

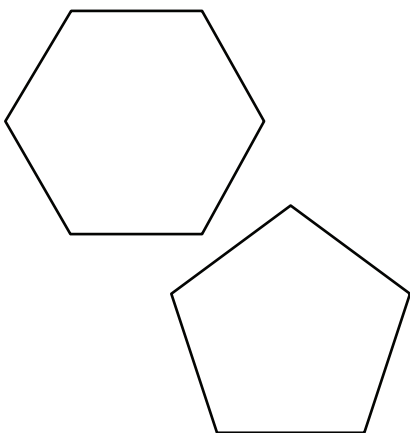
LOOK KOOL ACTIVITY: Use the news to make a geodesic dome!!!!



WHAT IS THIS?:

Geodesic domes can look like a delicate web of tubes and connectors. But don't let their appearance fool you. As you'll discover in this activity, geodesic domes are incredibly solid structures. The secret to a geodesic dome's solidity: triangles. Triangles are super strong shapes. That means that you can make domes out of some very light-weight materials, like straw, bamboo, or...rolled-up newspapers. In this activity, you get to make a dome big enough for you to fit inside.

GOOD TO KNOW BEFORE YOU START THIS ACTIVITY:



If you look at geodesic domes closely, you can see that they're made up of triangles connected together to form a variety of shapes. For example, when you assemble certain types of triangles together, you can create hexagons (shapes with six equal sides that connect with each other with at same angles and pentagons (just like hexagons, but with five sides).



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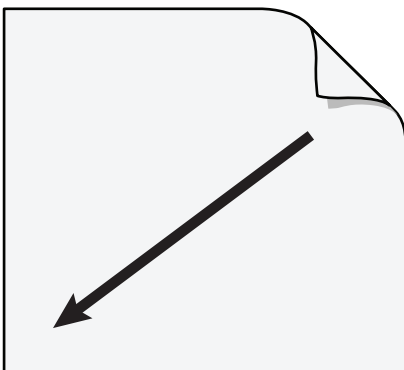


WHAT YOU'LL NEED:

- Friends to help you
- Masking or duct tape
- A ruler or measuring tape
- Scissors
- Lots of newspapers (*you'll need about 200 newspaper pages*)
- Stuff to add bedazzle your dome: glitter, finger paint, glue, beads, feathers and whatever else you like



PREPARATION:

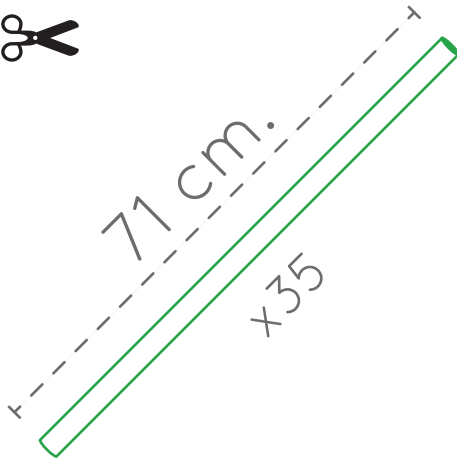


STEP 1 - Make 65 newspaper tubes

Open up the newspaper. Take three full pages out and stack them. Starting from the upper left corner, roll the stack as tightly as you can. You should have a long tube. Use tape to secure it. Repeat 65 times.

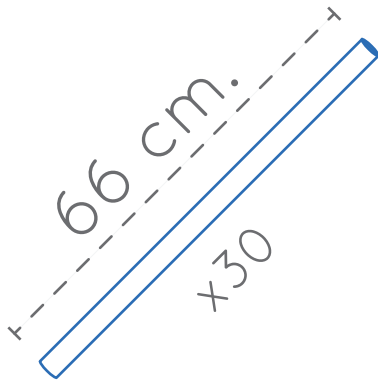


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STEP 2 - Make 35 “long” tubes

Cut off the ends of a tube until it measures 71 centimetres. Your first tube is your model. Use it to do the same to the **34** other tubes. Make a pile with your 71-centimetre-long tubes.



STEP 3 - Make 30 “shorter” tubes

Do the same as in step 2. But this time, the length for the **30** remaining tubes is 66 centimetres.



