___ 5. A net force ≠ 0 is required to change an object's motion.

Answer: T
This statement is totally correct. Newton's 1st Law tells us that a net force = 0 **will not** change an object's motion. So, the converse must be true that a net force ≠ 0 **will** change an object's motion.
Points: 0 / 1

___ 6. The most obvious unit to measure inertia with would be the kilogram (kg).

Answer: T
Mass is defined as a measure of an object's resistance to changes in motion. The property of matter to resist changes to motion is called inertia. Therefore, mass is a measure of inertia. The unit of mass is the kilogram so it follows the kilogram is also the unit of inertia.
Points: 0 / 1

___ 7. When a ping-pong ball and a golf ball are at rest, the golf ball has more inertia. But, when the ping pong ball and golf ball are in motion, the ping pong ball has more inertia.

Answer: F
Mass determines inertia and mass only (not velocity; that contributes to an idea called momentum). In any instance, moving or not, a ping pong ball has less mass than a golf ball. So, a ping pong ball will always have less inertia.
Points: 0 / 1

MULTIPLE CHOICE

___ 8. 1.) _____ stated that the natural tendancy of matter is to be at rest and a force is required to maintain motion.