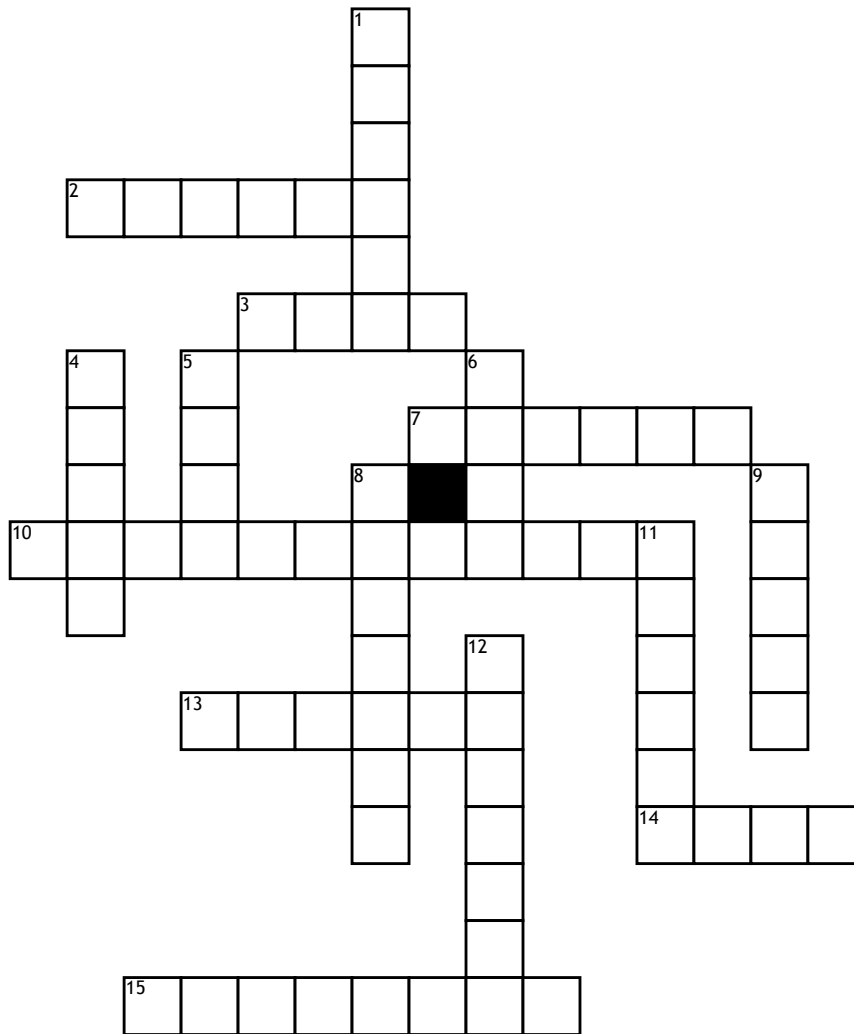


Newton's First Law of Motion



Across

- 2. The metric system uses this as the unit for force.
- 3. All matter has this, even in space.
- 7. A word we use for the force that gravity exerts on an object.
- 10. Any change in the motion of an object.
- 13. An object in motion will remain in...

- 14. Standing on the Moon your mass is the same as on Earth, but your weight is _____.
- 15. The metric system uses this as the base unit for mass.

Down

- 1. In the system of measurements used in the United States, we use _____ as a unit for weight.
- 4. A push or a pull.
- 5. The more mass an object has, the _____ inertia it will have.

- 6. An object at rest will remain at...

- 8. We have a new equation; $F_g = m \cdot g$, or weight = mass * _____

- 9. In the story of Newton coming up with the idea of gravity, this fruit fell on his head.

- 11. When used in Physics, the word _____ means perpendicular

- 12. The resistance of the object to any change in its motion.

Word Bank

- | | | | | |
|---------|--------------|--------|--------|--------|
| REST | KILOGRAM | NEWTON | POUNDS | LESS |
| GRAVITY | INERTIA | MORE | MOTION | WEIGHT |
| FORCE | ACCELERATION | APPLE | MASS | NORMAL |