



Guide for Parents

This activity aims to encourage collaboration between adults and children, as well as shape basic knowledge of electrical energy and why scientists and engineers are interested in it. It is not expected that parents know the answers to these or any other questions that arise, but rather this is a guide to what questions you might ask, and to encourage families to follow up on answers and learn together.

Questions can be asked about what you see as you go, and about the science behind these observations. Here is a list of examples, but feel free to explore further ideas as you do the activity.

You might want to try the activity again with something changed, but only change one thing at a time to see the effect – this is the start of experimenting!

How could you improve on this motor? Make it faster? Bigger? Stronger?

What would happen if you use more or fewer coils of wire? Bigger or smaller coils of wire?

What would happen with different sized batteries?

Try moving the magnet into different positions - closer? Further away? Use two magnets?

What happens to the coil in each of these tests? Why does this happen?

What could we put on the rotating coil to make this motor more useful?

What else can you think of using this motor for?

What do you think has a motor like this in your home?