

TEACHER VERSION (Suggested student responses included)

Field Wrap-Up

- 1) How does your calculated carbon storage (g C/m^2) compare to the estimate of carbon storage you made using the *Global Biomass Table*? Explain why there may be differences between the two values.
- 2) Suggest a way that someone might calculate the carbon storage in vegetation of your entire schoolyard, state or region based on your sample site values. (Hint: Is your sample site representative of the surrounding area?)
$$\text{Carbon storage } \text{gC/m}^2 \times \text{total vegetated area of schoolyard } (\text{m}^2) = \text{Total Carbon Storage}$$
- 3) How might we use these data to make further explorations of the local carbon cycle?
 - a) *Compare data to: classroom biomass activity (BiomassUnits), biomass for global biomes, data from other plots or classes at the same school, data collected by different schools (GLOBE database).*
 - b) *Use data to run and understand the Biomass Models.*
 - c) *Use data from previous collection years on the same plot to understand biomass change over time. The difference between year 2 and year 1 is growth over that year (carbon flux into the forest).*
- 4) **Unit Question:** How does your field plot relate to our study of the global carbon cycle?
*Plant carbon storage is one pool in the global carbon cycle. Photosynthesis and respiration move carbon between the plant pool and the atmosphere. Trees store a large amount of carbon because they are both large and abundant. *Many answers possible.*

Name:

Date:

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- 4) **Unit Question:** How does your field site relate to our study of the global carbon cycle?

