## A MAGICAL KNOT TRICK!

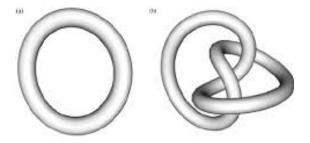
Can you tie a knot in the center of a string without letting go of either end?

Go ahead, give it a try!

Stuck yet?

The truth is, that depending on how you grabbed the string, this could be an impossible task.

In a branch of mathematics called knot theory, it is a well-known fact that the *unknot*, a circle without a knot in it, is fundamentally different from the *trefoil knot*, a circle with a knot in it. Which means, unless you break the circle to tie it, you can't turn one into another!



When you grab the ends of the string, your body creates a circle with the string, and unless you already have a knot in the circle, you won't be able to put one there without letting go of one end.

To WOW! your friends, cross your arms before you grab the string. When you uncross them, the "knot" created by your arms will move onto the string, knotting the string. Try it!

