

6 Binder Clip Structure

Math Club

The Math Behind It

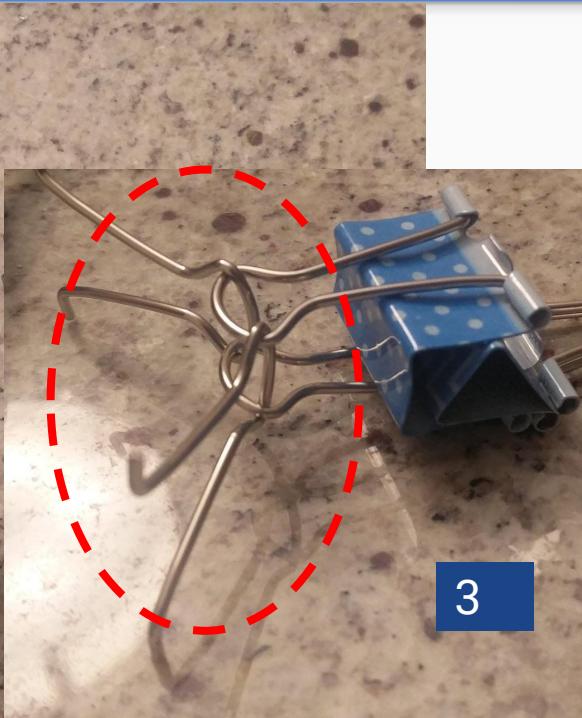
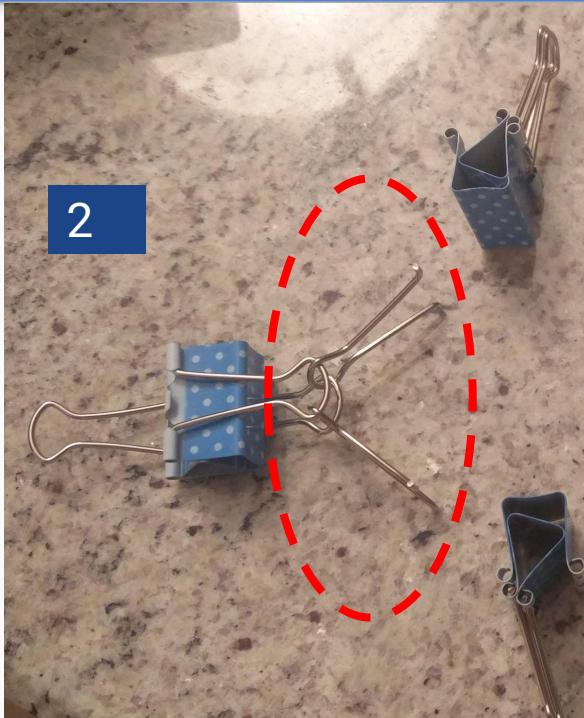
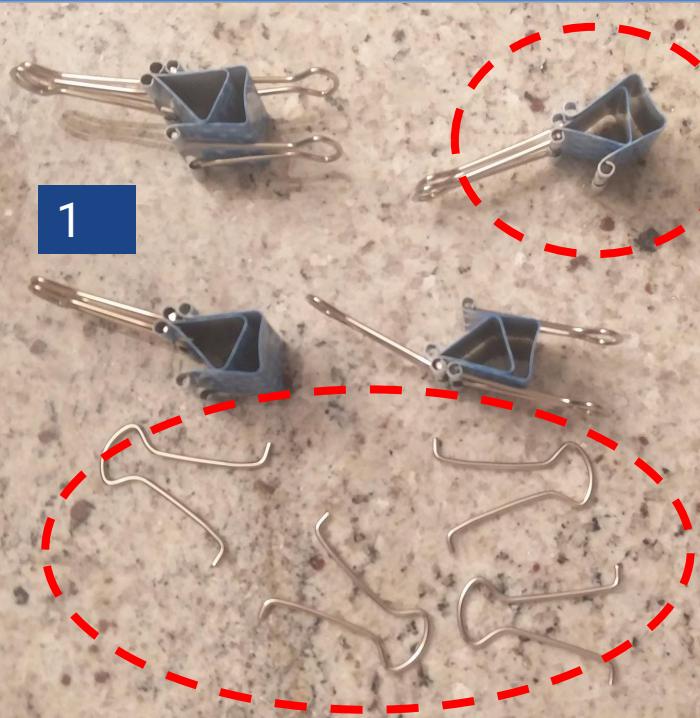
High Potential Energy System caused by stressing of binder clips

