ACTIVITY ANSWER KEY

Chapter 1, Section 1

Check your answers from the Answer Key. <u>Answers separated by commas</u> may be in any order. <u>Answers separated by semicolons</u> must be in stated order. Correct all errors, then complete your next goal.



Lesson 1: A Look At Life
The Study of Biology

- 1. (a) True
- 2. (b) False
- 3. (b) False
- 4. (d) neon
- 5. hydrogen, carbon, oxygen, nitrogen, phosphorus, sulfur
- 6. elements
- 7. (c) the breath of life
- 8. (a) True
- 9. (a) cell
- 10. (b) biology
- 11. DNA
- 12. "There is no part of life that does not contain its lessons. If you are alive, there are lessons to be learned."



Lesson 2: Scientific Laws The Scientific Method

- 1. scientific method
- 2. (c) an assumption made to test and prove a logical conclusion
- 3. (a) test evidence
- 4. scientific law
- 5. "What is the evidence?"
- 6. (c) wait to accept a theory until it withstands the test of time
- 7. (a) products accepted without thorough testing
- 8. (b) was prescribed without thorough testing
- 9. (a) True

- 10. (c) human germs are more easily transmitted to humans
- 11. (c) vigorously wash their hands in water and chlorinated lime prior to examining living patients
- 12. (c) They refused to believe that infections could result from invisible things.
- 13. (b) existence of God
- 14. (c) A person's reaction to something
- 15. (a) True
- 16. moral
- 17. Galileo Galilei
- 18. (d) all objects fall at the same speed regardless of weight
- 19. (b) False
- 20. "Man will occasionally stumble over the truth but usually manages to pick himself up, walk over or around it and carry on."



Lesson 3: Discoveries

Early History of Science

- 1. (b) their knowledge of astronomy and architectural engineering
- 2. (d) based largely on superstition
- 3. Earth
- 4. (b) False
- 5. (b) phlogiston
- 6. oxygen
- 7. (b) False
- 8. (d) many important discoveries
- 9. (a) accept the teachings of earlier scholars

- 10. (c) God established the universe and put certain laws into existence.
- 11. (d) Roger Bacon
- 12. (b) faithfully accept traditional dogmas
- 13. (a) True
- 14. Law of Gravitation
- 15. (a) biblical concepts
- 16. (e) Antoni van Leeuwenhoek
- 17. (a) Robert Hooke
- 18. (b) Andreas Vesalius
- 19. (g) William Harvey
- 20. (f) John Ray
- 21. (h) Carolus Linnaeus
- 22. (c) Marcello Malpighi
- 23. (d) Ulisse Aldrovandi
- 24. Charles Darwin
- 25. "In questions of science, the authority of a thousand is not worth the humble reasoning of a single individual."



Lesson 4: Theories

Darwin & the Theory of Evolution

- 1. evolution
- 2. (c) All species share a common ancestor.
- 3. (a) True
- 4. (a) sparked a rapid growth in biological research
- 5. England
- 6. (a) Cambridge University to become a clergyman
- 7. (c) a student of nature
- 8. Alfred Russel Wallace
- 9. (a) fish
- 10. "the book that shook the world"
- 11. Hitler
- 12. change
- 13. (b) False
- 14. (d) all of the above

- 15. (d) life is a competitive struggle to survive
- 16. (a) True
- 17. common ancestor
- 18. (a) True
- 19. (b) Darwin's theory has been modified
- 20. (d) all of the above
- 21. "...There is more evidence to suggest an abrupt arrival of man rather than a gradual process of evolving..."



Lesson 5: DNA

Features of Life

- 1. non-living
- 2. (a) True
- 3. (c) orderly
- 4. d some cats
- 5. b octopuses
- 6. <u>c</u> archerfish
- 7. <u>a</u> some insects
- 8. <u>e</u> peregrine falcons
- 9. (d) automatic ultraviolet protection
- 10. (a) True
- 11. (c) absurd in the highest possible degree
- 12. take
- 13. (d) all of the above
- 14. X (a) It lives in waters near Oahu, Hawaii.
 - (b) It uses its ventral fin as a lure for other fish.
 - X (c) Its dorsal fin appears as a separate, smaller fish.
 - ___ (d) It is destroyed when another fish approaches the lure.
- 15. (c) Within the brains of these birds is the inherited knowledge of how to identify latitude, longitude, and direction by the stars.
- 16. (a) True



