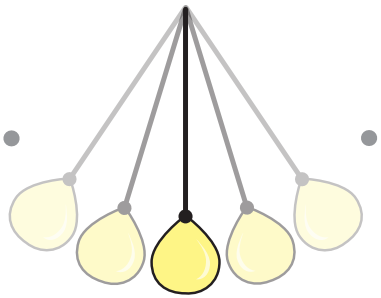
PARENT NOTES: CLOCKWORK AND MACHINERY!

PENDULUM

Today we learned that pendulums which are sometimes used in clocks convert stored potential energy into kinetic energy when they swing. This is what keeps a pendulum clock ticking and gives it it's 'tick tock' sound. We built pendulums with different lengths to investigate how changing the distance of the weight from the top of the pendulum changed the speed of the swing.



ASK YOUR CHILD

What did you make today?
(A set of pendulums)

How does a pendulum use energy when it swings?
(A pendulum converts stored energy into movement, or potential energy into kinetic energy, every time it swings. Pendulums lose a little bit of energy on every swing so they need to be recalibrated every so often).

What effect does changing the distance of the weight from the top of the pendulum have on the swing speed?
(Shorter distances should swing faster)

Have you seen something like this used to keep time before?
(They may have seen a metronome in music class)