24 axes of symmetry, similar to a volleyball

Shape of the dodecahedron family

Construction

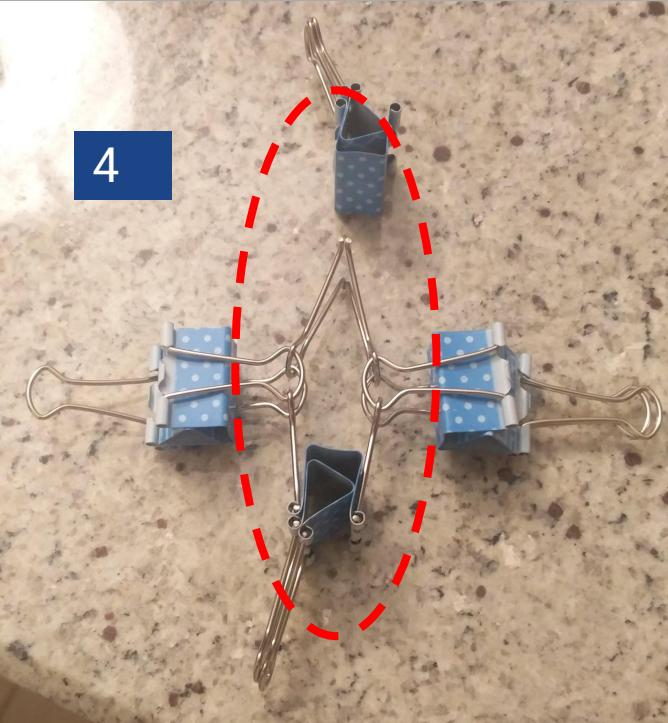
1. Begin with 4 clips held open with other clips
2. Remove handles off 2 of the 4 open clips (img 1)
3. Attach handles onto the clips where handles have not yet been removed (img 2 and 3)



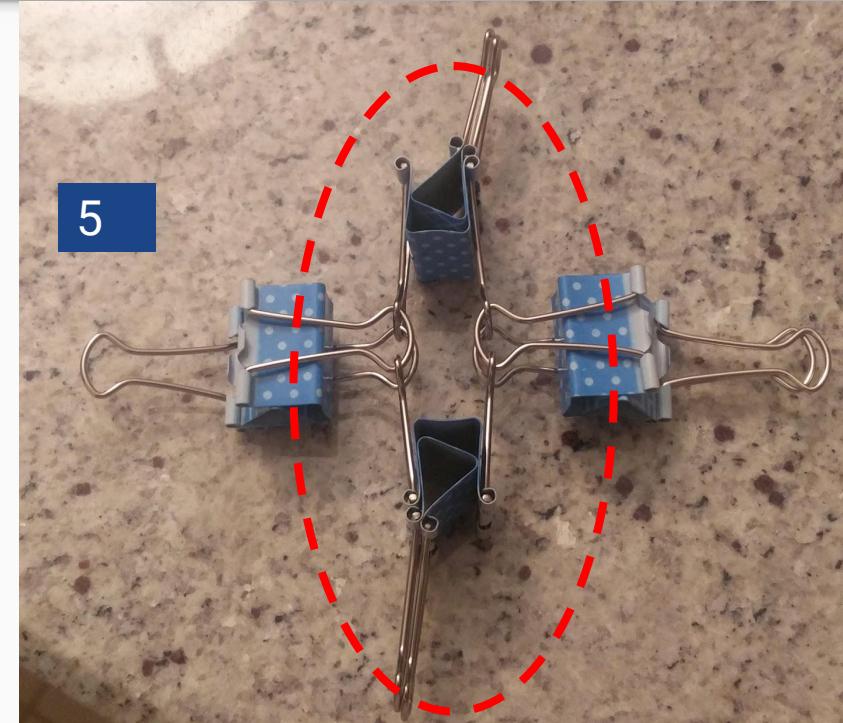
Construction

4. Reattach the clips using only one handle from each clip from the previous step. Make sure the “mouth” of the binder clip faces outwards. Do this for both sides (img 4 and 5)

