Ecology Pre-test (Elementary)

Science is easier to understand if you can make connections between what you know now and the new ideas that you are studying. This is a test that will help us to understand what you know now.

Please answer these questions as carefully and completely as you can. If you aren’t sure of the answer, please write about any thoughts that you have. If you can help us to understand how you think about these questions, then we can do a better job of explaining science in ways that make sense to you.

Please put your initials (not your full name) in the boxes

First  Middle  Last

Date ______________________
Class ____________________________ Teacher ___________________________

1. What are some things that help plants live and grow? Use the lines given below (as many as you need) to answer this question.

____________ helps plants grow because _______________________________________
____________ helps plants grow because _______________________________________
____________ helps plants grow because _______________________________________
____________ helps plants grow because _______________________________________
____________ helps plants grow because _______________________________________
____________ helps plants grow because _______________________________________

2. What are some things that help people live and grow? Use the lines given below (as many as you need) to answer this question.

____________ helps humans grow because _______________________________________
____________ helps humans grow because _______________________________________
____________ helps humans grow because _______________________________________
____________ helps humans grow because _______________________________________
____________ helps humans grow because _______________________________________
____________ helps humans grow because _______________________________________
3. A small acorn grows into a large oak tree.
   (a) Which of the following is FOOD for plants (circle ALL correct answers)?
   Soil   Air   Sunlight   Fertilizer   Water
   Minerals in soil   Sugar that plants make

   (b) How does a plant change as it grows?

   (c) Where do you think the plant’s increase in weight comes from?

4. An infant grows to become a big adult.
   (a) What causes the infant to grow?

   (b) Explain how an infant gains weight as she grows.

5. When a person loses weight, what happens to some of the fat in the person’s body?
   (a) The fat leaves the person’s body as water and gas.
   (b) The fat is converted into energy
   (c) The fat is used up providing energy for the person’s body functions
   (d) The fat leaves the person’s body as feces
6. Explain your answer to the previous question. Why do you think this happens to the fat?

7. Explain what happens to an apple after we eat it.

8. Explain what happens to the air that we breathe when it’s inside our bodies.

9. When an apple is left outside for a long time, it rots.
   (a) What causes the apple to rot?

   (b) Explain what happens to the weight of an apple as it rots.
10. Explain how are the following living things connected with each other:
   (a) Grass.  (b) Cows.  (c) Human beings.  (d) Decomposing bacteria.

11. What happens to the wood of a match as the match burns? Why does the match lose weight as it burns?

12. Explain why it might be important to preserve our forests?

13. Do you think that wood is a mixture of different things? (Circle one)
   YES  NO

Please explain your ideas about what makes up wood.