

## MEASURING CO<sub>2</sub> PRODUCTION USING SODA LIME: SUMMARY DATA FORM

Use this form to compile results from all of your samples.

Name(s) \_\_\_\_\_ Date \_\_\_\_\_

Date soil samples were collected \_\_\_\_\_

Describe the soil or compost samples listed on this page. Include soil sampling location, a description of the location, and any other useful information (such as sampling depth or observations about soil conditions at the sampling site).

If you carried out an experiment using treatments, such as worms vs. no worms, describe your treatments here.

Summarize your data in the table below (this may include relevant data from other students as well as your own). Use the numbers that you calculated on the **Data Form for Samples** to fill in Columns 3–5. The final column is for display of mean CO<sub>2</sub> production rates among replicate samples. If you carried out an experiment with treatments, then you will calculate separate means for each treatment.

| Soil sample ID# | Treatment or type of sample | Corrected soda lime weight gain (mg CO <sub>2</sub> ) | Total soil sample dry weight (kg) | CO <sub>2</sub> production rate (mg CO <sub>2</sub> /day/kg dry soil) | Mean CO <sub>2</sub> production rate for replicates (mg CO <sub>2</sub> /day/kg dry soil) |
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## SECTION 2. BIODEGRADATION PROTOCOLS

4. If you measured CO<sub>2</sub> in different treatments (e.g., presence or absence of worms), explain your results. Which treatment had higher levels of CO<sub>2</sub> production? What are some possible reasons for the differences?

5. If you had a chance to do a follow-up experiment, what would you do differently based on what you have learned? For example, can you think of other treatments that would be useful to investigate?

6. Why is it useful to measure decomposition rates in soil or compost?