

Matter Makes Loops

Track matter through a food web.

4.12.B “describe the cycling of matter and flow of energy through food webs, including the roles of the Sun, producers, consumers, and decomposers; and”

NAME _____

DATE _____

1 LABEL THE MODEL _____ Word bank below

Write one word-bank process in each numbered box. Match each process to the arrow between two stages.

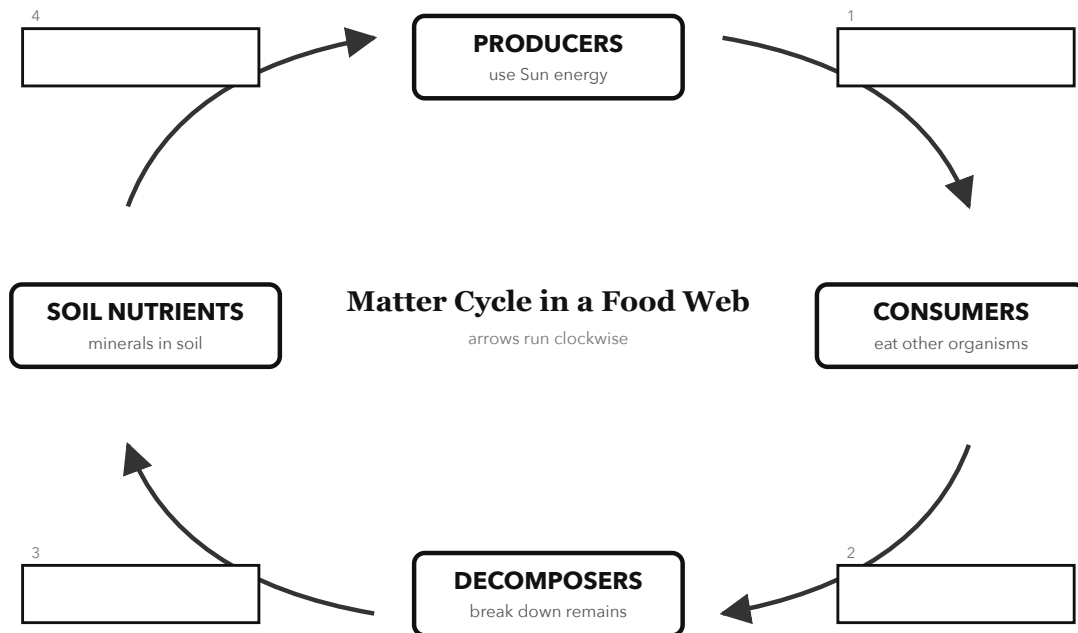
WORD BANK

death and waste

decomposition

feeding

nutrient uptake



2 RUN THE MODEL Use your finished diagram

1 Energy from the Sun enters the model through which stage?

2 After decomposers break down remains, what stage comes next?

3 Which process moves soil nutrients into producers?

3 CHECK IT Before you turn it in

☐ I matched each process to an arrow.

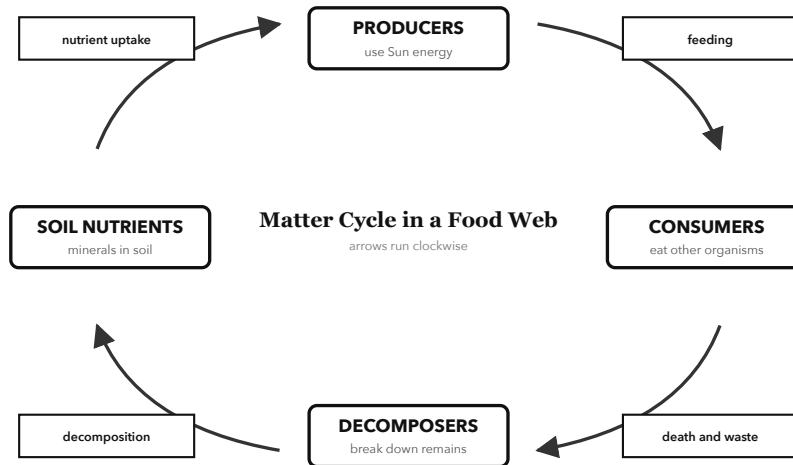
☐ I can identify producers and consumers.

☐ I can explain how decomposers return matter to soil.

TEST THE MODEL

What does this model leave out about how energy moves in a real food web?

PART 1 • COMPLETED MODEL



PART 2 • RUN THE MODEL

1. **Producers.** (Energy from the Sun enters the model through which stage?)
2. **Soil nutrients.** (After decomposers break down remains, what stage comes next?)
3. **Nutrient uptake.** (Which process moves soil nutrients into producers?)

TEST THE MODEL (SAMPLE ANSWERS)

- It leaves out that energy flows from the Sun and does not loop back.
- It leaves out heat released as energy moves between organisms.

This model shows matter cycling through producers, consumers, decomposers, and soil. Emphasize that the Sun provides energy to producers, but energy flows one way rather than cycling.