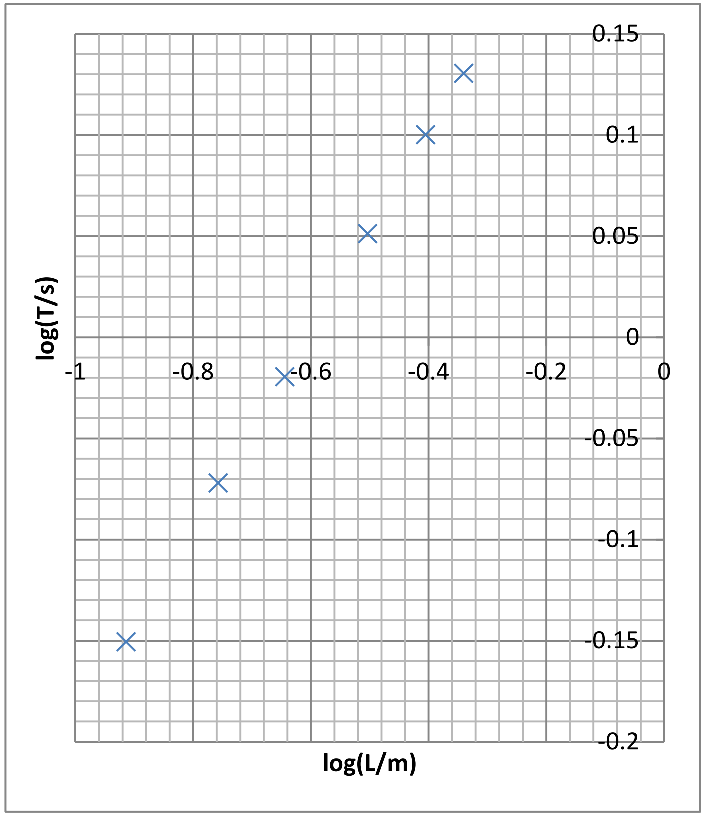
Investigating the relationship between the length L and period T of a pendulum

L/m	10T/s	T/s	log(L/m)	log(T/s)
0.457	13.50	1.350	-0.340	0.130
0.394	12.59	1.259	-0.405	0.100
0.314	11.25	1.125	-0.503	0.051
0.227	9.56	0.956	-0.644	-0.020
0.175	8.47	0.847	-0.757	-0.072
0.122	7.07	0.707	-0.914	-0.151



It is suggested that $T = k L^n$

1. Find k and n from the graph.

2. Use the formula sheet to find the formula for the period of a pendulum. Does your value of n agree with the formula?

3. Use your value for k to calculate the gravitational field strength where this experiment was conducted.