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## Fall Semester Physics



## Across

3. Force is equal to mass times acceleration
4. Depends upon starting position and end position, meters
5. Who experiences the greater force when a tiger hits a mouse?
6. What the scientist compares the result to
7. Energy from motion
8. Gravity only acts in the $\qquad$ direction.
9. Gravitational Potential Energy depends on mass, gravity and $\qquad$ -
10. Energy cannot be created nor destroyed
11. Unit of Energy/Work
12. How much net force does it take keep a 1 kg ball rolling at $4 \mathrm{~m} / \mathrm{s}$ ?
13. Unit of power
14. Something that does not change in an experiment
15. All forces are in balance
16. What is the SI unit for mass?
17. 1st Step of the Scientific Method

## Down

1. Force * displacement
2. If mass remains constant and force is increased, what happens to acceleration?
3. This is the only force that acts on a projectile
4. An educated guess
5. What is the SI unit for displacement?
6. Where is acceleration due to gravity 9.8 $\mathrm{m} / \mathrm{s}^{\wedge} 2$
7. What is the SI units for acceleration?
8. Scientific Method Step where the test results are shared
9. In kinematics what does the variable $x$ represent
10. An object at rest will remain at rest
11. The Earth exerts a force on the moon, the moon exerts a(n) $\qquad$ force back
12. For every action there is an equal and opposite reaction
13. Ratio of output to input
14. The variable the scientist changes
15. What is the SI unit for time?
16. Energy released when heavy atoms in matter are split
17. Has direction and magnitude
18. What is the SI units for velocity
19. Vertical direction of a graph
20. A twisting caused by forces
21. The greater the mass the $\qquad$ the acceleration.
22. How many directions does a projectile travel
23. Energy dependent upon position
24. Force applied an object
25. What are the units for force?
