

# Cup Phones

Reginald Mitchell (known today as RJ Mitchell) was listening to the wireless radio with his family. This was one of the most important forms of communication in the Second World War for families to receive news and announcements. The letter that Reginald wrote to his son Gordon was another way of sending comfort and connection to loved ones during the war.

When flying in Supermarine Spitfires in the Second World War, pilots would communicate with Fighter Command HQ and other aircraft using small portable radios. Radios use electromagnetic signals to send sound waves over a long distance, to deliver information from one place to another. It was important to keep in contact with the pilot should any problems arise!

But did you know - in the First World War pilots communicated very differently? They used an object called a gosport tube. This important piece of equipment worked very similar to a simple cup phone.



You are now going to engineer your very own 'gosport tube' to see how hard it was to communicate to one another before radios were introduced.

You will need:

- 2 x paper cups
- 1 x piece of string (roughly 1 metre in length)
- 1 x pencil



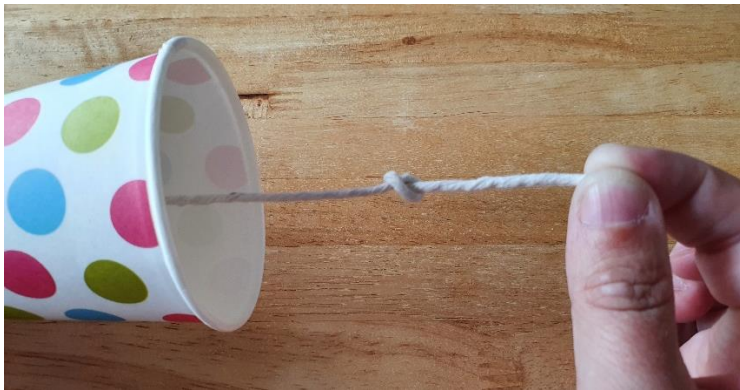
1. Take one of the cups and the pencil and pierce a small hole big enough to thread your string through.



2. Now thread one end of the string through the hole in the cup.



3. Pull the string through the cup and tie a knot as shown below.



4. Do exactly the same as above with the second cup. Your gosport tube device is now complete!

5. Stand around one metre apart from each other and make sure the string between the cups is nice and tight before you start talking to each other. Make sure the string stays taut. As one person talks into the cup, the other should be listening.

**Try:** think of some secret codewords and see if the other person can work out what you're saying and then swap over.

During lockdown, your family, friends and teachers would have used different ways of communicating to everyone. They may have used a telephone or even video called one another!

Can you think of any ways that we may communicate in the future? The options are endless! For example, it may be that we have a pair of glasses with a microphone in them.

Don't forget to share your ideas with us on social media!



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