

CHAPTER 1 GUIDED NOTES: THE SCIENCE OF BIOLOGY

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Section 1.1 pp 2-3.

1. List and briefly explain the characteristics that define life.

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

g. _____

2. List and briefly describe the 3 hierarchical levels of organization of the biological world.

a. _____

b. _____

c. _____

3. For each biological level in Figure 1.2, write a sentence that describes the level by referring to the level “below” it. An example is given to start you off.

a. Macromolecules: Macromolecules are built of smaller molecules bonded together.

b. Organelles: _____

c. Cells: _____

d. Tissues: _____

e. Organs: _____

f. Organ Systems: _____

g. Organisms: _____

h. Populations: _____

i. Species: _____

j. Community: _____

k. Ecosystem: _____

4. What is the basic unit of life?

5. Explain what is meant by **emergent properties** when explaining how a beaker full of chemicals is different than an animal made of that same mix of chemicals.
