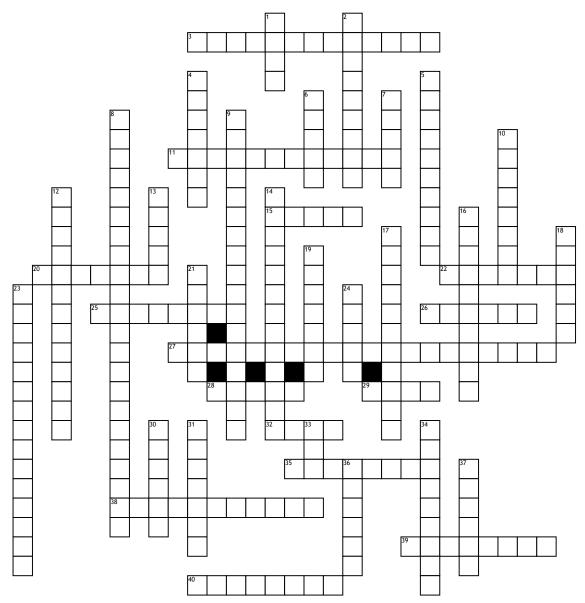
## Fall Semester Physics



## **Across**

- **3.** Force is equal to mass times acceleration
- **11.** Depends upon starting position and end position, meters
- **15.** Who experiences the greater force when a tiger hits a mouse?
- 20. What the scientist compares the result
- 22. Energy from motion
- 25. Gravity only acts in the \_\_\_\_ direction.
- **26.** Gravitational Potential Energy depends on mass, gravity and \_\_\_\_\_.
- 27. Energy cannot be created nor destroyed
- 28. Unit of Energy/Work
- **29.** How much net force does it take keep a 1 kg ball rolling at 4 m/s?
- 32. Unit of power
- **35.** Something that does not change in an experiment

- 38. All forces are in balance
- 39. What is the SI unit for mass?
- **40.** 1st Step of the Scientific Method <u>Down</u>
- 1. Force \* displacement
- **2.** If mass remains constant and force is increased, what happens to acceleration?
- **4.** This is the only force that acts on a projectile
- 5. An educated guess
- **6.** What is the SI unit for displacement?
- **7.** Where is acceleration due to gravity 9.8 m/s<sup>2</sup>
- 8. What is the SI units for acceleration?
- **9.** Scientific Method Step where the test results are shared
- **10.** In kinematics what does the variable x represent
- 12. An object at rest will remain at rest

- **13.** The Earth exerts a force on the moon, the moon exerts a(n) \_\_\_\_\_\_ force back
- **14.** For every action there is an equal and opposite reaction
- 16. Ratio of output to input
- 17. The variable the scientist changes
- 18. What is the SI unit for time?
- **19.** Energy released when heavy atoms in matter are split
- 21. Has direction and magnitude
- 23. What is the SI units for velocity
- 24. Vertical direction of a graph
- 30. A twisting caused by forces
- **31.** The greater the mass the \_\_\_\_\_ the acceleration.
- **33.** How many directions does a projectile travel
- 34. Energy dependent upon position
- 36. Force applied an object
- 37. What are the units for force?