

Ever wondered why pool noodles float instead of sink? Let's explore the science behind it by creating pool noodle boats using simple household materials! These boats make bath time more fun and educational.

## Materials Needed

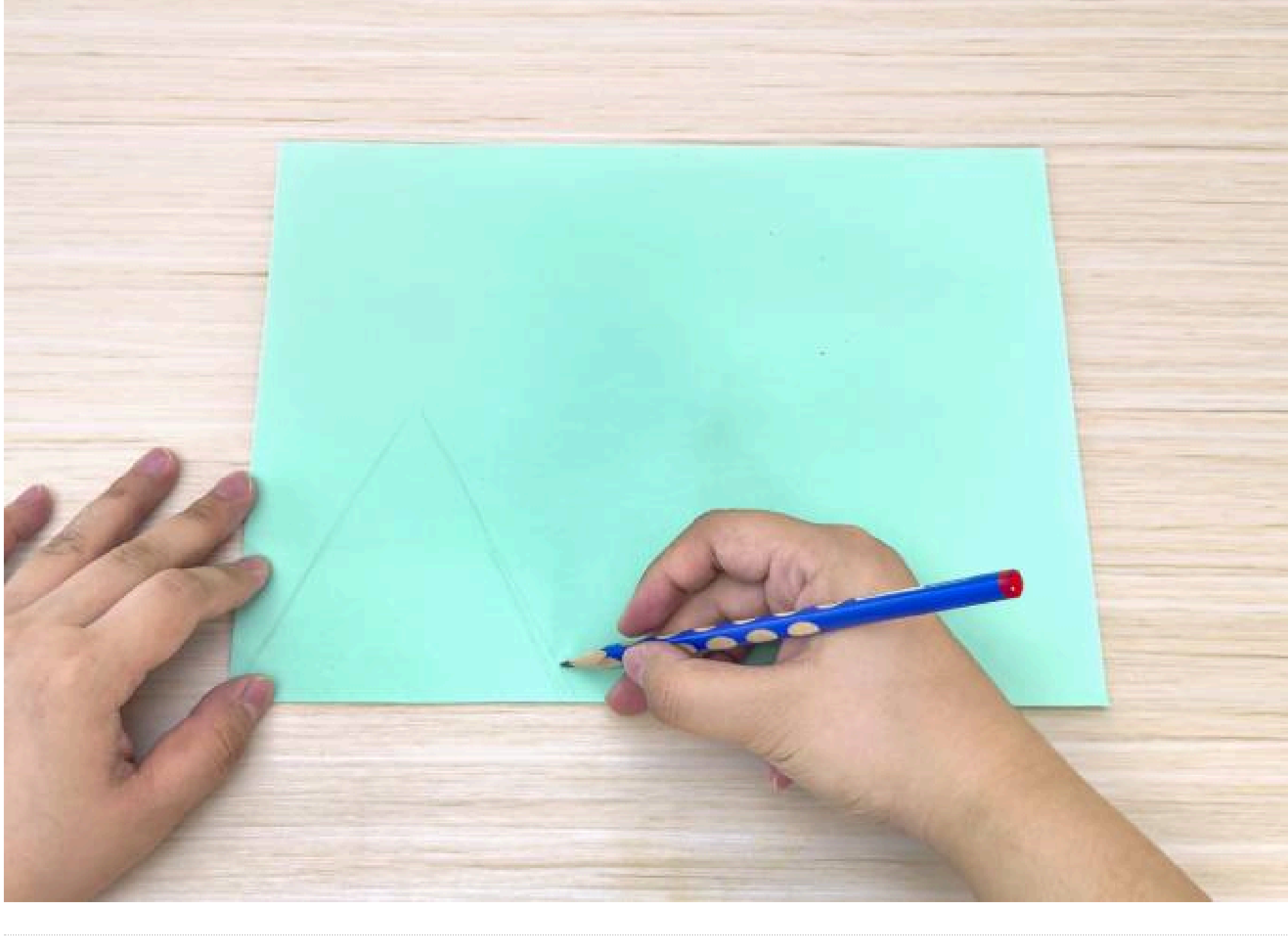
Colored foam paper  
Drinking straws  
Pool noodle pieces  
Colored paper tape  
Scissors  
Pencil



## Step-by-step tutorial

### Step 1

Draw a triangle on the foam paper using a pencil.



