

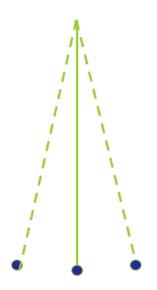
## Numeracy through Science module

## What makes a pendulum lazy? (Post-Primary)

## Read it -- Try it safely -- Explore it further

Sometimes a pendulum looks busy and other times it looks lazy. Make a simple pendulum by attaching a bead to a length of thread.

The top of the thread needs to be held securely but in a way that allows the length of thread to be changed.



Use a ruler to measure the length of the pendulum.

Use the stopwatch on a smart phone to record time.

Ask the students to predict whether a short string or a long string will make the pendulum lazy?

With a length of 30 cm, record the total time for 20 return journeys.

Repeat for pendulums of length 20 cm and 10 cm.

Compare your results.

Which pendulum is busy, and which is most lazy?

Extension activities: Investigate if a heavier bead makes any difference.

Investigate if the angle from the vertical at the start,

makes any difference.

Research how a Grandfather clock differs from a simple

pendulum.