

Cycles of Matter (stuff) - Ecology part 2 LT4

Describe how matter cycles among the living and nonliving parts of an ecosystem.

MTS: I can define "cycles of matter".

ADV: I can explain the basic steps involved when discussing the water cycle and the carbon cycle.

MAS: I can determine the effects on the environment when the water cycle and carbon cycle are interrupted.

1. What two things are **recycled** in an ecosystem?

2. Through this _____ process, _____ are constantly being passed through _____ to non-living _____ and back again, over and over.

3. _____ is cycled through the _____ and _____ factors of an _____, moving between living things and _____ things, such as _____, _____, and _____.

4. Why does the water cycle not have a real starting or ending point?

5. There are four steps to the water cycle listed in the reading. Write them in your words on the lines below - be sure to include key vocabulary words.
 - I. _____
 - II. _____
 - III. _____
 - IV. _____

6. In the space to the right draw your best version of the water cycle from the diagram in the reading - be sure to include all four steps in the cycle.

Cycles of Matter - water and carbon stuff

8. Most of the water that is precipitated onto land is not absorbed by the soil. Instead, it is carried to the _____ by streams and rivers. This process is called _____.
9. Water also moves through living organisms. Plants take up through their roots, and the water then moves up through the plant and _____ from the _____ in a process called _____.
10. Add the processes from 8 and 9 to your drawing of the water cycle.

The Carbon Cycle

11. _____ is constantly _____ between _____ and the _____.
12. How is carbon turned into glucose?
13. How do consumers get carbon?
14. How is carbon “lost” by consumers and in what form is it “lost”?
15. Draw the carbon cycle in the space below using yourself as the main character in your drawing. Include the following parts and terms (*these are in order to be helpful*): **carbon dioxide, photosynthesis / producer (a plant), glucose, consumer (yourself) / cellular respiration, and back to carbon dioxide.**