

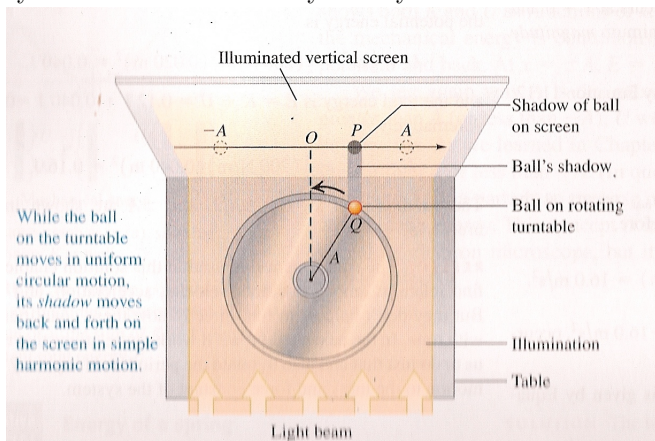
Name _____

Date _____

Mr Rawson

Simple Harmonic Motion I

1. If a mass of 0.55 kg attached to a vertical spring stretches the spring 2.0 cm from its original equilibrium, what is the spring constant of the spring?
2. Will the period of a vibrating mass-spring system on Earth be different from the period of an identical mass-spring system on the moon? Why or why not?



3. A spring with a spring constant of $1.8 \times 10^2 \text{ N}\cdot\text{m}^{-1}$ is attached to a 1.5 kg mass and then set in motion.

- What is the period of the mass-spring system?

- What is the frequency of the vibration?