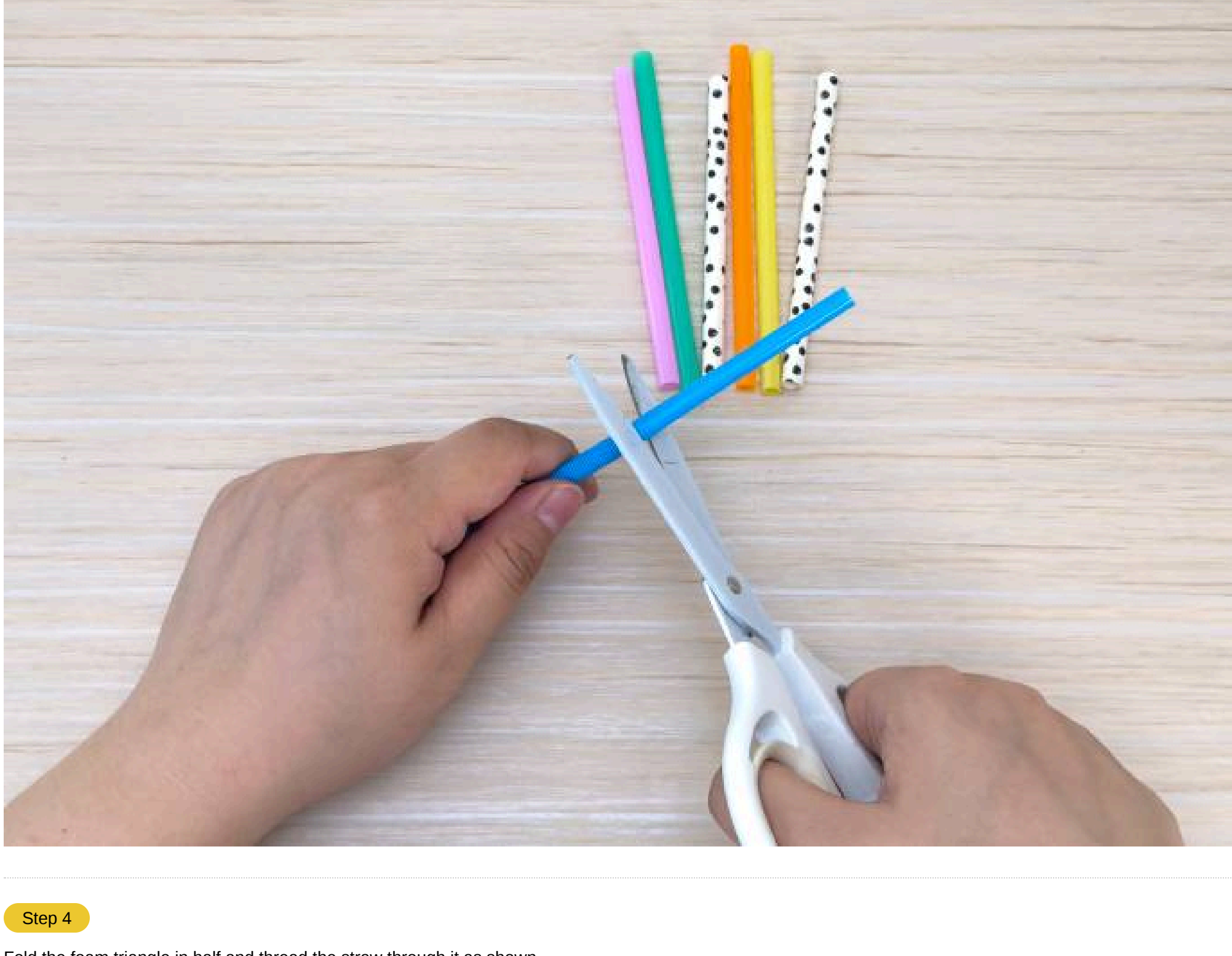
### Step 2

Cut out the triangle. You can make several triangles depending on how many boats you want to make.



