

Practical Title: Clucking Cups

Focus and Principles: Investigation (comparative or fair test) and recording conclusions

What difference does changing one of the variables make to either the pitch or the volume of the sound made by the clucking cup?

The Learning Objective could be to be able to draw a conclusion, based on their results, in which case the pupils can be asked just to record their conclusions.

Equipment: A selection of cups (paper/plastic) of different sizes, a selection of string/wool of different thicknesses, scissors, awls (for poking a hole in the base of the cups), a selection of material strips (e.g. J-cloth), access to water

Suggested pupil group size: 3-ish

Further instructions: It is worth showing that dampening the cloth can make a difference (can ask pupils to think about why this is). The cup can be either way up.

Where the focus is on the recording of a conclusion then the pupils can be encouraged to think about the following:

- Were they able to reach a firm conclusion as a result of their investigations? Does the conclusion fit with their understanding of sound?
- If they were not able to reach a firm conclusion then ask them to consider why this might be – recording these ideas can be their conclusion.

It is worth emphasising to pupils that it is not a sign of failure if they are unable to spot a clear pattern/relationship and draw a conclusion. Scientists are often not able to do this; the important thing is to be able to think about why and what could improve the experiment.

Health & Safety:

Teachers always need to risk assess practical activities for their children and defer to their health and safety advisor for the most up-to-date source of health and safety guidance.

This training cannot be relied upon as source of health & safety guidance.

