

1. (1.1) Arrange in order, from simplest to most complex, the levels of organization that occur in nature. Begin with the atom.

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2. The fundamental unit of life is the _____.

3. Explain how the actions of producers, consumers, and decomposers create interdependency among organisms.

4. _____ are certain molecules and structures that can detect stimuli.

5. Give examples of stimuli from both the internal and the external environment that may be detected by receptors.

6. _____ refer to the internal operating conditions of organisms remaining within tolerable limits.

7. The signature molecule of cells is a nucleic acid known as _____.

8. Arrange in order, from greater to fewer organisms included, the following categories of classification: class, family, genus, kingdom, domain, order, phylum, and species

List and Describe the different Domains that life are organized

- _____ -
- _____ -

_____ -
9. List and briefly describe the 6 different kingdoms of life.

10. Distinguish between the terms *prokaryotic* and *eukaryotic*.

11. Explain the relationship between mutation and genetic variation.

12. Most mutations have either _____, _____ or _____ effects.

13. An _____ trait is any form of a trait that helps an organism survive and reproduce under a given set of environmental conditions.

14. Define *natural selection* and briefly describe what is occurring when a population is said to evolve.

15. Distinguish between natural and artificial selection and give an example of each.

16. The term _____ means genetically based changes in a line of descent over time.

17. List and briefly describe the 7 steps of the scientific method.