ACTIVITY ANSWER KEY

Chapter 4, Section 1

Check your answers from the Answer Key.
Correct all errors, then complete your next goal.



Lesson 1*: Biology*
Cells

1. ___ Why can't we leave this green world?
   _X_ How can an entire village . . .
   _X_ What important discovery . . .
   ___ Why did Del want to tag . . .
2. Chloroplasts
3. their green color, no food, fall to the ground
4. more complex
5. carbon, oxygen, hydrogen, nitrogen
6. Atoms
7. Cells
8. Robert Hooke, cells, 1665
9. fossils
10. (b) Fossils are remains of once living organisms.
11. (b) False
12. external conditions, from nutrients (or food), wastes, growing, reproducing.
13. 2,500,000
14. protoplasm
15. _X_ It is the outer covering of the cell.
    _X_ It controls what enters and . . .
    ___ It needs water and nutrients . . .
    ___ It responds to messengers from . . .
    ___ It carries messages to body . . .
    _X_ It protects the cell from . . .
16. Hormones, protein
17. (wording may vary) They protect the cell from outside invaders.
18. Semipermeable
19. cytoplasm
20. (d) closets
21. Proteins
22. digestive
23. hormones
24. antibodies
25. Mitochondria
26. nucleus
27. DNA, RNA

	Both Plants and Animals	Plants Only	Animals Only
28.	cell membrane	chloroplasts	
29.	cytoplasm	cellulose	
30.	nucleus		
31.	vacuole		
32.	ribosome		
33.	mitochondria		

34. vacuole
35. nucleus
36. cytoplasm
37. ribosomes
38. cell membrane
39. mitochondria
40. animal
41. plant
42. (d) all of these
43. *"Definiteness of purpose is the starting point of all achievement."*



Lesson 2: *Biology*
Fungi Kingdom

1. (d) She ignored their intent and . . .
2. (a) True
3. fungi, bread, wine

4. (b) fermentation
5. (c) asexual reproduction
6. (wording may vary) control the growth of undesirable organisms
7. Pasteurization
8. peer pressure, Germ Theory
9. (c) arrogant and proud behavior
10. _X_ He is one of the top ten scientists . . .
    _X_ He is considered the most . . .
    ___ He embraced Darwin's Theory of . . .
    _X_ He showed spontaneous . . .
11. (any order, wording may vary) pasteurization, germ theory of disease, anthrax vaccine, rabies vaccine
12. (a) True
13. (wording may vary) They are both considered fungi.
14. (wording may vary) Molds reproduce by airborne spores. (Yeasts reproduce asexually.)
15. (b) carried by the air
16. warmth and moisture
17. (d) 1975-2000
18. (b) False
19. parasite
20. (c) those who are able bodied but refuse to work and are supported by the government or other means . . .
21. chlorophyll, sense, animal or plant
22. _3_ organ
    _1_ cell
    _4_ system
    _2_ tissue
23. (d) unknown
24. *"The laws of nature work consistently and without complication"*



Lesson 3: *Biology*
Fungi and Algae

1. (a) City Park
   (b) Main Street
   (c) museum grounds
   (d) Caddy Historical Museum
2. (d) It remains unchanged by the reaction it produces.
3. catalysts
4. (c) decomposers
5. (c) Fungi are parasites and decomposers which may be helpful or hurtful, depending on the type of fungus . . .
6. _X_ It is a fungus.
   _X_ It fights harmful bacteria.
   ___ It was invented by a chemist . . .
   _X_ It is a chemical produced . . .
   _X_ It was not widely used until . . .
   ___ It was the only helpful mold . . .
7. (any order) Roquefort cheese, Blue cheese, truffles, mushrooms
8. (a) varieties of fungi
9. (c) enormously complex
10. algae, (any order) roots, stems, leaves
11. (any order) Euglena, diatoms
12. (any order) Spirogyra, volvox
13. Spirogyra, volvox
14. aquatic
15. algae
16. (any order) green, blue-green, red, brown
17. The Red Sea
18. (a) major
19. moss
20. moss, north side of trees and rocks.
21. Lichens, rocks
22. Lichens, weathering
23. (a) He recognized Del as she walked by him.
24. *"A positive attitude can produce a chain reaction of positive thoughts, events and outcomes."*



