

Gumdrop Geodesic Dome

Have you ever seen a geodesic dome? Maybe you've seen them at the playground! In this activity, you will get to build a simple geodesic dome using gumdrops and toothpicks.

PROGRAM PREMIERE

Youtube - Cal Poly Pomona ASCE

Friday, November 13, 2020 @ 10:00AM

Materials Required:

- 11 Gumdrops and 25 Toothpicks

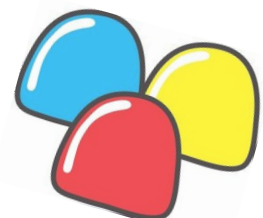
Instructions:

1. Refer to the provided sheet to see how the dome is made. Attach five toothpicks together using the gumdrops between each toothpick to form a flat pentagon (five-pointed) shape. You should have a gumdrop at each point between each toothpick. Cut the paper into 3 inch wide strips. Length depends on personal design.
2. Poke two other toothpicks into each gumdrop from Step 1, arranging the new toothpicks so that they are pointing up at an angle. Try to make it look like you're forming triangles!
3. Take five new gumdrops and attach them to the top of the new toothpicks, putting two toothpicks into each gumdrop to form triangles. You should end up with five triangles this way.
4. Attach a toothpick between the top points of the triangles you just made, connecting the gumdrops together. This uses five toothpicks, and will create another pentagon shape, this time at the top of the dome!
5. Take five more toothpicks and poke one into each of the five gumdrops that make up the top pentagon. Arrange the new toothpicks so that they are pointing up. Poke all five toothpicks together using one gumdrop in the middle-top of the dome. Your geodesic dome is complete!
6. Gently press down on the gumdrop at the top of your geodesic dome. If it does not break, try carefully pressing down on it a little more!
7. Share your creations with us on Facebook or Instagram using the hashtag #cppasceSTEAM

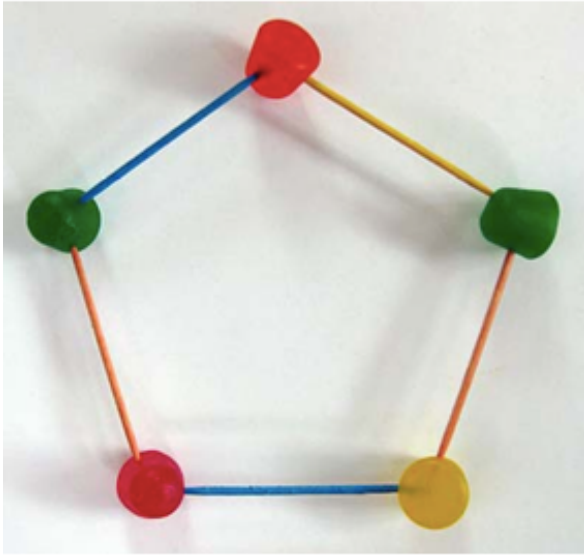


@cppasce

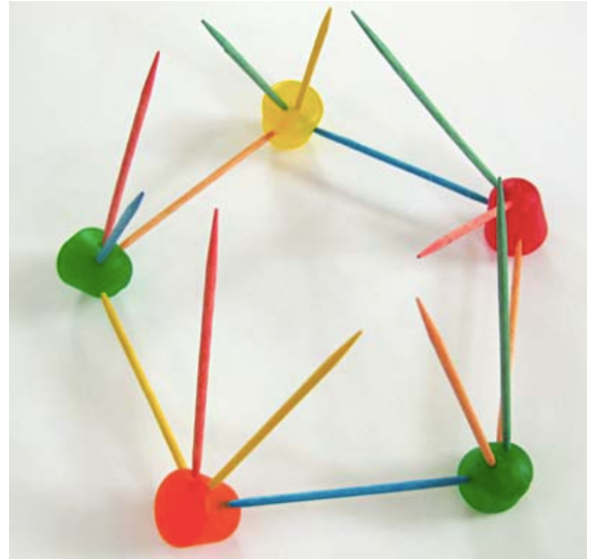
www.cppasce.org



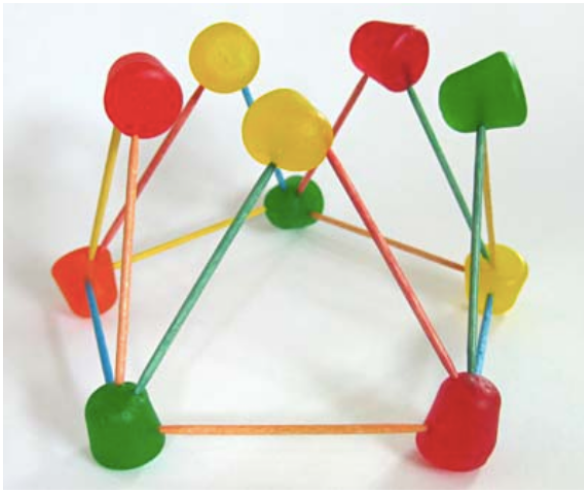
1



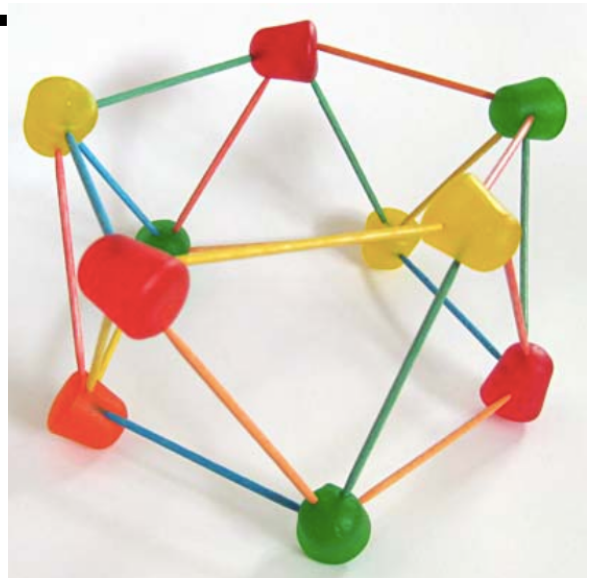
2



3



4



5

