Rotational Kinetic Energy
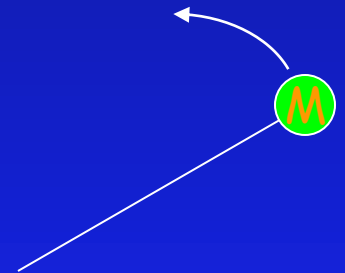
- Consider a mass M on the end of a string being spun around in a circle with radius r and angular frequency ω [demo]

  → Mass has speed $v = \omega r$

  → Mass has kinetic energy
  - » $K = \frac{1}{2} M v^2$
  - » $= \frac{1}{2} M \omega^2 r^2$

- Rotational Kinetic Energy is energy due to circular motion of object.