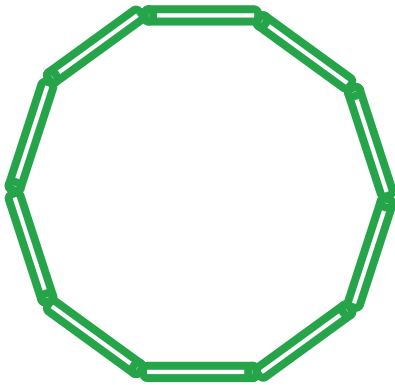
STEP 4 - Add some pizzazz to the tubes.



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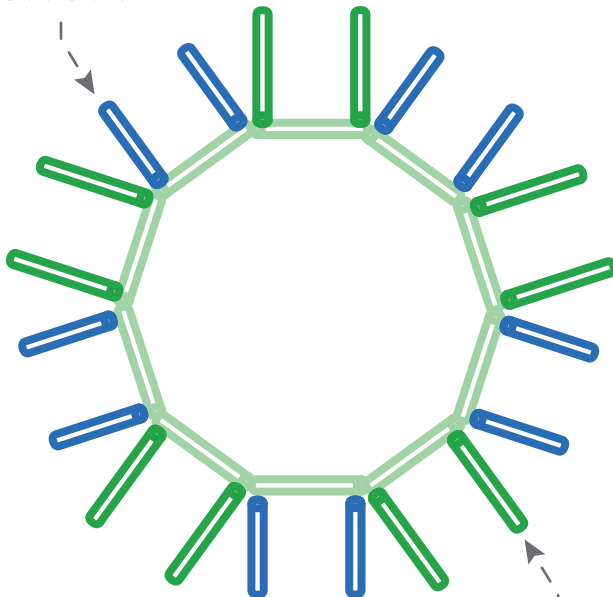
ASSEMBLY: Now it's time to put it all together!



STEP 1

Take 10 long tubes and tape them together to make the dome's base.

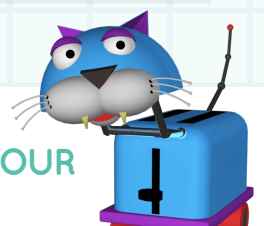
short



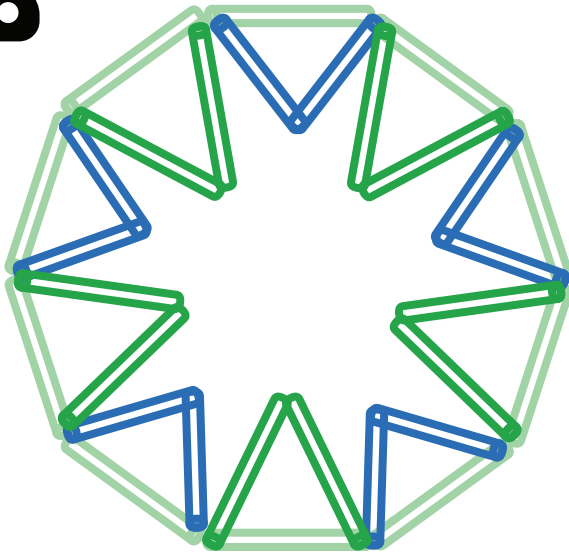
STEP 2

Look at your base. The places where the tubes connect are "joints" Take a long tube and a shorter tube and tape them to each joint. But not in any old way. Make sure that you place them so that long tubes are beside long tubes, and shorter tubes are beside shorter tubes. The illustration for step 2 should help you place your tubes in the right position.

long

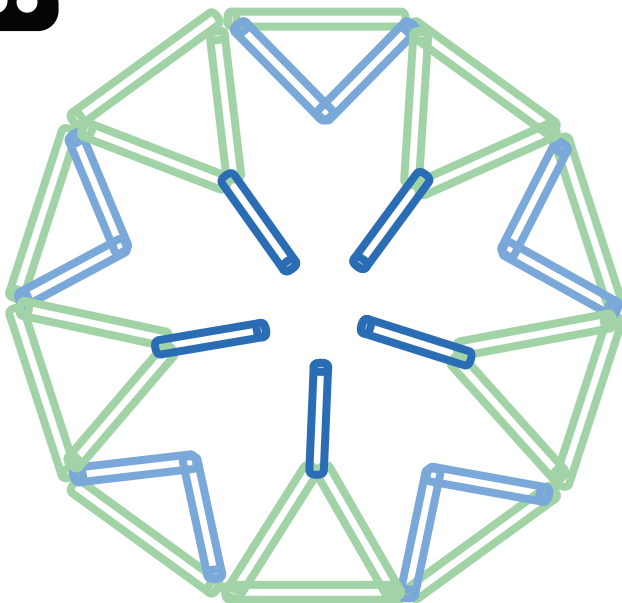


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STEP 3

Make pairs out of the shorter tubes. Tape these pairs together. Do the same with the long tubes. You should now have 5 “shorter” triangles and 5 long triangles alternating with each other along the base.



