

Study Guide for Animals Unit Test

1. What are rules about atoms?
2. What are rules about energy?
3. Can atoms become energy or can energy become atoms? Explain.

4. Complete the following chart for proteins, fats (lipids) and carbohydrates

Polymer	monomer	type of atoms in this molecules	type of energy stored

5. Describe how oxygen enters and moves through an animal's body to the cells.
6. Trace the path of carbon dioxide through an animal's body (where is it formed, how does it leave)
7. Trace the path of food through an animal's body. (Where does it enter, where does it go?)
8. What are two main processes food is used for in the cell?
9. Where does digestion occur?
10. Where does biosynthesis occur?
11. Where does cellular respiration occur?
12. Which process results in heat energy? How could you tell if heat energy was being produced?

Recall the Mealworm Investigation

13. What was your claim (conclusion) about Matter Movement? Explain why it is correct using evidence.

14. What was your claim (conclusion) about Matter Change? Explain why this is correct using evidence.

15. What was your claim (conclusion) about Energy Change? Explain why this is correct using evidence.

16. What could be an incorrect claim about the mealworm investigation? Explain why this would be incorrect.

17. What are changes that could be made to improve the investigation? What other evidence needs to be collected?

18. A man drinks 10 cans of soda a day and gains weight. Soda is mostly sugar and water.
 - a. How did drinking soda cause the man to add fat to his body?

19. 2. A girl plays tennis for 2 hours and weighs less at the end of her match than at the beginning.
 - a. What energy left her body?
 - b. What kinds of atoms left her body?
 - c. Where did the energy and atoms come from?

20. A bee uses energy to move its wings as it flies from flower to flower collecting nectar (the main ingredients in nectar are water and sugar).
 - a. How could the nectar from one flower help the bee to fly to the next flower?

21. A wolf gains weight by eating a rabbit.
 - a. Could a wolf gain five pounds by eating a four-pound rabbit?
 - b. Why or why not?

22. A male penguin loses up to half his body weight while keeping his egg warm without eating.
 - a. Where did the energy come from to keep the egg warm?
 - b. What happened to the matter in the penguin when he lost weight?