

Apparatus Required

Test 1

The task is to carry out an investigation of how the amplitude of vertical oscillation of a mass hanging from two springs in series varies with time.

The following apparatus is required for each candidate:

100 g mass holder with 4×100 g masses, taped together to produce a combined mass of 500 g

2 springs joined “in series”, e.g. Nuffield No. 2 extension springs / expendable springs

1 optical pin

1 split cork

2 \times clamp and stand

G-clamp

Metre rule

Stopwatch / timer of resolution 1 s – or a centisecond timer with the fractional second section of the display obscured, e.g. by masking tape

Sticky tape (to secure the optical pin).

Test 2

The task is as in **Test 1**.

The apparatus required is as in **Test 1** except that the combined mass required is 400 g.