

QUESTIONS TO HAND IN-EXPERIMENT 7

NAME _____

LAB INSTRUCTOR _____ LAB DAY/TIME _____

1. A spring which hangs vertically is 20 cm long with no weight added to its end. Putting a 0.5 kg mass on the end of the spring causes it to stretch until its new length is 25 cm. What is the spring constant?

A spring has a spring constant of 47.3 N/m. A mass of 300 grams is added to the end of the spring and the mass - spring system is set into motion.

2. What is the period of this motion?
3. What is the frequency of the motion?
4. If the mass is doubled, what happens to the period of oscillation?
5. If the mass is reduced to one-fourth its original value, what happens to the frequency of oscillation?