Pass out 6 popsicle sticks to each student. Explain that there is a way to put these sticks together to form a square without using any glue or tape. Have the students try to figure out how to put them together. If they are stymied, display the Popsicle Square sheet. After students have created a square, pass out 5 more popsicle sticks and challenge them to create a triangle. If need be, display the Popsicle Triangle sheet as a guide.

After the students have created the triangles and squares, have them test them to see how sturdy they are. You can either have students drop them from various heights or take them somewhere to fly the puzzles like a frisbee to see how well they hold up.

NOTE:
1. When creating the square polygon, weave the sticks together.
2. When creating the triangle, it is best to hold the three top pieces together in the air and then slide in the other two popsicle sticks. When the sticks are laying on the table it is harder to slot in the other popsicle sticks.
Popsicle Square