

MEASURING THE PENDULUM

Assemble the pendulum as instructed, using:

- 1 stand/statiivi
- 1 koura
- 1 bosshead/kaksois-puristin
- 80 cm of thread
- 3 weights
- 1 stopwatch
- 1 ruler

EXPERIMENT 1: Time of oscillation

Let the pendulum oscillate freely, starting from an angle of approximately 45 degrees.

Measure the time needed for 10 oscillations **to and fro**.

time for 10 oscillations	time of oscillation

According to my experiments, the time of oscillation is affected by:

- weights ☐ lengthened ☐ shortened ☐ no effect
- length ☐ lengthened ☐ shortened ☐ no effect

EXPERIMENT 2: the effect of mass

Experiment whether or not the weights affect the oscillations.

My hypothesis: ☐ The weights affect the time of oscillation.

☐ The weights have no effect.

weight (g)	time for 10 osc.	time of osc.

EXPERIMENT 3: the effect of length

Experiment whether or not the length affects the oscillations.

My hypothesis: ☐ The length affects the time of oscillation.

☐ The length has no effect.

length (cm)	time for 10 osc.	time of osc.