



## Module 2: Waste-to-Resource Strategies in Agri-Food Systems

### Lesson B Quiz: Carbon Math

#### QUIZ LINKS:

[Module 2 Lesson B Quiz - Responder Link](#)

#### **Multiple Choice**

Despite no perfect solutions, why are these paths important?

- A. They guarantee zero waste instantly
- B. They make landfills produce electricity overnight
- C. They remove the need for any recycling programs
- D. They can close the landfill loop

When thinking about the  $\Delta\text{CO}_2\text{-eq}$ , positive  $\Delta$  means it: \_\_\_\_\_

- A. Removes all greenhouse gases
- B. Adds pollution
- C. Has no impact on the environment
- D. Creates only oxygen

Landfill = \_\_\_\_\_  $\text{CO}_2\text{-eq}$  per kg of orange peel

- A. +500 g
- B. +100 g
- C. +250 g
- D. +800 g

When thinking about the  $\Delta\text{CO}_2\text{-eq}$ , negative  $\Delta$  means it: \_\_\_\_\_

- A. Increases greenhouse gases
- B. Has no effect on emissions
- C. Reduces pollution
- D. Only changes the temperature

Which of the following is easiest to set up with a low cost?

- A. Anaerobic digester
- B. Compost
- C. Biochar kiln
- D. Biogas refinery

#### **True or False**

Insects produce more usable protein than biochar.

#### **Short Answer**

Briefly explain the case study mentioned in Lesson B about transforming campus waste.

Answer should:

- Discuss what the case study utilized
- Explain how the methods described in the case study was able to create healthy plants
- Be 3 sentences minimum

#### **Design Prompt**

If you were running a school that produced a certain amount of lunch waste, let's say around 40 kg, what types of paths would you use to reduce lunch waste? (Hint: Recall the campus scenario from Lesson B)

Requirements:

- Describe which paths you would use to reduce lunch waste
- Allocate how much waste could go towards your chosen methods
- Be 3-4 sentences minimum