

QAST Weekly Challenge

Marble Run

Introduction: many factors effect potential and kinetic energy. A marble run is a toy which can be used to explore these factors and have fun at the same time

Your challenge: to create a marble run in which the marble takes exactly sixty seconds to travel the full length of the run.

Resources: For this task you may use

A large cardboard box

Corrugated card

Sticky tape

Marbles (or any similar small round object)

Scissors

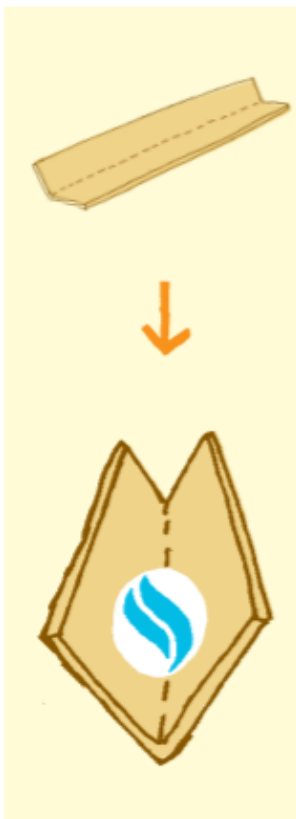
Process:

Cut the corrugated card into strips wide enough to take the marble as the runway

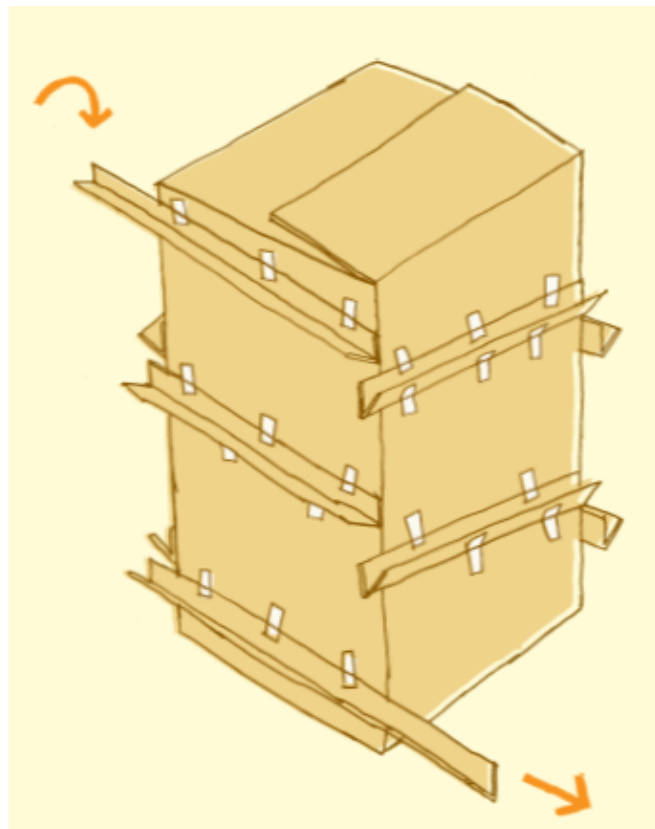
Attach these to the side of the box to create a run for the marbles

Place a marble at the top of the run and time how long it takes for the marble to reach the bottom of the run. The angle of the runways will affect the speed of the marble.

Adjust your design until the marble takes exactly 60 seconds to go from the top of the run to the bottom.



Making a runway



a marble run