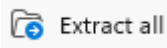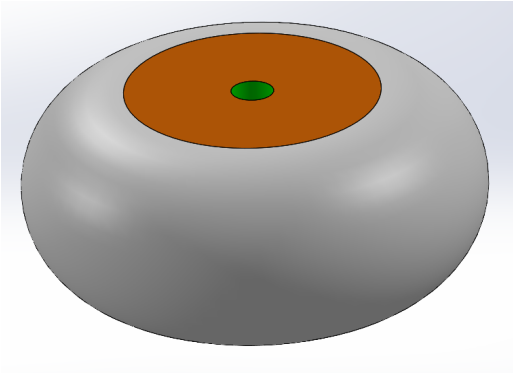# How to Build a Snowman

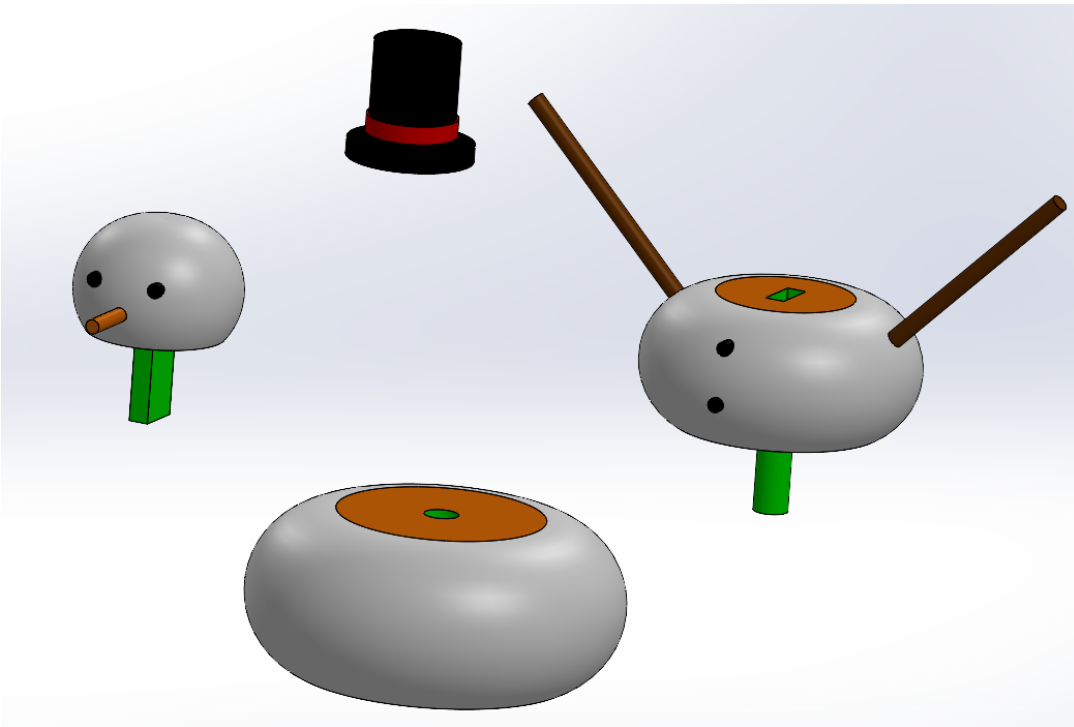1. Download the zip file containing the parts
2. Extract the parts from the zip folder

