

GIRL SCOUT WEEK SERIES

ACTIVITIES

SWAP: Mini Magic Wand
Magic Toothpick Trick
Make Some Magic At Home

MAGIC SECRETS

Throughout history, a lot of ‘magic’ has really been science disguised with a few silly words. This is one of those tricks.

All things (including water) is made up of tiny things called molecules). Water molecules like each other and stick together (that’s why when a bit of water falls on a table or window, it blobs together in a little droplet).

The surface of the water has a layer of clingy molecules on it -- this layer is called the water’s surface tension. The toothpicks were nice and flat so they were floating on this layer.

Remember that we dipped the sixth toothpick in dish soap? That’s the real trick to this trick. The soap molecules break the surface tension of the water.

This effect spreads out in an ever widening ring (like ripples in the water when you throw a rock in a lake).

The molecules originally holding the toothpicks break apart. The molecules farther away from where you dipped the toothpick still have their surface tension (for a little longer) so they pull the toothpick toward them. Of course, eventually the “ripples” of soap hit those molecules too.

Once the soap is in the water, the surface tension won’t come back. That’s why the audience member couldn’t recreate the trick. It will only work once and then you have to clean everything up and use new toothpicks to do the trick a second time.

That’s also why you have to be careful that your pan is well rinsed before you do the trick.

Check out more tricks like this on <https://www.kidzone.ws/magic/>



Use Your I-magic-nation!

Add a little magic to your day with these fun activities, magical secrets, and video that teaches girls how to make magic right at home!

GIRL SCOUTS FUN FACTS

**Did you know that
Venus and
Serena Williams,
Dakota Fanning,
Taylor Swift and
Michelle Obama
were all Girl Scouts?**

