

# Capture the Wind

## Activity 5- STEAM Football for Kids

Materials Needed:

First, gather paper, a paper bowl or cup, tape, scissors, 4 popsicle sticks, and crayons.

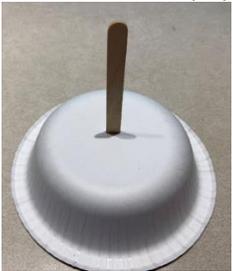


What to do:

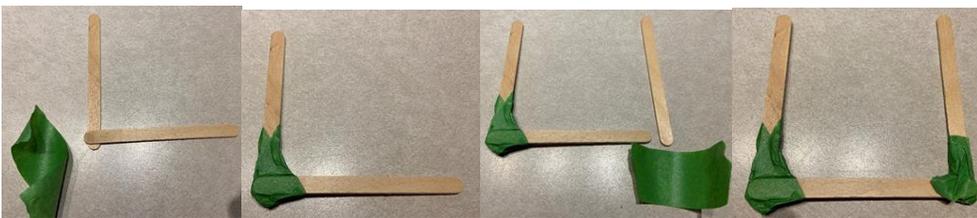
1. Make a hole in the bottom of the bowl or cup with the tip of the children's scissors. Be careful.



2. Put the popsicle stick in the bottle of the cup or bowl.



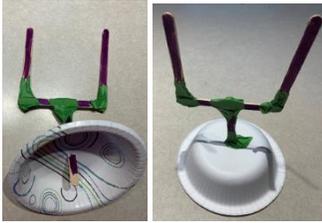
3. Tape one side of the stick to the end of another popsicle stick. Do the same on the other side to create a goal.



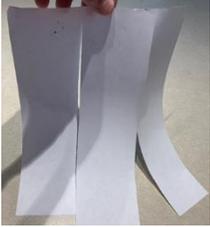
4. Tape the U-shaped popsicle sticks to the bottom of the goal post which is the fourth popsicle stick.



5. Color or decorate the goal post.



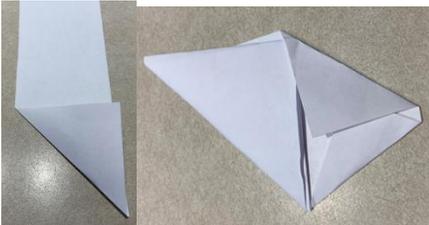
6. Take a piece of paper and cut it in three strips. These strips are for the footballs.



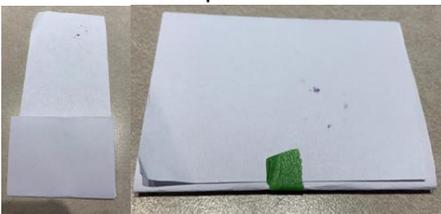
7. The first strip can be crumpled into a circle shape.



8. The second strip of paper can be folded into a triangle shape.



9. The third shape can be made into a square. Use a piece of tape to close the side.



10. Decorate the three footballs.



11. See how many goals can be made with the three shapes of footballs.  
Take score. The person with the most goals wins.



## **STEM Connections**

How does this work?

In this experiment, projective motion was to show how gravity causes a flicked ball whether it is thrown or a kicked object to fall in a parabolic arc. Projective motion is motion of an item that is thrown or forced into the air. When the item is in motion, it is subject to only the acceleration of gravity. Gravity is the force of something in physical motion. The parabolic arc is in the shape of an arch like a bridge or a curve. Geometry is also used to identify the best way to make a ball to go over the goal post.

What force pulls the ball back down?

Change the size and shape of the balls. Which shape and size goes the furthest? Which one goes the shortest distance? If you change the color, does that affect how far the object goes?

Add a paper clip to one end of the ball? How does it move now?

Try adding a target to the other end of the goal post? Did you get close?

## **Other Football Sources**

The following are available as **eBook** titles to check out.

[Let's Explore Engineering](#) by Joe Levit

[Let's Explore Technology](#) by Joe Levit

[Let's Explore Math](#) by Joe Levit

[Let's Explore Science](#) by Joe Levit

[Football Is Fun!](#) By Robin Nelson

[Football Trivia](#) by Tyler Mason