4

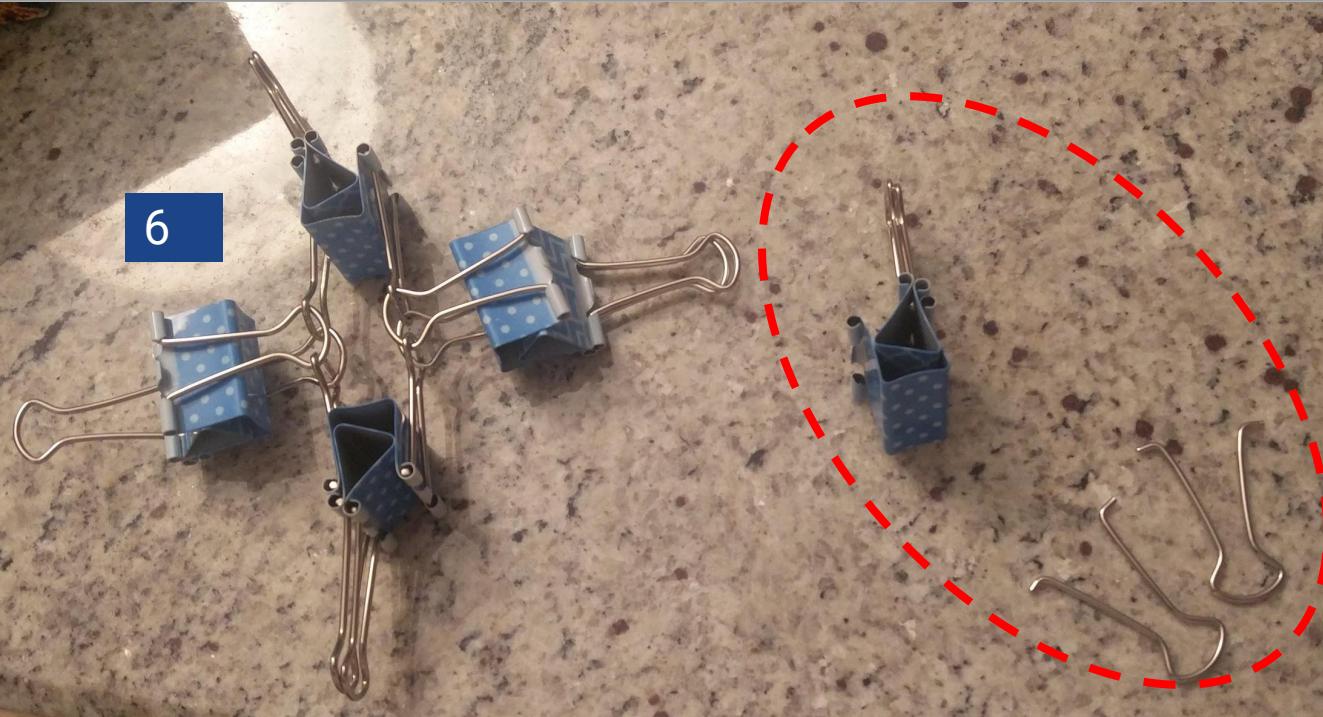


5



Construction

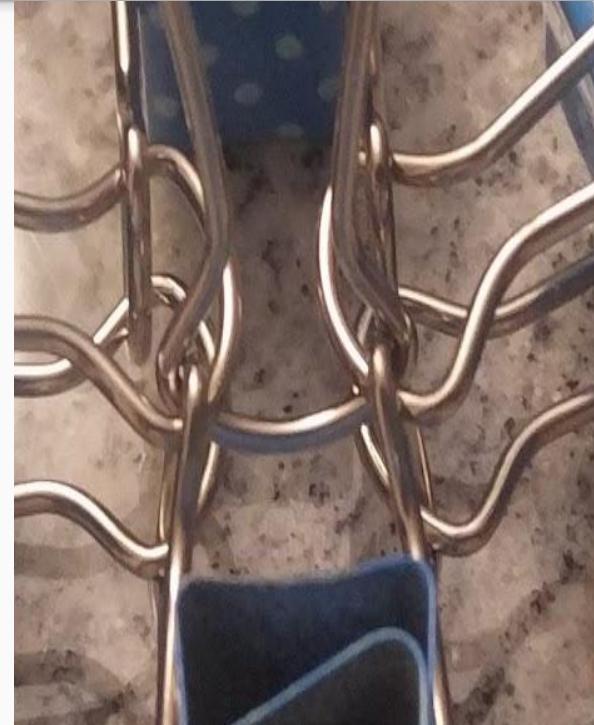
5. Get 3 binder clips and insert them into one another so that the “mouths” of the middle and outermost ones are held open. Remove the handles from the outermost clip (img 6)