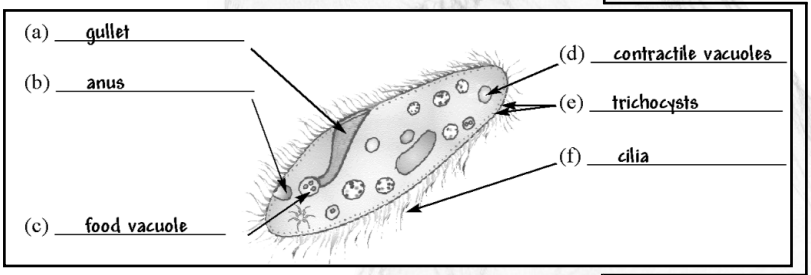
Lesson 4: *Biology*
Protozoa

1. (d) illness caused by certain water microbes
2. (c) disease causing bacteria
3. (b) photographs

4. (d) none of these
5. (c) They are found in all but very cold climates.
6. Amoebas
7. pseudopodia
8. (b) false
9. (d) definition 4
10. (b) definition 2
11. vacuole, liquid
12. life processes
13. design, complexity
14. paramecium
15.

Organism Features	Amoebas	Paramecium
No particular shape	X	
Keeps changing shape	X	
Retains original shape		X

16.



17. (d) binary fission
18. parasites
19. X It is caused by parasitic protozoa.
___ It is so named because people become sick while they sleep
X It is spread by tsetse flies.
X It is difficult to treat, often deadly.
20. protozoa, mosquito
21. (any order) fever, chills, sweats
22. giardiasis
23. sleeping sickness
24. malaria
25. (a) yes
26. X Protozoa help keep soil fertile.
___ Protozoa cause disease
X Protozoa are necessary for plant . . .
X Protozoa clear out old bacteria . . .
___ Protozoa inhabit land all over the world
27. protista kingdom
28. algae
29. algae
30. bacteria, (wording may vary) scientists created the monera kingdom
31. (wording may vary) a mental ward orderly
32. *"Parasitic relationships drain a person of resources and contribute nothing but waste products."*



Lesson *5*:*Biology*
Bacteria

1. (c) false clue
2. (d) none of these
3. Bacteria
4. Pasteur, milk, bacteria
5. food poisoning, botulism
6. (b) no
7. X Foods such as buttermilk, . . .
X Nitrogen-fixing-bacteria are . . .
___ Bacteria produce botulism and poisoning
___ Bacteria cause worldwide disease
8. remove
9. ___ good bacteria
X nitrogen-fixing bacteria
X lichens
___ bad bacteria
10. decay
11. without oxygen, oxygen
12. (c) a prefix meaning "not," "without" . . .
13. Anton Leeuwenhoek
14. (a) Dutch microscope maker
15. microscopes, bacteria, (words may vary) bacteria were dismissed without a thorough study
16. Edward Jenner, vaccination
17. (b) physician
18. vaccination, medical discoveries
19. Louis Pasteur

20. Germ Theory of Disease, medical
21. Joseph Lister
22. antiseptics, disinfectants, greatest physicians
23. against
24. (c) disease causing bacteria
25. against disease causing bacteria
26. (wording may vary) disease causing bacteria (or anaerobic bacteria)
27. Listerine
28. (c) They were all intensely opposed by their professional peers.
29. _X_ Standing against your peer group . . .
    _X_ The majority is not always right . . .
    _X_ Stick to what you know is right . . .
    ___ When the going gets tough . . .
    _X_ Choosing a life work that benefits . . .
    _X_ Through perseverance , problems . . .
30. pathogenic (or pathogens)
31. one third (1/3)
32. (c) 600-650
33. (a) True
34. separate nuclei, classified in a kingdom of their own
35. (b) is composed of only one type of organism
36. help bacteria attach firmly to surfaces, give them a sense of touch
37. (b) upset and suspicious
38. *"The hardest thing to open is a closed mind."*

Ask for your QUIZ over Section 1.
Reminder: Students who score 85% or higher on the three section quizzes may be exempt from the chapter test!