

Summary Questions: Ecology

Answer in complete sentences on a separate sheet of paper.

3-1 What is Ecology?

1. Define ecology.
2. What does the Biosphere include?
3. Define species.
4. Make a diagram with arrows from smallest to largest using the four **boxed** words.

3-2 Energy Flow

5. Why do organisms need to obtain energy?
6. What is the main source of the earth's energy?
7. What 3 kinds of organisms are considered producers?
8. Name and define 5 kinds of heterotrophs and give an example of each. (Make a chart; kind of organism-definition-example.)
9. Name three organisms in a food chain in the order that energy flows. Label each as a heterotroph, energy source or autotroph.
10. Each step of a food chain or food web is called a _____?
11. How much energy from one trophic level moves on to the next trophic level?

3-3 Cycles of Matter

12. Why can matter cycle through the biosphere?
13. Define evaporation and transpiration.
14. What is a key ingredient of living tissue?
15. Why is nitrogen needed by all organisms?
16. Why is phosphorous needed?