Answer on Question# 41304, Physics, Other

In an experiment to determine the effective mass of a spiral spring, which of the following is not required in the set of apparatus?
a. spiral spring
b. stop watch
c. slot weights
d. pendulum bob

Solution: hence we have the formula for calculating the period of oscillations of a mathematical pendulum:

$$T \cong 2\pi\sqrt{\frac{m_w + m_{eff}}{k}}$$, where m_w-mass of slot weight, m_{eff}- the effective mass of a spiral spring,

k- stiffness springs. With a stop watch, we can measure the period of oscillation.

In our experiment provides some fluctuation spiral springs with suspended to one end of the slot weights, so we do not use pendulum bob.

Answer: d. pendulum bob