Name: $\qquad$
Date: $\qquad$

## Unit conversion - formulas: $\mathbf{F}=\mathbf{m v} 2 / \mathbf{r}$

A 100 g marble is being spun around on a string that is 90 cm long. The speed of the marble is measure at $3.5 \mathrm{~m} / \mathrm{sec}$. What is the tension in the string, in Newtons?

Extension: What is the tension in the string if the marble's speed is measured at 15 miles per hour?

Show your work, and write your answer in a complete sentence.