STEP 4

Take 10 short tubes and connect them to the tops of each “triangle”. This will “squeeze” your shape together and you should notice that the dome shape is starting to form.



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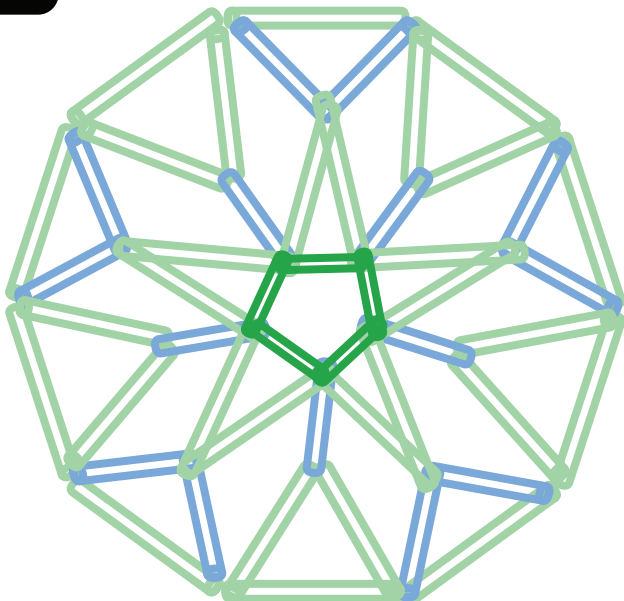
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STEP 5

You should now be able to count 10 places, or “joints” where the shorter pieces connect. At each of these joints, there should be four “shorter” tubes connecting. Connect a shorter tube at each of these joints. But this time, these shorter tubes should be sticking straight up. Now take 10 long tubes and use those to connect the shorter tubes that are sticking up to the joints.

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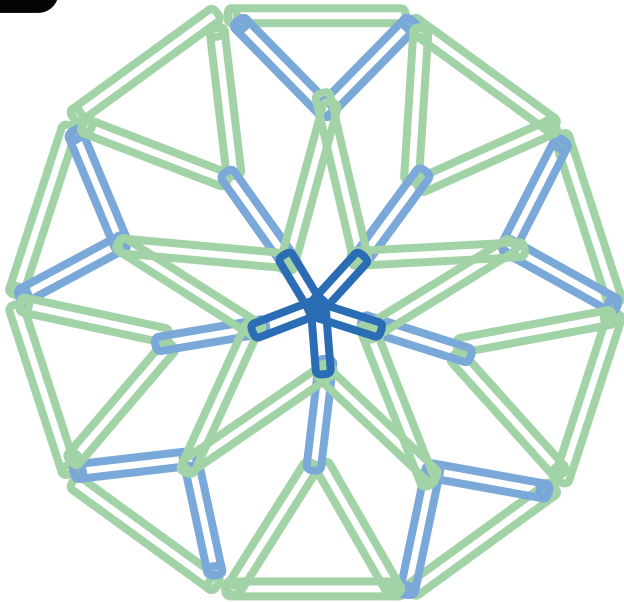
STEP 6

Use long tubes to connect the tops of the new triangles formed in Step 5



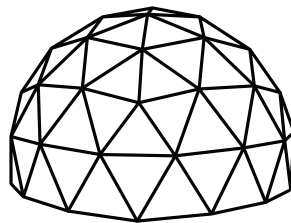
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STEP 7

Use the remaining short tubes to close off the dome by having them all connect to the joints and at the center. You might have to be inside the dome for this step.



And there you have it, a dome!

And how do you make the news with a newspaper dome? ? By testing out its strength! See how many stuffed animals it can support. Then try adding other, heavier, unbreakable objects you can find around your home, like magazines.

You might be surprised.

