**Activity 3**

**The Carbon Cycle**

**Grade Level:** 5-8

**Time:** 45-60 minutes

**Learning Intention:** We are learning the components of the carbon cycle; photosynthesis, combustion, respiration, and decomposition.

**Objective:** Students will analyze information on the carbon cycle from the Informational video, Carbon Cycle and Global Warming.

**Overview:** In this activity, students are presented with an 8 minute video on the carbon cycle and global warming. Students will then read a text passage on the four main components of the carbon cycle. Finally, students will use a four square graphic organizer(or concept map) to define, illustrate, and explain the components of the carbon cycle.

**Materials Needed:**

* Internet Access
* Projector or Individual computers
* Holt Science & Technology: Environmental Science 2002
* 4 square graphic organizer
* Concept map (best in 11x17print)
* Colored pencils (optional)

**Success Criteria:** We will know we are successful when we can define, illustrate, and explain the four components of the carbon cycle.

**Activity:**

1. Begin class by reviewing the previous class’ lesson on carbon and how it released into the atmosphere.
2. Hand out the 4 square graphic organizer( or concept map) or having students copy it into their notebook. Explain that today you continuing your investigation on global climate change. Now that we know about what carbon is and how it is released into our environment, we want to take a closer look at how it moves through living things and our environment. Review the success criteria with the students.
3. View the video, Carbon Cycle and Global Warming. <http://youtu.be/1o4ODWMZq5U>
4. After viewing the video have students work in pairs to read the text on the carbon cycle. The text can be found on pages 31-32. You may want to make a copy of the text or print the attached copy for convenience. Students may be unfamiliar with terms such as respire. Referring to the written definition on the copied text or writing the definition on the board may be helpful.
5. Explain the 4 square graphic organizer(or concept map) with the students and have them use the text book to define, illustrate, and explain the four components of the carbon cycle. The use of colored pencils for illustrations is optional.