions:

- 1. Describe the chemical composition of the early Earth's atmosphere.
- 2. Define: Greenhouse gas:
- 3. What role did early plants play in creating the Earth's atmosphere?
- 4. How did early plants contribute to Earth's carbon reservoir we find today?
- 5. Outline the relationship between reduced carbon, oxidized carbon, and organisms that feed on the reduced carbon
- 6. Use the space below to diagram the 30-second version of the carbon cycle as presented in the CrashCourse video (Chemistry #46). Be sure to include the moose.

- 7. What is the role of Carbon fixation in the carbon cycle? What organisms carry out this process?
- 8. What are the two ways that organisms can use the carbohydrate products of the redox carbon fixation reaction?
- 9. Describe the reaction that occurs between CO2 and water.
- 10. How do marine invertebrates use carbonate ions?
- 11. In what form is 80% of the planet's carbon stored?
- 12. List three examples of fossil fuels. How much of the Earth's Carbon is stored as fossil fuel?
- 13. The problem with combustion: calculate the amount of the annual CO2 produced by combustion that can be reabsorbed in one year. Show your work.

14. What is the effect of the non-absorbed CO2?