

Study Guide

Introduction to Biology

Part I – What is Science

1. Define Science
2. Compare Discovery Science with Hypothesis-Driven Science
3. Compare scientific facts, hypothesis, theories and laws
4. Be able to explain why other philosophies for explaining the Universe are not science
5. Differentiate between true science and what many people think of as science
6. Define Biology
7. List the five unifying themes of biology

Part II – Characteristics of Living Things

8. What are the 8 characteristics of living things
9. Why is a virus not considered a living thing

Part IV – Organization of Living Things

10. List the levels of organization in living things and an appropriate example of each for a human

Part V – Unifying Themes of Science

11. Compare direct and indirect observations
12. Compare open and closed systems
13. What is the correct way to classify things and why do scientists classify
14. What is a model?
15. What is scale?
16. Patterns are used to make _____