

Equipment

- Whirly Tubes

Method

1. Hold one end of the tube and twirl the other end in a circle above your head
2. Listen for the noise it makes
3. See if you can do it a little bit faster and listen for the noise again
4. Is it a different noise? What is the difference?

The Science

Imagine that the tube is filled with tiny pebbles. Twirling the tube overhead would shoot the rocks out of the tube. The same thing happens with the molecules of air. As you twirl the tube, air molecules are launched out of the other end. The faster the twirl, the faster the molecules come flying out.

The faster the air flows through the tube, the higher the frequency of the sound produced which is then amplified by the tube.

Health and Safety

Ensure that there is enough space between the students using the tubes to prevent any injuries. Ensure that the students use the tubes above their heads.

