Biology 11-Ch.16 Review Questions

1. What is Spontaneous Generation?
2. What was the experiment Spallanzani conducted in an attempt to prove Spontaneous Generation did not exist?
3. How were Redi’s conclusions debated by John Needham?
4. How was Louis Pasteur’s experiment groundbreaking?
5. What are the five gases in the Earth’s first atmosphere?
6. When was Planet Earth born? When did the Earth’s first ocean start to appear? Why?
7. What did Stanley Miller think he created back in 1953? Describe in detail his experiment and his outcomes.
8. What happens to amino acids in the absence of oxygen? What do they form?
9. What are proto-life cells? Why are they considered “alive”.
10. What were the first true cells? How did they attain food? What kind of organism were they?
11. Why were the primitive heterotrophs forced to become autotrophs? Why are they called autotrophs and when did they become common?
12. The first autotrophs used \_\_\_\_\_\_\_\_\_\_\_\_\_ the way present day plants use H2O.
13. Give an example of a primitive autotroph.
14. What happened when organisms started to substitute H2O instead of H2S in their metabolic pathways?
15. What is metabolism?
16. What are two positive things that came out of the release of oxygen in the Earth's atmosphere?
17. How did sexual reproduction speed up the evolutionary process?
18. What is the symbiotic theory of eukaryotic origins?
19. What are the key differences between asexual and sexual reproduction?
20. What is a microfossil? How much detail do they provide?