



EPPro8 Challenge

Engineer Problem Solve Innovate

Pac-Man – Teacher’s Notes

Summary

Teams will build a giant compass to cut out a Pac-Man.

They will then build a Pac-Man vehicle.

Pac-Man’s jaws will be driven with a basic link mechanism. As the vehicle is pushed along the ground a mechanism makes the jaws open and shut.

Principles

Geometry, Mechanisms, Electronics.

Extra Equipment

Large cardboard box (large than 700mm x 700mm).

Scissors.

What to Aim For

See the “Getting the Most from your Equipment” document for guidelines on what to aim for from these challenges.

The Crank Handle Jaw challenge uses a window wiper type mechanism to convert the rotating motion of a motor/crank handle to a side-to-side motion.

It is difficult to explain the “window wiper” mechanism with a diagram. At our events we would have an example on the demo stand. I suggest that the teams have a look at the tutorial video if they can’t understand this (starting at 5:53 into the video).

Our Solution

