



## COMPOUND PENDULUM HVT3



Year 1  
study

### Features

- Wall mounted apparatus.
- Can be mounted to HST1, HST100, HAC14, HVT12f frames
- TWO experiments in ONE; compound and Simple Pendulum
- Determination of Acceleration due to Gravity 'g'
- Radius of Gyration
- Stopwatch supplied along with container for accessories

### Description

A wall mounted bracket has a metre long bar suspended from its knife-edge pivot point. Attached to the pendulum bar is a movable mass. The mass can be fixed along the pendulum bar in seven positions. A simple cord pendulum with adjustable pendulum mass is also included. This enables the radius of gyration of the compound pendulum and the acceleration due to gravity to be determined. Other investigations from this experiment include centre of gravity of a compound pendulum; effect of fulcrum position and comparison with a simple pendulum. To time the pendulum motion a stopwatch is provided whilst accurate positioning of the pendulum mass is achieved using the ruler provided.

### Related Laws/Applications

- Acceleration due to Gravity
- Radius of Gyration
- Oscillations
- Vibration

### Learning capabilities

- To determine the radius of gyration of a compound pendulum about its centre of gravity
- Investigate the effect of fulcrum position
- To find the acceleration due to gravity 'g'
- To verify the equation of motion for a compound pendulum

### Technical Specification

- Pendulum Bar: 950(L) x 25(W) x 5(H) mm
- Seven (7) positions: 50mm centres
- Pendulum Bar: approximately 0.8kg

**Recommended Ancillaries**

- HAC14
- HST1
- HST100
- HVT12f

**What's in the Box?**

- 1 x Pendulum bar
- 1 x Slotted bob
- 1 x Knife edge assembly
- 1 x pendulum bob
- 1 x 5m spare cord
- Instruction manual
- Packing list
- Test sheet

**Weights & Dimensions**

- Weight: 2 kg
- Length: 950mm
- Width: 120mm
- Height: 120mm

**Essential Services**

- Sturdy vertical support

**Ordering information**

To order this product, please call PA Hilton quoting the following code:  
HVT3

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