ACTIVITY ANSWER KEY

Chapter 4, Section 3

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

Lesson 11: *Energy*

Heat Flow

1. (b) False
2. heat energy
3. conduction
4. (a) solids
5. (b) False
6. (a) poorly
7. (a) poorly
8. convection
9. fluids
10. (b) convection
11. heat energy
12. radiation
13. radiation
14. radiators
15. (a) True
16. better
17. (b) False
18. radiation
19. (d) reflects radiant heat
20. *"Let us devote our life to worthwhile actions and feelings, to great thoughts, real affections, and enduring undertakings."*

Lesson 12: *Motion*

Waves in Fluids

1. axis
2. (b) *transverse wave*
3. crest
4. trough
5. nodes
6. (a) ***displacement***
7. (c) amplitude
8. (b) False
9. (a) one half of a wave
10. wavelength
11. (a) True
12. (c) in phase
13. (d) any number of full wavelengths
14. out
15. (a) True
16. (d) *constructive*
17. one half
18. (a) True
19. (c) *period*
20. *"Laziness travels so slowly that poverty soon overtakes him."*

Lesson 13: *Motion*

Transverse and Longitudinal Waves

1. (b) False
2. energy
3. (b) False
4. (d) wavelength
5. (a) cycles/time
6. reciprocals
7. (b) .50 seconds per wave
8. (d) decreases
9. (b) False
10. (b) speed
11. (c) speed
12. (a) frequency * wavelength
13. (b) multiply 256 by 4.4
14. (b) False

15. (d) ***longitudinal***
16. (a) True
17. (d) ***compression***
18. higher
19. (c) sound waves
20. *"When we draw conclusions and interpret observations, imaginations must be checked against factual results."*

1. compression



Lesson 14: *Motion*
Sound Waves: Amplitude and Pitch

2. (a) True
3. (d) amplitude
4. (b) False
5. (c) reflected
6. reverberation
7. as big or bigger
8. Refract
9. (b) frequency
10. 512
11. (d) low
12. (b) shorter
13. (b) less than one inch
14. (a) high
15. S O N A R
16. (c) hearing
17. (b) False
18. (d) steel
19. two
20. *"Success comes in cans, failure in can't."*



Lesson 15: *Motion*
Properties and Sounds

1. (b) slower
2. speed
3. (b) False
4. (a) 1,128 ft/sec
5. pitch
6. (d) natural frequencies
7. fundamental
8. higher
9. lower
10. higher
11. (a) higher
12. (a) True
13. (c) quality
14. sympathetic vibration
15. (a) True
16. (d) resonance
17. (c) beats
18. Beats
19. (b) False
20. *"Remember, success is not measured by heights attained but by obstacles overcome."*

Ask for your QUIZ over Section 3.
Reminder: Students who score 85% or higher on the three section quizzes may be exempt from the chapter test!