

Carbon Cycle Loop

Follow carbon through living things.

4.12 "Organisms and environments. The student describes patterns, cycles, systems, and relationships within environments. The student is expected to: investigate and explain how most producers can make their own food using sunlight, water..."

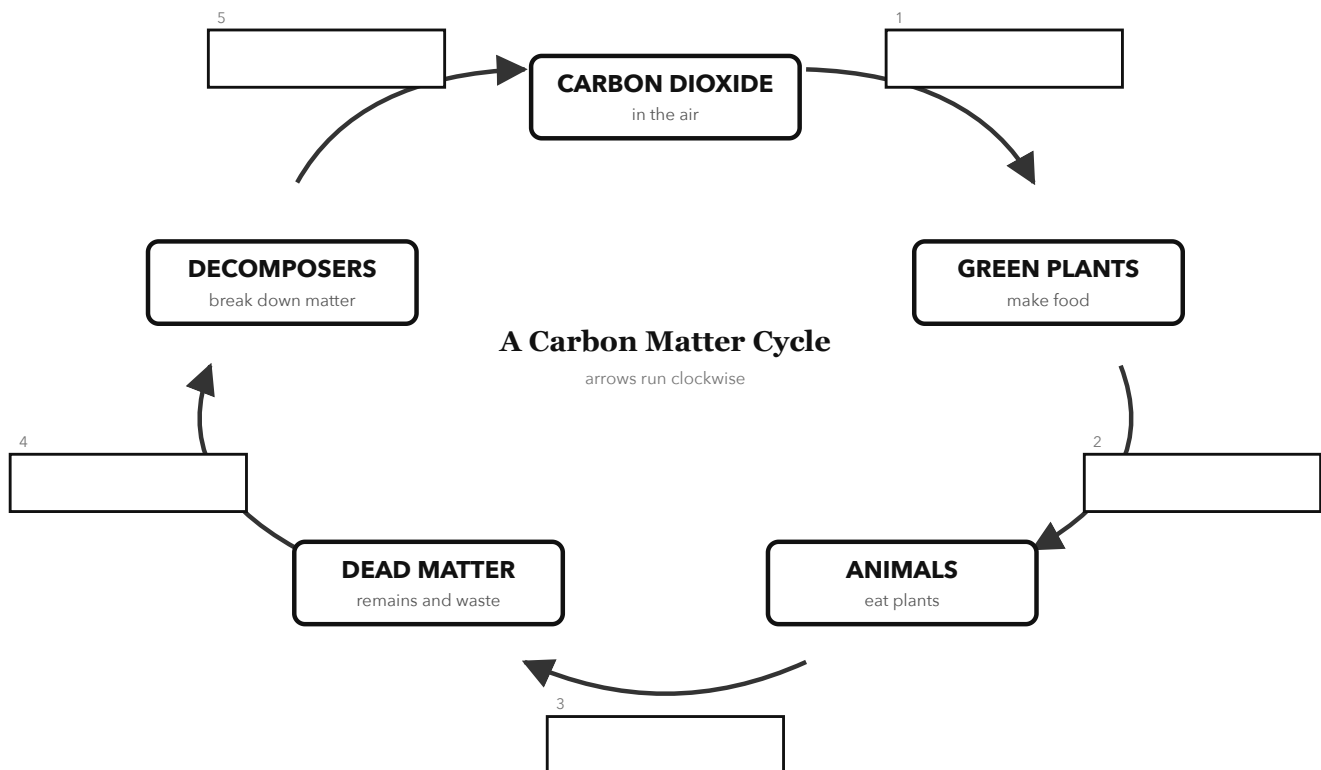
NAME _____

DATE _____

1 LABEL THE MODEL _____ Word bank below

Write one process from the word bank in each numbered box. Follow the arrows around the loop.

WORD BANK	death and waste	decomposition	eating	photosynthesis	respiration
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2 RUN THE MODEL Use your finished diagram

1 Which process uses sunlight to move carbon dioxide from the air into green plants?

2 What stage comes after ANIMALS in the completed model?

3 Which process returns carbon dioxide to the air?

3 CHECK IT Before you turn it in

☐ I wrote one process in each box.

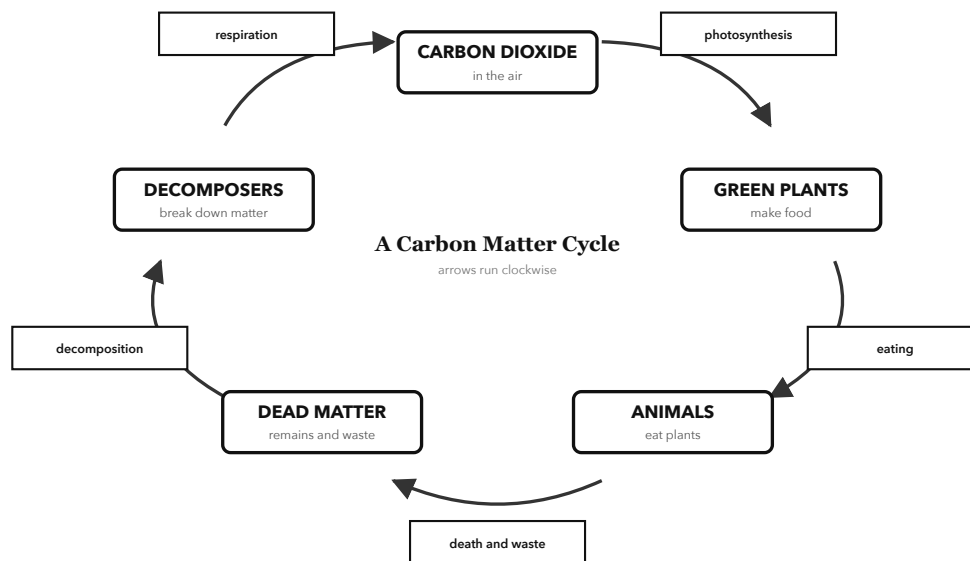
☐ I followed every arrow in order.

☐ I checked that the loop ends where it starts.

TEST THE MODEL

What is one part of the real carbon cycle that this model leaves out?

PART 1 • COMPLETED MODEL



PART 2 • RUN THE MODEL

1. **photosynthesis** (Which process uses sunlight to move carbon dioxide from the air into green plants?)
2. **DEAD MATTER** (What stage comes after ANIMALS in the completed model?)
3. **respiration** (Which process returns carbon dioxide to the air?)

TEST THE MODEL (SAMPLE ANSWERS)

- It leaves out carbon dioxide released when plants and animals respire.
- It leaves out sunlight and water used in photosynthesis.

Process order is photosynthesis, eating, death and waste, decomposition, and respiration. Dead matter includes remains and waste, and the model simplifies other ways carbon can move through the system.