**Carbon Cycling Model**

**Learning target:** I can develop a model to describe the cycling of carbon.

**Directions:** Students will work in groups of 2 to 3 students. Students will be given class time to complete project.

Read page 85 before you start this project. Create a model to illustrate the carbon cycle and emphasize the ways that humans have altered the cycle. In designing this project include the following components: carbon reservoirs; processes that move carbon from one reservoir to another (I.e. burning a fossil fuel); human influence on carbon cycle; climate change; and solution to minimizing carbon in atmosphere to solve climate change.

**Presentation:** Students will present their finished project. The presentation will demonstrate the carbon cycle and explain why their team’s solution is the best. Tell the audience the evidence to support their solution, and the reasoning of why they think this will help solve the problem.

**Project Choice**

1. 3-D model, such as a diorama (shoebox model)
2. Original Song
3. Video
4. PowerPoint/Prezi
5. Other idea signed off by teacher.

**Scoring Rubric**

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| **Components** | **5 (Exemplary Rating)** |
| **Carbon Cycling****X 2** | 1. Model demonstrates that students have a good understanding of the cycle.
2. Carbon reservoirs are accurate
3. Processes that move carbon are accurate
4. Human influence is accurate
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| **Solution****X 2** | 1. Team has a well-thought-out solution to the problem.
2. The solution is well supported by evidence.
3. Students demonstrate sound reasoning.
4. Solution is creative
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| **Craftsmanship****X 1** | 1. Project demonstrates that the team put forth a great amount of effort.
2. Team members take great pride in work.
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| **Creativity****X 1** | 1. Team demonstrates imagination in the project.
2. Team shows that they “look outside of the box.
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