    a.   📁 Extract all

3. Create a new Assembly file in solidworks
4. Add the "Snowman Base" first followed by the rest of the parts
    a. Make sure that the base is centered on the origin of your assembly
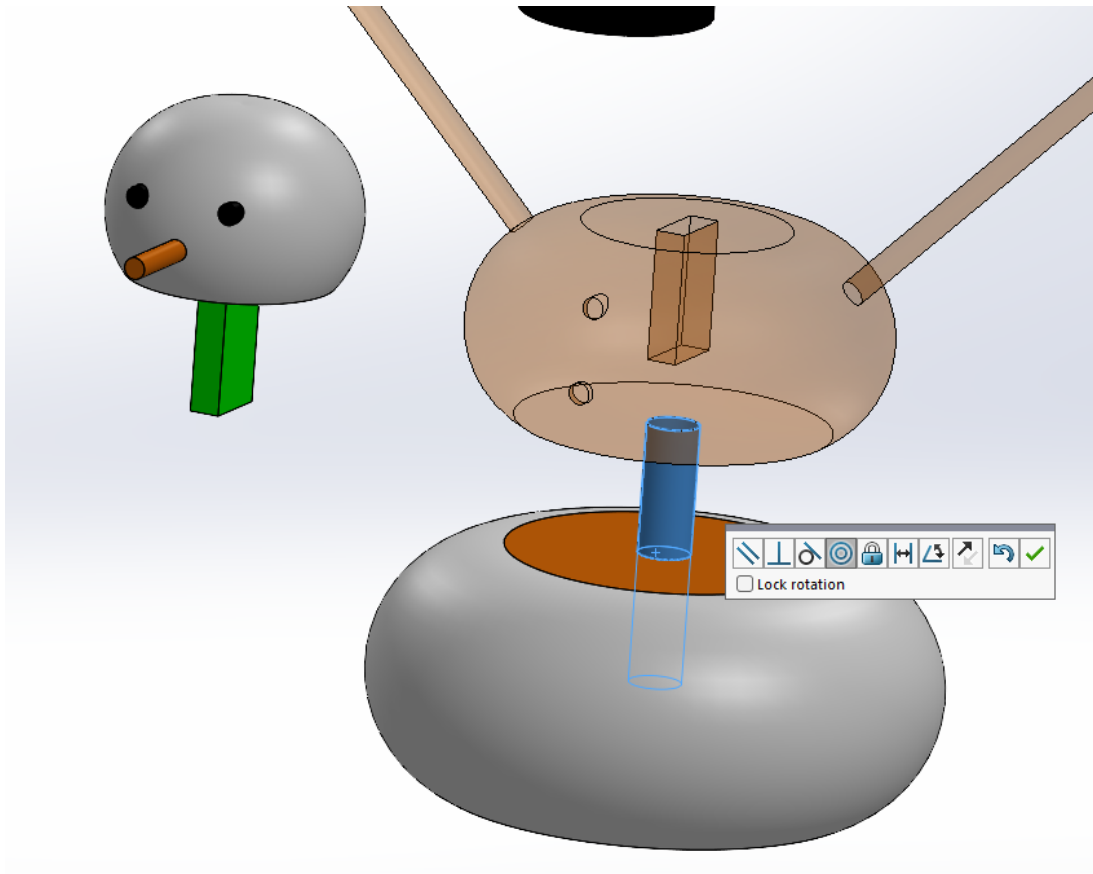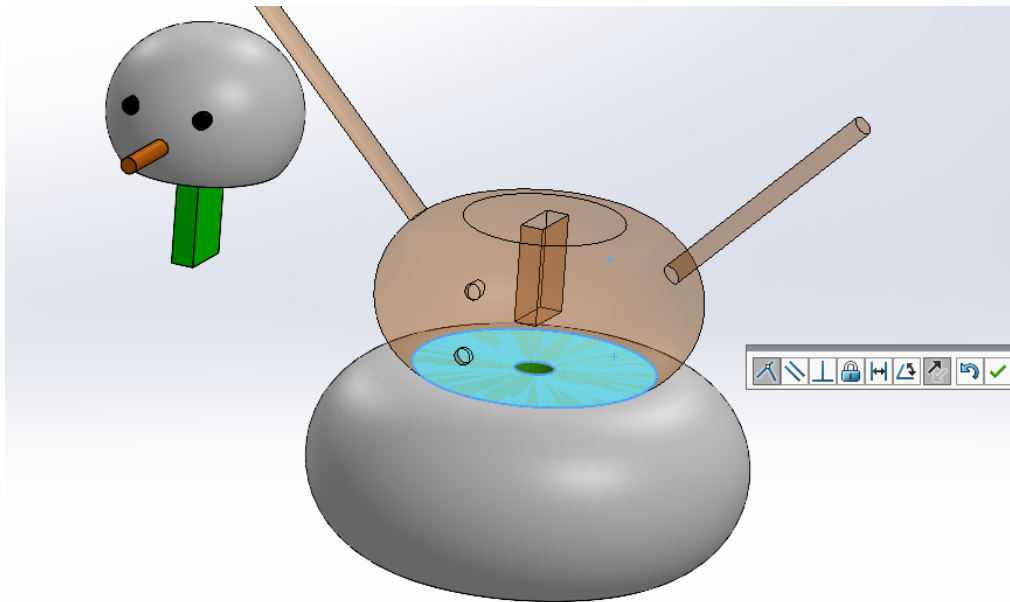
    b.

