ACTIVITY ANSWER KEY

Chapter 5, Section 2

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



Lesson 6: *Scientific Laws*

Ohm's Law

1. (b) *current*
2. c ampere
3. b coulomb
4. a volt
5. d ***ohm***
6. (d) 9 volts
7. more or greater
8. less
9. Georg Simon Ohm
10. (b) False
11. length
12. radius
13. "the current is directly proportional to the voltage and inversely proportional to the resistance."
14. (c) ohm
15. I = V/R with *I* the current, *V* the voltage (or electromotive force or electric potential) and *R* the resistance
16. I = V/R = (6.0 volts) / (16 ohms) = 0.375 amps
17. (a) True
18. R = V/I
19. R = V/I = (1.5 volts) / (0.5 amps) = 3 ohms
20. V = R * I
21. V = R * I = (12 ohm) * (10 amps) = 120 volts
22. *"Try not to become a man [person] of success but rather try to become a man [person] of value."*



Lesson 7: *Compounds*

Humphry Davy: Chemical Detective

1. laughing gas
2. (b) False
3. Humphry Davy
4. N_2O
5. pain reliever
6. electrolysis
7. (d) water
8. potassium
9. (c) is a metal
10. K_2CO_3
11. (a) True
12. Michael Faraday
13. lamp or light
14. (b) False
15. Humphry Davy
16. Michael Faraday
17. 51
18. (a) his lack of caution around chemicals
19. (a) True
20. *"Let those who want to move and convince others, first be convinced and moved themselves."*



Lesson 8: *Elements*

The Sodium Metals: Lithium

1. (a) True
2. flame test
3. *Li*
4. *Na*
5. *K*
6. *Rb*

7. *Cs*
8. *Fr*
9. (c) active metals
10. less
11. Reduction
12. (a) an ***acid***
13. base
14. (a) True
15. salt
16. metallic elements
17. Johan August Arfvedson
18. (c) a Greek word meaning stone
19. Lithium
20. *"I like living. I have sometimes been despairingly miserable, racked with sorrow, but through it all I still know that just to be alive is a grand thing."*



Lesson 9: *Elements*
Sodium

1. salary
2. (b) False
3. (b) False
4. necessary (or essential)
5. *Na*
6. (b) electrolysis
7. (c) electrolysis
8. hydrocarbons (kerosene, etc)
9. metal
10. *NaCl*
11. Na_2CO_3
12. Na_2HCO_3
13. *NaOH*
14. hydroxide
15. (b) base
16. (b) bicarbonate
17. (a) baking soda
18. sodium bicarbonate
19. 23.0 + 16.0 + 1.00 = 40.0
20. *"Challenges make you discover things about yourself that you never really knew."*



Lesson 10: *Elements*
The Sodium Family of Metals

1. (a) True
2. (d) water
3. *K*
4. common
5. feldspar
6. *KOH*
7. K_2CO_3
8. KNO_3
9. *Li*
10. *Na*
11. *K*
12. *Rb*
13. *Cs*
14. (d) the ***spectroscope***
15. spectroscope
16. photoelectric
17. (c) radioactive emissions
18. positive
19. (b) False
20. *"Patience and perseverance have a magical effect before which difficulties disappear and obstacles vanish."*

Ask for your QUIZ over Section 2.
Reminder: Students who score 85% or higher on the three section quizzes may be exempt from the chapter test!