

Chapter One - Cells: The Basic Unit of Life.

Online resources http://www.scienceman.com/bc8/pgs/links_u1.html

1. Why is this chapter important?
2. Both unicellular and multicellular living things are called _____.
3. All the _____ that keep an _____ take place inside the _____.
This is why the _____ is called the _____.
4. Living things survive in many different _____.
5. All living things have _____ that demonstrate they are alive.
6. Some living things are _____ and can be _____ only with a _____.
7. Regardless of where they live, all _____ things have needs that must be met if they are to _____ in their _____.
8. What is the difference between unicellular and multicellular living things?
9. Define stimulus and provide an example.
10. What are three waste products produced by animals?
11. Describe the five characteristics of living things.

12. Early microscopes were built in the late _____ and early _____.
_____ was one of the first people to build a microscope.
13. What was the approximate magnification of his first microscope? _____
14. When you look through a microscope, you will observe an _____ that is _____, _____ and _____.
15. To determine the _____ of the microscope when using each _____ lens, you _____ the _____ of the _____ by the _____ of the _____.
16. Define resolving power.
17. All cells have similar _____ and _____.
18. Each structure and organelle carries out a _____ to help _____ the _____ of a _____.
19. Organelles take up about _____ percent of cell. The rest of the cell consists of _____.
20. The nucleus contains _____ or _____ which carries the _____ material that is passed from _____ to _____.
21. The _____ are the energy producers in the cell.
22. The total of all chemical reactions that take place in our cells is called our _____.
23. Functions that organelles can perform are _____, _____ and _____.
24. What is the difference between plant and animal cells?

35. _____ is a special term that scientists use when referring to the movement of _____ through a _____.
36. What is reverse osmosis and how could it be used.
37. Create your own summary of the key ideas in this chapter. *See Science skill 10 for help in using graphic organizers.* Use these headings to organize your notes: Characteristics of Living Things, The Microscope, Cell Theory, Cell Organelles, Diffusion & Osmosis.
38. Check your understanding of the contents of this chapter by doing the Chapter Review exercises on pages 50-51.
39. If you are using the Student Workbook, complete Chapter 1, pages 2-19.

Key Terms to know:

compound light microscope

electron micrograph

magnification power

resolving power

scanning electron microscope

bacteria

cell membrane

cell theory

cytoplasm

mitochondria

nucleus

organelle

vacuole

viruses

concentration

diffusion

osmosis

selectively permeable membrane