

EPPro8 Challenge

Engineer Problem Solve Innovate

Drum Machine – Teacher’s Notes

Summary

Teams will construct a basic drum kit. They will then construct a mechanism that can play the drums by turning a crank handle. This is similar to how a cam shaft works for the timing on a car’s engine.

Principles

Mechanisms, Structures, Gearbox, Electronics.

Extra Equipment

Five drum printouts (at the end of this document).

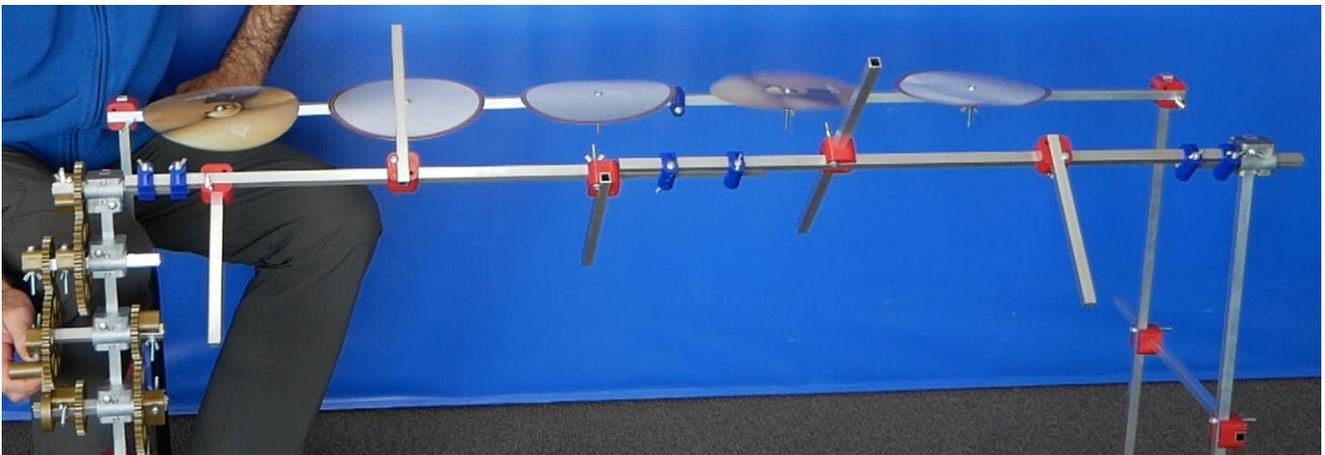
- Double laminate these (ie feed them through the laminator twice).
- Cut to shape.
- Carefully make a hole in the centre using scissors.

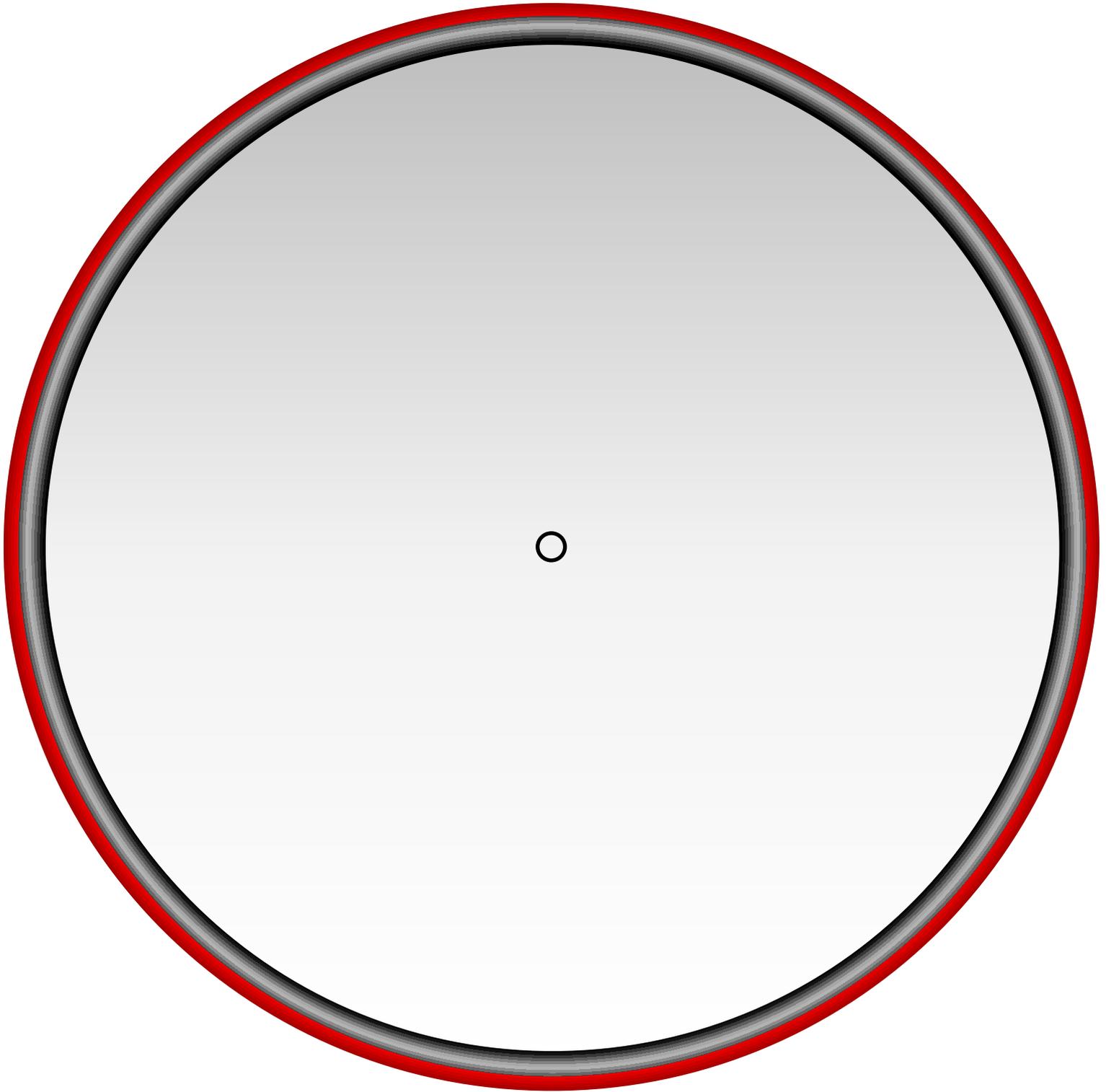
What to Aim For

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

This challenge uses a gearbox. There is a separate challenge that describes how to build a gearbox. Teams may wish to complete this challenge first

Our Solution





3 Copies

Print, double laminate, then cut



2 Copies

Print, double laminate, then cut