

**Checklist statement**

I can explain why motion in a circular path at constant speed involves an acceleration.



I can explain why circular motion requires a centripetal force.



I can apply $\omega = \frac{v}{r}$, define all terms and know their standard units.



I can apply $\omega = 2\pi f$, define all terms and know their standard units.



I can explain the radian as a measure of angle.



I can apply $a = \frac{v^2}{r}$, define all terms and know their standard units.



I can apply $a = \omega^2 r$, define all terms and know their standard units.



I can apply $F = \frac{mv^2}{r}$, define all terms and know their standard units.



I can apply $F = m\omega^2 r$, define all terms and know their standard units.



I can estimate centripetal acceleration and centripetal force in situations involving rotation.