This image only uses 2 clips, but use 3

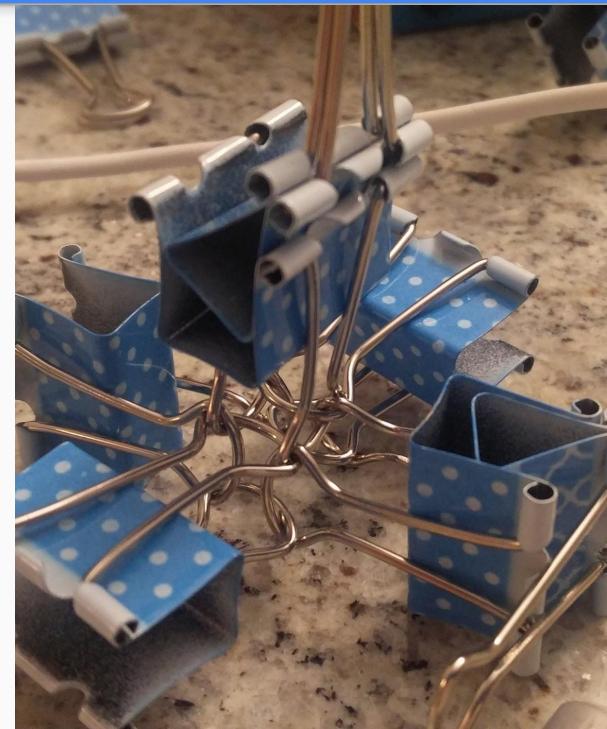
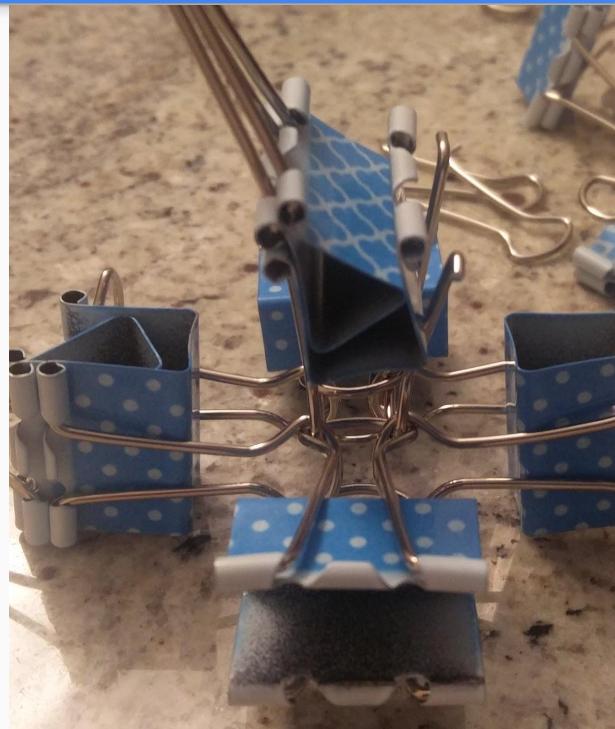
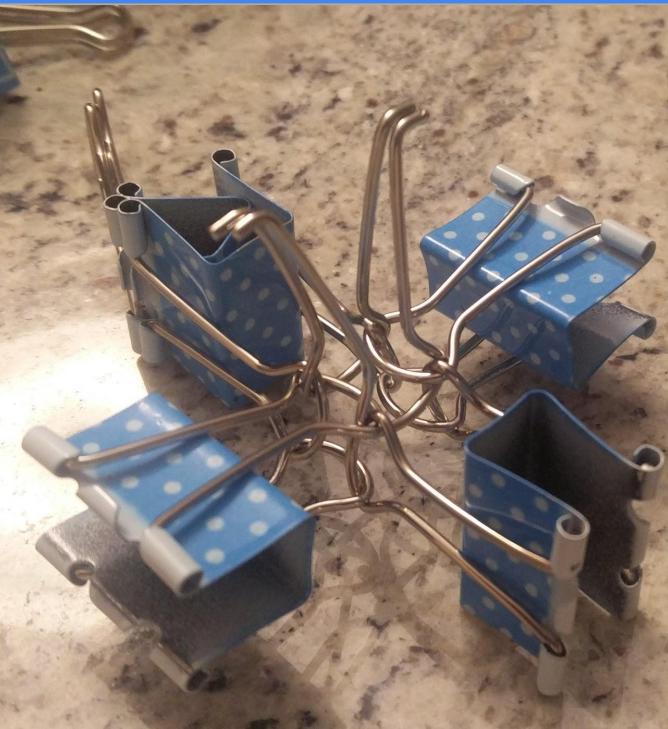
Construction

6. Slide one of the handles through the 4 already connected clips such that the handle goes through 4 different other handles. This step is difficult. Make sure your current construction retains the tension within the handles, in other words, do not rotate a clip! Do this step again with the other side.



Construction

7. Get the clip without the handles and attach it to the two handles. When doing this, make sure the clips holding the outermost clip open stay in the mouth. Otherwise it will close and you will have to open it again. Repeat with the other side



Hooray!

