

Name _____ Date _____ Period _____

Chapter 6 Concept Review

PHYSICS

Directions: Answer the following questions using your notes and textbook

- _____ depends on net force.
- Objects acceleration is directly proportional to the net _____ acting on it.
- Acceleration depends on _____.
- acceleration produced is _____ proportional to the mass.
- Inversely– means that the two values change in _____ directions.
- Newton's Second Law states:The _____ produced by a net force on an object is directly _____ to the magnitude of the net force, is in the same direction as the net force, and is inversely proportional to the _____ of the object.
- Using units of _____ (N) for force, _____ for mass (kg), and _____ per second squared (m/s²) for acceleration, we get the new equation.

$$acceleration = \frac{netforce}{mass}$$

- _____ is a force that acts on materials that are in contact with each other.
- friction acts in opposite _____ to oppose motion.
- Friction mainly due to _____ in the two surfaces.
- Friction of liquids appreciable even at low _____.
- _____ (friction acting on something moving through air) is common form of fluid friction.
- When friction is present, an object may move with a constant _____ even when outside force is applied to it.
- Pressure– amount of _____ per unit _____.

15. _____ showed falling objects accelerate equally, regardless of their masses

16. _____ believed that an object weighing tens times as much would fall ten times faster (disproved by Galileo and others– Galileo’s famous demonstration at Leaning Tower of Pisa)

17. Equation: $F_g = \text{_____} \times \text{_____}$

18. Equation: $F_g = \text{_____} \times \text{_____}$

19. Equation: $a =$

20. When _____ is also considered, the acceleration of any object is the _____.

21. Air resistance _____ the net forces acting on a falling object.

22. When air resistance equals _____ force on falling object (force of gravity– also called weight) then net force is _____ and no further acceleration occurs.

23. terminal speed– when _____ terminates

24. When consider direction (which is down for falling objects) we call this maximum speed _____.

25. Air resistance is often negligible at _____ speeds, but very noticeable at _____ speeds.