Reading Questions: Life in Extreme Environments

Before reading the article, answer these questions:

1. What is the difference between biotic and abiotic factors? Give examples of each.
2. What are some factors needed for organisms to live?
3. What does the word extremophile mean to you?
4. Give examples of extreme conditions. Do you think that any organisms can live in those conditions?

While reading Life in Extreme Environments, answer these questions:

5. What are tardigrades? What extreme conditions do they tolerate? How do they tolerate these conditions?
6. Give examples of organisms that live in dry environments. Explain what mechanism they use to survive dry conditions.
7. Why are most organisms not able to survive in very low temperatures? Give examples of organisms that can. How are they adapted to live in low temperature environments?
8. What are some effects of radiation on living organisms? How do some organisms endure high levels of radiation?
9. Explain what discovery has led scientists to believe that the biosphere is larger than what was previously though.
10. Choose one extreme environment and explain how the organisms living in that environment can survive those severe conditions.