

Name:

Date:

Class:

Carbon Cycle Worksheet

Group roles: There are three people in your expert group. Each member should choose one of the following roles to make sure your group works productively:

- Timer - keeps track of time and keeps the group work moving forward.
- Reader - reads the instructions and rubrics for the group.
- Ambassador - asks questions that the group is unsure of.

Instructions: As a team, watch this video (<https://www.youtube.com/watch?v=jOht6qmuG-k>) which introduces the human impact on the carbon cycle. Next read the information provided at this link (<https://scied.ucar.edu/learning-zone/earth-system/biogeochemical-cycles>) to learn about the carbon biogeochemical cycle and then individually answer the questions below. Once each team member has answered these questions, discuss your answers as a group. If needed, additional research links are provided at the bottom of this document.

1. What is a biogeochemical cycle?

2. When does carbon move from a biotic factor to an abiotic factor?

3. When does carbon move from an abiotic factor to a biotic factor?

4. As a group, draw a picture of the carbon cycle. Each group member should contribute to the poster, for example: one member draws the images, one member writes the labels, one member draws the arrows. Arrows showing the movement of carbon in your poster should be drawn in brown. The poster should include:
 - Label the following terms on your poster: photosynthesis, cellular respiration, carbon dioxide, glucose
 - The following images need to be included on your poster: plants, animals, sun (please add more images as you see fit)
 - Identify carbon moving from a biotic factor to an abiotic factor
 - Identify carbon moving from an abiotic factor to a biotic factor
 - Include pictures and labels for at least three ways humans impact this cycle
 - Brown arrows showing the flow of carbon in the cycle

