

## Vasquez High School -- Physical Science -- Test #2 -- Chapter 3 -- 100 points

Use pencil and write NEATLY. If I cannot read it, you don't get credit. Take your time and think everything through carefully before answering. Partial credit for partial performance on problems.

Write **TRUE** if the statement is true OR write the word that substitutes for the underlined word that would make it true. Writing false only earns partial credit. Three points each.

- \_\_\_\_\_ 1) A man jumps out of an airplane and continues to accelerate until the force of the air resistance equals the force of his weight and he reaches terminal velocity.
- \_\_\_\_\_ 2) Energy equals mass times acceleration.
- \_\_\_\_\_ 3) You can yank the tablecloth away from underneath dishes without disturbing them much because of Newton's third law.
- \_\_\_\_\_ 4) Balanced forces result when you hang motionless from a pull-up bar.
- \_\_\_\_\_ 5) Since the gravity on the moon is one-sixth what it is on Earth, you would weigh six times as much on the moon as you do on Earth.

**Matching Section.** Write the letter for the best choice in each example. Two points each.

- |                              |                                                                                                                                 |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| _____ 6) Velocity            | A) The idea that everything with mass is attracted to everything else with mass                                                 |
| _____ 7) Force               | B) Galileo's idea that everything on Earth goes up or down based upon how heavy it is                                           |
| _____ 8) Friction            | C) A push or a pull; measured in Newtons                                                                                        |
| _____ 9) Inertia             | D) Newton's Law of Gravitation is an example                                                                                    |
| _____ 10) Law of Inertia     | E) One quantity increases and the other quantity decreases                                                                      |
| _____ 11) Mass               | F) Amount of matter in an object; measured in kilograms                                                                         |
| _____ 12) Gravity            | G) Amount of space an object takes up                                                                                           |
| _____ 13) Net force          | H) Relates to mass; resistance to change in motion of an object                                                                 |
| _____ 14) Action-reaction    | I) Force of gravity on an object's mass                                                                                         |
| _____ 15) Inverse square law | J) For every action, there is an equal and opposite reaction.                                                                   |
| _____ 16) Volume             | K) The force the floor exerts on you when you stand motionless; it is always equal to your weight but in the opposite direction |
| _____ 17) Weight             | L) Happens when the net force is zero                                                                                           |
| _____ 18) Newton's 3rd Law   | M) The change in position divided by time in a particular direction                                                             |
|                              | N) Your shoes push back on the ground and you walk forward are this kind of pair                                                |
|                              | O) Newton's 1st Law                                                                                                             |
|                              | P) Combination of all forces acting on an object                                                                                |
|                              | Q) Requires motion and contact; three kinds                                                                                     |
|                              | R) Only requires two objects to be in contact with each other                                                                   |
|                              | S) The answer is not S.                                                                                                         |
|                              | T) It's not T either.                                                                                                           |
|                              | U) Why are you reading these?                                                                                                   |