



Inspired by Nature (Biomimicry) Activity for Kids

Waterproof Shoe DIY

 Duration: **15-20 min**

 Difficulty: **Easy**

 Cost: **\$0 to \$5**

Make a shoe waterproof using an idea from nature!

Material List

- 1** Old pair of canvas shoes
adults permission required
- 1** Candle
- 1** Hairdryer
- 1** Pitcher of water
- 1** Large plastic tub

Instructions

- 1** Rub the candle back and forth all over the surface of one shoe.
- 2** Have an adult help you use a hairdryer to melt the candle wax into the shoe.
- 3** For best results repeat this process one or two more times.
- 4** Hold the treated shoe over a shallow container and pour water gently on it.
- 5** Next take the untreated shoe and pour water on it to see the difference.

How It Works

The treated shoe has a special coating of wax that protects the shoe from getting wet. This is similar to the nasturtium plant in the video or the feathers on a duck. When you poured water on the treated shoe, the water just slid off. The untreated shoe got wet when you poured water on it. Being inspired by nature to solve a problem is called biomimicry.

