ACTIVITY ANSWER KEY

Chapter 9, Section 2

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



Lesson 6: *Energy*

Sound—Period and Frequency

1. dependable
2. (b) quartz crystal
3. (b) a complete repetition
4. (b) False
5. (a) True
6. cycles
7. time
8. (a) cycles/sec
9. f = 60 cycles per second or 60 cycles/sec
10. f=1 cycle per 11 years or 1 cycle /11 years or 1/11 cycles/year (11 years per cycle is incorrect)
11. (a) sound
12. Pythagoras
13. mathematical
14. (b) percussion
15. (d) organ
16. (d) vibrating strings
17. (a) electronic
18. (a) work in a secret scientific research labor camp in Siberia
19. (b) Robert Moog
20. *"Out of difficulties grow miracles."*



Lesson 7: *Light & Sound*

Sound—Pitch and Quality

1. (a) frequency
2. 512
3. two (2)
4. (c) is the range of singers from bass to soprano
5. (b) piano
6. (b) False
7. (a) amplitude
8. Decibels
9. (b) False
10. (b) is the range of human hearing
11. (a) True
12. (a) distracting
13. abatement
14. noise
15. quality
16. (d) ***fundamental frequency***
17. (a) True
18. (a) tuning fork
19. (any order) pitch (frequency), loudness, quality
20. *"The person who does not make a mistake does not do anything."*



Lesson 8: *Light & Sound*

Recording Sound

1. 1,100
2. (c) primarily at home
3. (d) by selling newspapers on a train
4. (a) $40,000
5. (a) build a research laboratory
6. phonograph
7. sound writer
8. (a) a cylinder wrapped with tin foil
9. sound
10. (b) carbon

11. (a) 1,500 hours
12. (b) 16
13. (a) True
14. kinetoscope
15. (a) the *Great Train Robbery*
16. (d) sound could not be made to synchronize with the picture
17. (a) True
18. (a) ***CD***
19. (c) DVD
20. *"Genius is one-percent inspiration and ninety-nine percent perspiration."*



Lesson 9: *Light & Sound*
Sound—Doppler Shift

1. (a) higher
2. Doppler
3. (c) lower
4. (b) False
5. (b) False
6. (a) higher
7. lower
8. (b) False
9. (b) blue
10. (d) is shifted toward the red
11. shift
12. (a) True
13. (c) Doppler
14. (b) False
15. (a) greater than
16. (b) 334/307.2
17. approaching
18. all
19. (c) the speed (motion) of the earth
20. *"Provision for others is a fundamental responsibility of human life."*



Lesson 10: *Geology*
Earthquake Waves

1. (a) True
2. (b) compress and expand
3. (b) False
4. (b) earthquake waves
5. (a) P
6. (b) farther apart
7. seismologist
8. (a) True
9. epicenter
10. (a) True
11. Seismic waves
12. faults
13. (a) True
14. vibration
15. (c) New Madrid earthquake of 1811
16. (b) San Francisco earthquake of 1906
17. (a) True
18. (c) 8.0
19. Alaska
20. (a) an earthquake
21. *"If you have something you cannot live without, you do not own it, it owns you."*

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!