

FORCES and ACCELERATION

Matching (you will need to use some terms more than once)

___ 1. A force is __	a. the tendency of an object to resist a change in motion.
___ 2. The sum of all the forces acting on an object.	b. balanced forces
___ 3. The sum of all the forces acting on an object is zero.	c. direction
___ 4. If several people push on a large bolder and it begins to move then forces are __	d. a push or pull
___ 5. Inertia	e. net force
___ 6. Velocity can change when speed or __	f. unbalanced forces
___ 7. Even if an object is traveling at constant speed its velocity can change if its __ changes.	g. mass
___ 8. The amount of inertia an object has depends on its __	

Pick the word(s) that correctly complete the statement.

9. Newton's first law of motions says, "An object at rest **will will not** stay at rest unless acted upon by a(n) **balanced unbalanced force**. An object in motion **will will not** stay in motion unless acted upon by a **balanced unbalanced** force.

10. A racecar driving 200 km/hr. around an oval racetrack **is is not** accelerating, because its direction **is is not** changing.

11. If you pushed on the side of a toy truck that is rolling along the floor would the motion of the truck change? **Yes No** This is because the push is a(n) **balanced force unbalanced force**. **Balanced unbalanced** forces cause a change in motion.