**Climate Change Collection Scorecard**

**Date:** 4/28/05  
**Reviewer:** Carrie Morrill  
**Name of resource:** What is the Carbon Cycle?  
**Sponsoring Organization:** UCAR, Project LEARN  
**URL:** http://www.ucar.edu/learn/1_4_2_15t.htm  
**Site Homepage:** http://www.ucar.edu/learn/  
**RESOURCE WITHIN A SITE?** Y / N  
**FOUND THROUGH DLESE?** Y / N  
**IF SO, WHICH COLLECTIONS?** DLESE Community Collection, CRS Annotated Collection

**RECOMMENDATION** YES YES WITH RESERVATIONS NO  
**STARS** 1 2 3 4 5 (LAME TO STELLAR)

**NARRATIVE:** Activity in which students brainstorm and map the carbon cycle: sources, sinks and release agents. Seems like it would be a dull activity. The recommended extension of making collages illustrating the cycle using newspapers and magazines is slightly more exciting.

**INTENDED USE**  
_ X REFERENCE  
_ X COMPUTER ACTIVITY  
_ _ NON-COMPUTER ACTIVITY

**EDUCATOR OR LEARNER OR BOTH** IF FOR LEARNER, EVIDENCE ITS BEEN TESTED? Y / N  
**BEGINNER** OR ADVANCED OR BOTH

**Easily Printed?** Y / N

**BUGS & TECHNICAL DIFFICULTIES** (PROBLEMATIC TO ROBUST)  
1 2 3 4  
**COMMENTS:** No outside links.

**SCIENTIFIC ACCURACY** (NATIONAL ENQUIRER TO NATIONAL GEOGRAPHIC)  
1 2 3 4  
**EVIDENCE IT HAS BEEN REVIEWED FOR ACCURACY?** Y / N  
**COMMENTS:** Background information is accurate and useful.

**PEDAGOGICAL INFORMATION**  
_ _ REFERENCE ONLY  
_ X TEACHER GUIDE  
_ X MATERIALS LIST  
_ X ASSESSMENT STRATEGIES  
_ X TIMEFRAME PROVIDED  
_ X STANDARDS ALIGNMENT

**PROMOTES STUDENT LEARNING** (WEAK TO STRONG)  
1 2 3 4  
**COMMENTS:** The activity seems unexciting even though it is constructivist.

**APPROPRIATE/EFFECTIVE MULTIMEDIA DESIGN** (WEAK TO STRONG)  
1 2 3 4  
**COMMENTS:** Graphics are appropriate.

**VISUAL APPEAL** (WEAK TO STRONG)  
1 2 3 4  
**COMMENTS:** Long web-page, lots of scrolling.

**TEACHING TIPS:** Here is another possible extension to make this activity more exciting: I once saw a water cycle game that students loved and that could be easily converted into a carbon cycle game. Set up stations around the room representing carbon reservoirs (ocean, atmosphere, rocks, plants, animals, etc). At each station there is a die and on each side of the die is another reservoir that carbon can flow into. For example, at the plant station there might be “animal”, “rock”, and “atmosphere”, and “stay in plant” on the die. For stations with a long residence time, such as “rock”, several sides of the die should say to stay in that reservoir. The students could help to define the stations and the sides of the dice based on their discussion and mapping of the carbon cycle. Then, play the game. Assign students to the various stations to begin. Everyone rolls the die at their station and then goes to the station indicated.
The teacher tells everyone to roll the die again and go to their new station, etc.

RECOMMENDATIONS FOR DEVELOPER: See comments on promoting student learning.