

SC.912.L.18.9 – Photosynthesis and Cellular Respiration – Example 6 Answer

Two different species of bacteria are examined. Scientists find that species X always produces  $\text{CO}_2$  and  $\text{H}_2\text{O}$  during cellular respiration. Species Y always produces ethyl alcohol and  $\text{CO}_2$ . Which conclusion can be made from these observations?

- A. Only species Y is aerobic.**
- B. Only species Y is anaerobic.**
- C. Both species X and Y are aerobic.**
- D. Both species X and Y are anaerobic.**

Answer

- B. Only species Y is anaerobic.

Anaerobic cellular respiration converts sugars to ethyl alcohol and carbon dioxide in the absence of oxygen.