Grade Eleven Sample Test Item—Concepts & Procedures
Achievement Level: Standard Met

Given for the formula, $F = \dfrac{mv^2}{r}$ where

- *F* represents force,

- *m* represents mass and has units of grams (g),

- *v* represents velocity and has units of meters per second $\left(\dfrac{m}{s}\right)$, and

- *r* represents the radius and has units of meters (m).

Select an appropriate measurement unit for force.

(A) $\dfrac{g}{s}$

(B) $\dfrac{g \bullet m}{s}$

(C) $\dfrac{g \bullet m}{s^2}$

(D) $\dfrac{g \bullet m^3}{s^2}$

Area	Concepts & Procedures
	Applying mathematical concepts and procedures
Standard(s)	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.
Answer	C