

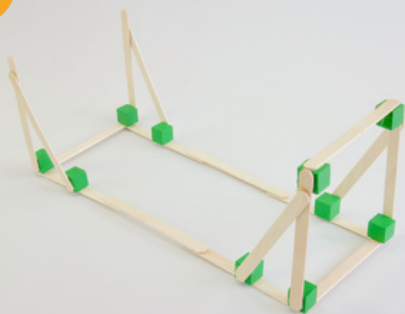


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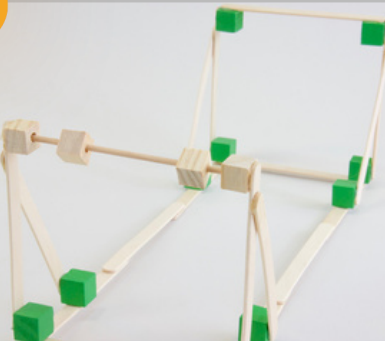
1. Create a base that's at least 3 craft sticks long. Glue 8 cubes near the ends as shown

2



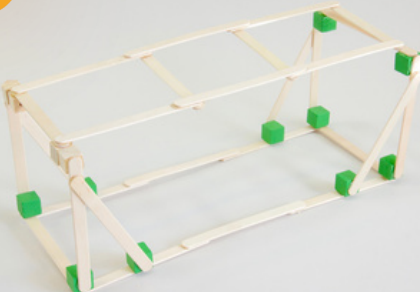
2. Create the triangular support structures. On one end, connect the supports as shown

3



3. On the other end, create a hinge with 4 cubes with holes and a dowel

4



4. Create the bottom of the bridge and glue it to the innermost hinge cubes. Note: the bridge is narrower than the base

5



5. To create hydraulics: Start by filling a syringe with water and attaching 12" of tubing

6



6. Push water through the tubing to remove all of the air

7



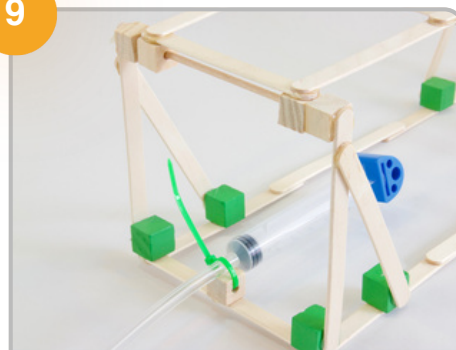
7. Refill to 10ml

8



8. Attach another empty syringe. Glue on a cube with holes, or attach a syringe adapter

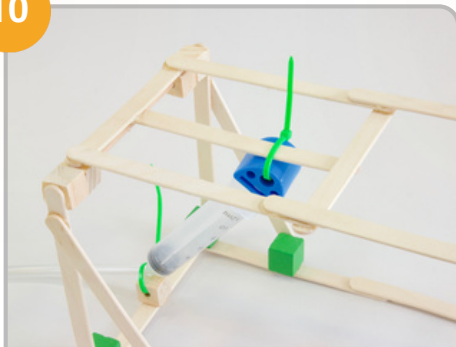
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9. Glue a cube with holes under the hinge, then cable tie the syringe nozzle to it

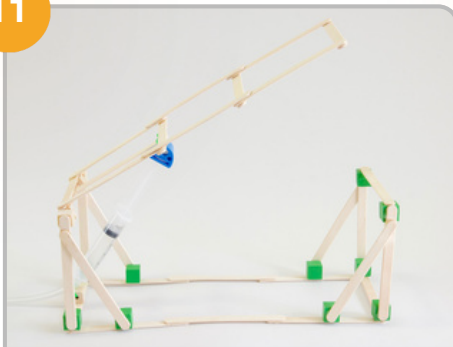


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10. Glue a stick to the center of the bridge, then cable tie the adapter to it

11



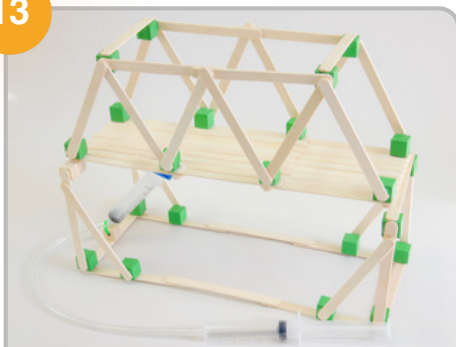
11. Test it out! Your bridge should be able to raise at least this high

12



12. (Optional) Cover the bottom of the bridge with craft sticks

13



13. Build the truss bridge.
(Optional): Build and test the sturdiness of the bridge first, then make the hydraulic lift