

# Lab 1. Cellular Respiration: Do Plants Use Cellular Respiration to Produce Energy?

1. Susan and Jessica are having a discussion in science class about the process of cellular respiration. Susan makes the argument that animals use cellular respiration to produce energy based on the evidence that they breathe out carbon dioxide ( $\text{CO}_2$ ); she also said that plants do not use cellular respiration because plants release oxygen ( $\text{O}_2$ ) to the atmosphere. Jessica disagrees with Susan and claims that both plants and animals use cellular respiration. Who do you agree with, Susan or Jessica? Explain your reasoning.
2. Describe the similar structures and features of plant and animal cells that allow for cellular respiration to happen in both types of organisms.

3. In this investigation you measured the amount of gas in the biochamber with a sensor. Were those measurements data or evidence?
- a. Data
  - b. Evidence
  - c. Unsure

Explain your answer.

4. Scientists always agree on their observations, but may disagree on the inferences.
- a. I agree with this statement.
  - b. I disagree with this statement.

Explain your answer, using an example from your investigation about cellular respiration.

