

A STEM in the Park

Take Home Activity

STEM

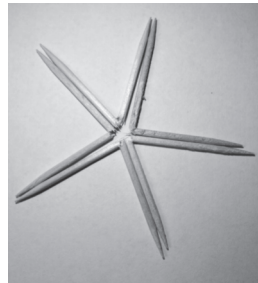
in the **PARK**™

Science, Technology, Engineering, and Mathematics

Toothpick Star

What You Need

- 5 Toothpicks
- Water
- Eyedropper



What To Do

1. Break 5 toothpicks in half, so they are still connected at the middle.
2. Arrange the toothpicks so they are touching with the broken piece in the middle of the star.
3. Using the eyedropper add water droplets one at a time to the center of the star and watch what happens!

Continued on back

The Science

Capillary action is the movement of water up a tube or through a material, usually defying gravity. Plants use capillary action to bring water up the roots and stems to the rest of the plant. Just like any other plant material, the wooden toothpicks absorb water through capillary action. As the broken toothpick absorbs the water, the wooden fibers expand and try to straighten out. As the toothpicks try to straighten, they push against the other toothpicks and form a star.

Extension: Visit Metroparks Toledo and take a look at all of the different plants that use capillary action.

Additional Notes

Adult supervision required for young children as toothpicks pose a choking hazard

This activity is brought to you by Metroparks Toledo

