

A boy measured the time period of a simple pendulum by taking the average of the time of its 20 oscillations but another boy measured the time period of same pendulum with 30 oscillations. Whose measured time period is more accurate and why?

Answer: The boy, which measured time period of a pendulum by measuring the time of 30 oscillations, had done a more accurate measurement, because error of measurement decreases when number of measures increases. But, this statement is true only in case, if the amplitude of the pendulum just slightly decreased during the time of the measurement.