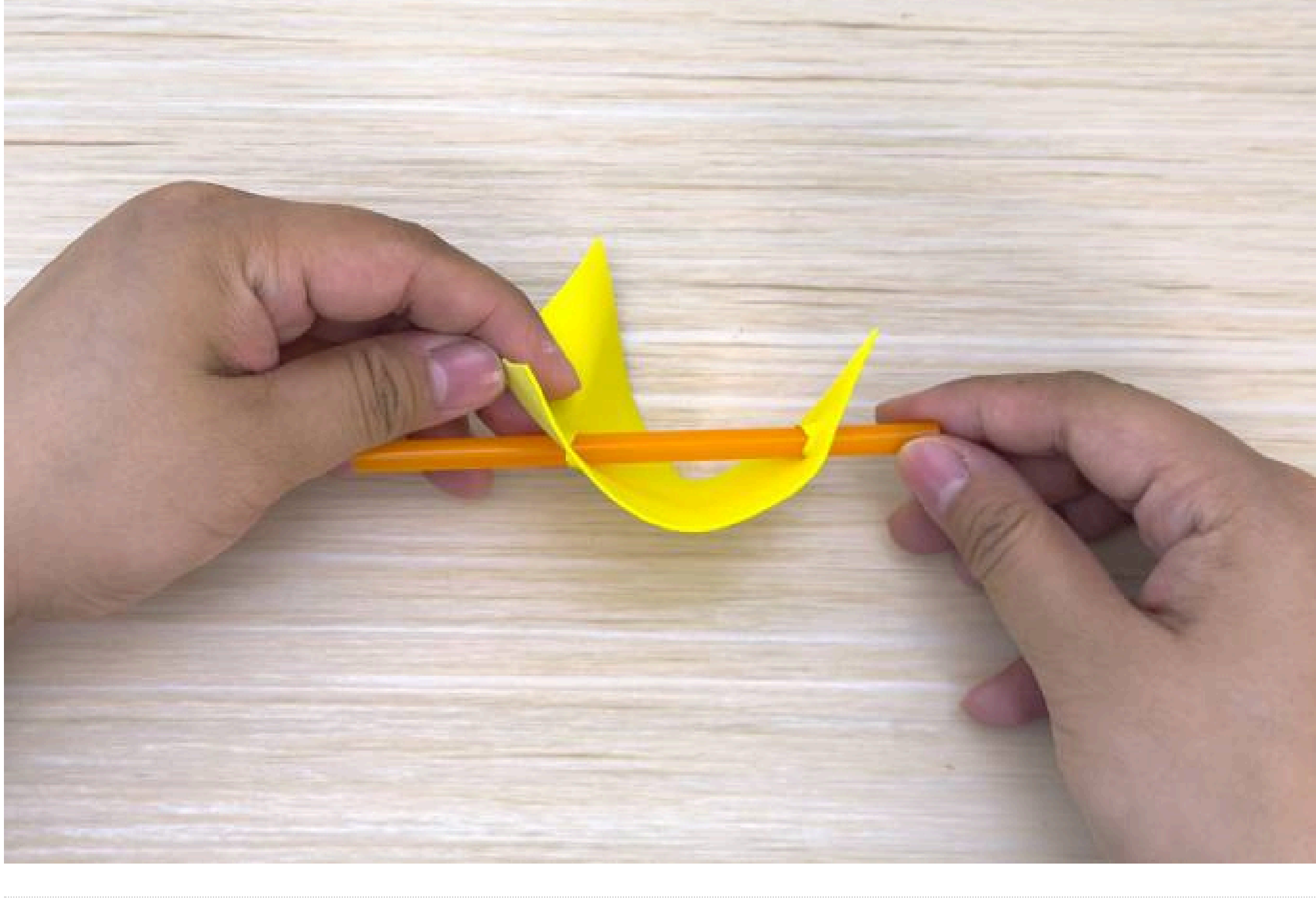
### Step 3

Cut straws in half. Each straw piece should be slightly longer than the triangle's edge. Try to keep straw lengths consistent if making multiple boats.



