

A noisy fan

Background

A fan may be made by folding a rectangular sheet of paper in concertina fashion. When moved through the air it may cool you down but it generally doesn't make any noise.

You will need...

- ✓ A large rectangular sheet of card or stiff paper.

Follow these steps

1. Holding the left side of the fan in the photo, slap the right side of the fan sharply against a hard surface.

So what happened?

The energy of the impacts was dissipated to the air as a very loud sound (considering it is essentially a sheet of paper). The "concertina folds" close in rapid succession, making the several sounds merge as one loud sound. The noise was like that which results from striking the flat side of a meter stick against a table, slap a table with the fan, so

What next?

Alter the number and size of the folds and the quality of the paper used to obtain the optimum sound possible.

