ACTIVITY ANSWER KEY

Chapter 2, Section 2

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



Lesson 6: *Motion*

Velocity, Mass, Acceleration and Force

1. (b) died
2. (b) False
3. (b) Oliver Cromwell
4. (c) ordinary
5. (b) False
6. (d) waiting on tables
7. (b) the bubonic plague
8. (b) False
9. (d) all of these
10. distance/time
11. (c) horse running on a circular racetrack
12. (a) True
13. change in time
14. (b) mass
15. (a) weight
16. (b) mass
17. (c) ***kilogram***
18. (b) velocity
19. (d) force
20. (c) Newton's Laws of Motion can be understood by first understanding velocity, mass, acceleration and force.
21. "*You cannot run the race until you learn to walk*."



Lesson 7: *Motion*

Motion, Gravity and the Stars

1. (a) True
2. (b) mirror
3. (c) caused false color fringes around an object
4. (b) mirrors
5. (c) 25 years
6. (b) False
7. Genesis, Job
8. (a) the greatest book ever written on science
9. (b) False
10. "A body at rest will remain at rest and a body in motion will remain in constant motion unless acted upon by an outside force."
11. (c) First Law of Motion
12. (d) the unbalanced net force must be zero
13. (a) resist changes in motion
14. (a) inertia
15. "The acceleration of an object is directly proportional to the net force acting upon it and inversely proportional to its mass."
16. (a) increase
17. (a) doubles
18. (b) be reduced in half
19. (b) eliminate mass from the car
20. (d) m/sec^2
21. m * a
22. (b) acceleration

23. "To every action there is always an equal and opposite reaction."
24. (d) to illustrate Newton's scientific contributions to the telescope and to understanding the Laws of Motion
25. "*A body at rest will remain at rest and a body in motion will remain in motion. Get moving now to remain in motion toward success.*"



Lesson 8: *Motion*
The Three Laws of Motion

1. change in time
2. change in time
3. matter
4. (c) kilograms
5. (c) acceleration
6. "A body at rest will remain at rest and a body in motion will remain in constant straight-line motion unless acted upon by an outside force."
7. (a) came to rest
8. (b) was motionless
9. (b) 1,000 mi/hr
10. (d) 18.5 mi/sec
11. (a) True
12. Inertia
13. (b) inertia of a person's body
14. (a) True
15. "The acceleration of an object is directly proportional to the force acting upon it and inversely proportional to its mass."
16. acceleration
17. (a) a net force of zero
18. gravity
19. (b) False
20. "When two bodies interact, the force exerted by the first body on the second is equal and opposite to the force exerted by the second body on the first."
21. (b) False
22. (b) False
23. (c) Third
24. (d) clearly state, explain and provide examples of the Three Laws of Motion
25. *"Wise people greet words of hate and anger with an equal and opposite reaction of love and kindness."*



Lesson 9: *Scientific Laws*
Newton and Gravity

1. (d) Isaac Newton
2. (b) John Kepler
3. (a) True
4. (b) False
5. (b) a force
6. (a) True
7. (c) earth
8. 3,600
9. 4,000
10. 240,000
11. (c) 3,600
12. (a) True
13. square
14. (a) True
15. (c) only one-ninth as great
16. (a) masses
17. (b) square of the distance separating them
18. (b) False
19. (b) Tycho of the South
20. (b) False
21. (d) Kepler's Three Laws of Planetary Motion
22. (c) Edmund Halley
23. (d) Newton solved many problems related to the force of gravity and published his work with the help of Edmund Halley.
24. *"Love, like gravity, is universal. It applies anytime, on anybody, anywhere."*



Lesson 10: *Scientific Laws*
The Law of Gravity

1. (a) ***equality***
2. (a) True
3. (b) False
4. πd
5. constant
6. force
7. masses
8. distance
9. (d) centers
10. square
11. (d) 16 times as great
12. masses
13. (a) True
14. (a) True
15. volume
16. (b) False
17. (d) greater inertia
18. (b) the force exerted by gravitational attraction
19. gravity
20. (b) is universal
21. (b) False
22. (b) False
23. (a) True
24. (b) John Kepler
25. (d) humility
26. (a) to provide a detailed description and explanation of the Law of Gravity
27. "*This most beautiful (solar) system could only proceed from the dominion of an intelligent and powerful Being.*"

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!