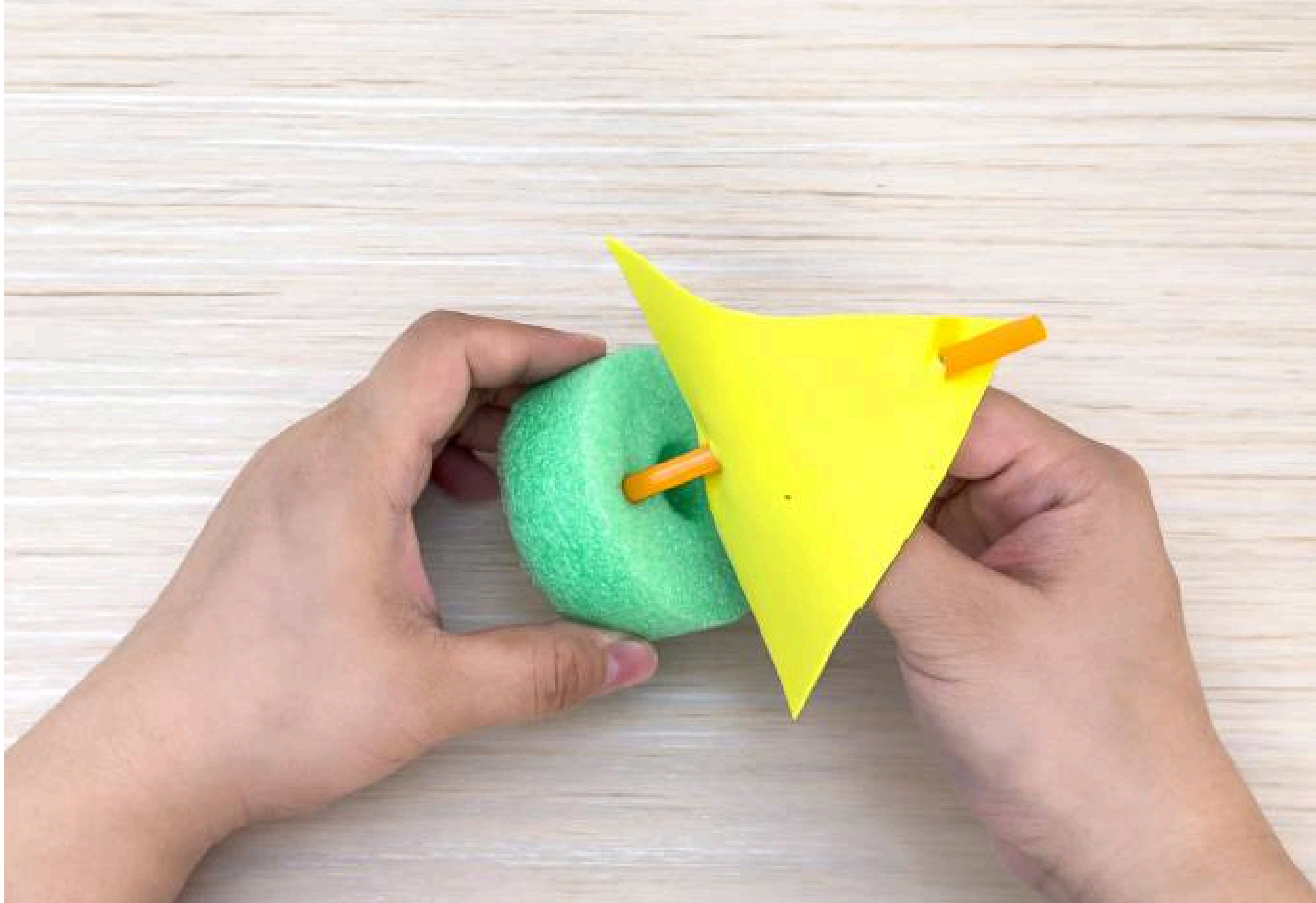
### Step 4

Fold the foam triangle in half and thread the straw through it as shown.



### Step 5

Insert the straw with the foam sail into the pool noodle piece.



### Step 6

Cut a piece of colored paper tape and attach it to the top of the straw.



### Step 7

Cut a small triangle from the end of the tape to create a flag shape.



### Step 8

Place your boat in a container of water or bathtub and watch it float!



## The Science Behind It:

Boats float due to buoyancy - an upward force exerted by liquids on objects. When your boat is placed in water, the water pushes up while the boat's weight pulls down. When the pool noodle displaces enough water, the buoyant force overcomes the boat's weight, allowing it to float. This is the same principle that keeps pool noodles floating in swimming pools.