

CHAPTER 1 - Introduction: The Scientific Study of Life

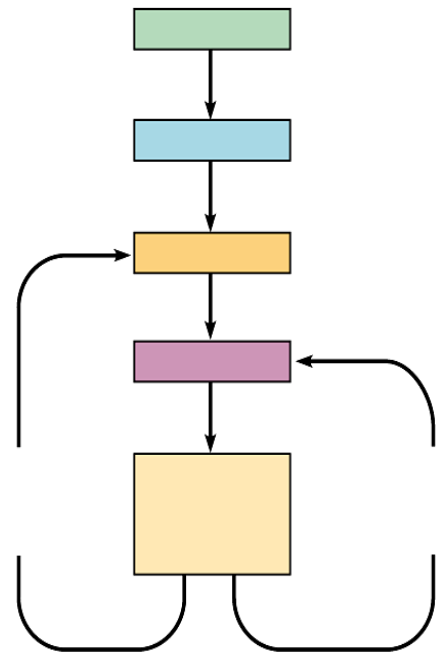
Chapter Reading Guide

1. Explain how the lives of gray-headed flying foxes are closely interrelated to the life cycle of eucalyptus trees.
2. List the levels of organization from atom to ecosystem and note how the levels relate to each other.
3. Describe the goals and limits of scientific investigations.
4. Define a hypothesis and compare inductive and deductive reasoning. Explain how each of these is used in discovery science and hypothesis-driven science.



Gray-headed flying fox and baby

5. Describe the goals and limits of scientific investigations.
6. Define a hypothesis and compare inductive and deductive reasoning. Explain how each of these is used in discovery science and hypothesis-driven science.
7. Label the diagram to the right using section 1.3 of the text. Then describe the fly mimicry experiment found within chapter one of the text while noting the logical steps of the experimental process.



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6. Describe and distinguish between the three domains of life. List examples of each domain.

7. List and describe seven properties that are common to all life.

8. Describe the process of natural selection. Explain why individuals cannot evolve.

9. Explain how the web of relationships gives an ecosystem its structure.

10. Label the diagram below. Then compare the flow of chemical nutrients and the flow of energy in an ecosystem.

