

PHYS1120

Summer 2025

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1. You are designing a grandfather clock. For the operation of the clock, you need the internal pendulum to mark the passing of one second. How long must the pendulum be to have a period of 1 second?
2. Now imagine you are on a future colony on Mars, where the gravitational acceleration is 38% the surface gravity of the Earth. What is the length of the pendulum on Mars with a period of 1 second?