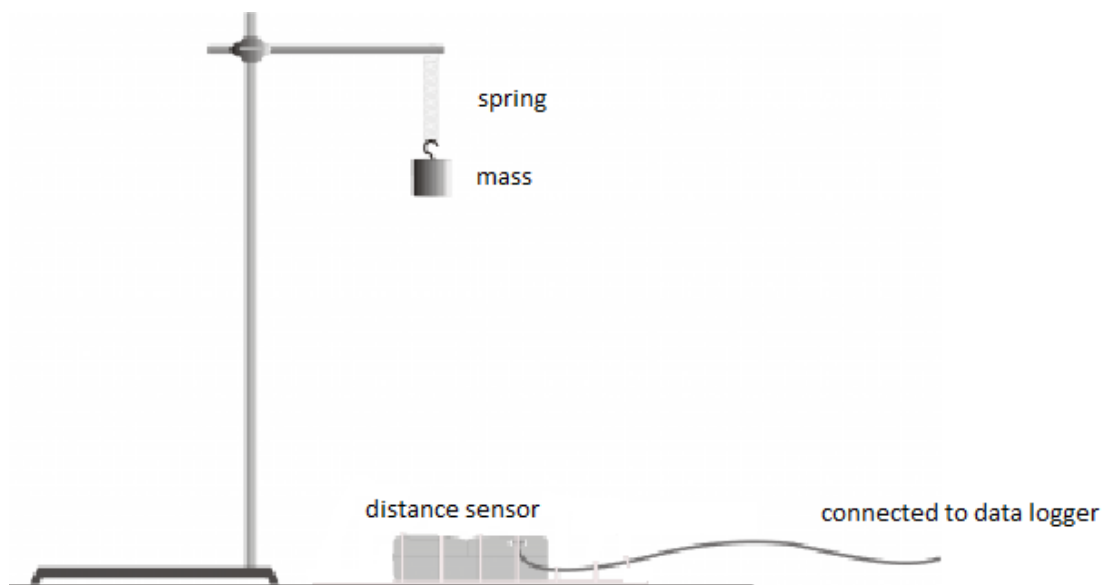







Title: To investigate SHM using a data logger.



1. Set up apparatus as shown in diagram. Place distance sensor directly beneath the mass. The minimal distance between the mass and the sensor must be at least 40 cm.
2. Switch on data logger, launch **Multilab** → **Logger** → **Setup** → **Rate** - 20 samples per second, → **Sample** 1000 → **OK**.
3. Go to **Logger** → **Setup** → **Sensor** →  click appropriate options.
4. Click on .
5. When the motion of the weights shows, view the displacement, velocity and acceleration graphs by selecting the displacement plot and clicking on  for the vel-time graph. Then select the vel-time graph,  click on  for the acceleration –time graph. What can be concluded from the graphs?
6. Repeat the experiment, however use a square piece of cardboard to increase the air resistance to the SHM. Is the damping visible on the graph?