

Post-Activity Quiz

Answer the following quiz questions:

1. If you took a pendulum from Earth ($g = 9.8 \text{ m/s}^2$) to Mars ($g = 3.77 \text{ m/s}^2$), how would that affect the period of the pendulum? Show your work.

2. What do the units of this equation represent? In particular, what does the squaring of the period allow you to calculate?

Complete the following performance assessment:

3. Using the following data, calculate the acceleration due to gravity on two unknown planets. (Note: Error has been introduced in the data to simulate actual data, so find the average or a best fit.)

Planet 1:

Length (m)	0.20	0.50	0.65	0.82	1.00
Period (s)	1.45	2.31	2.59	2.92	3.23

Planet 2:

Length (m)	0.20	0.50	0.65	0.82	1.00
Period (s)	0.85	1.34	1.52	1.71	1.88