    c.

5. Using the mate tool, select the bottom cylinder of the torso and the side of the hole in the base
   a. Create a Concentric Mate between the two surfaces

   b.
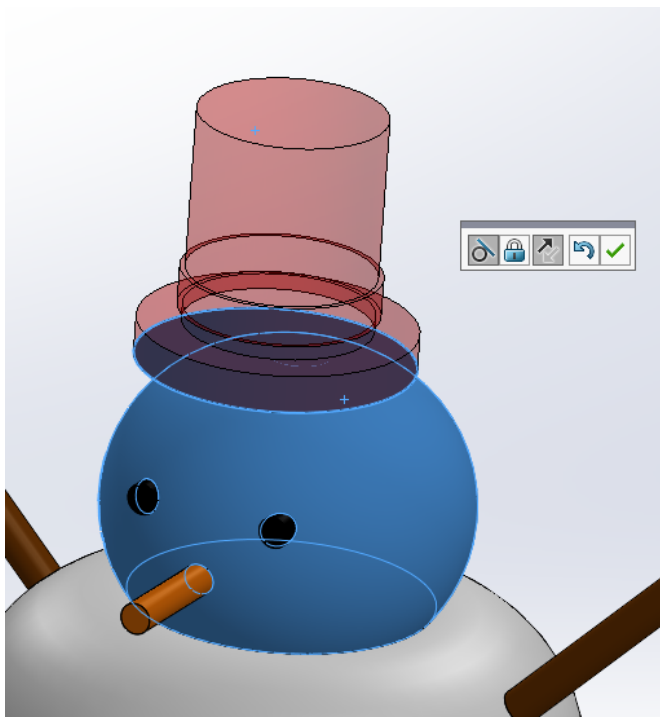6. Using the mate tool, select the bottom of the torso and the top of the base to add a concentric mate

   a.

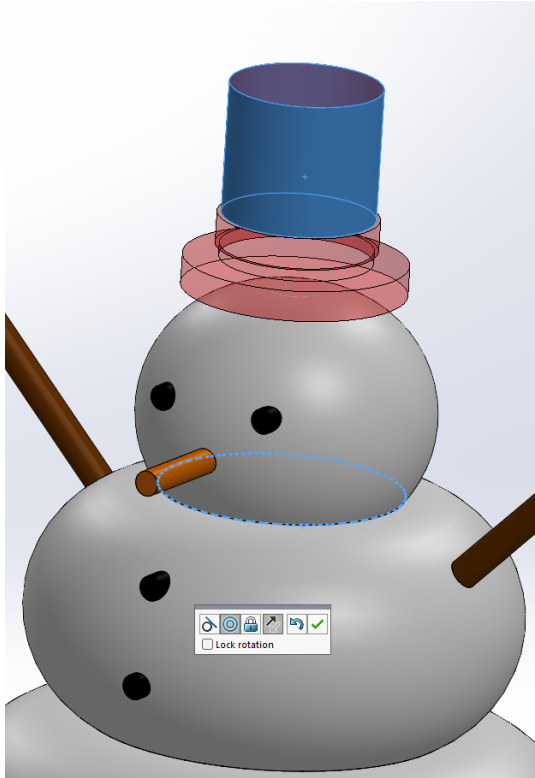7. Use Coincident mates to attach the head of the Snowman to it's body.

a.

8. Use a tangent mate to constrain the snowman's tophat to hit head
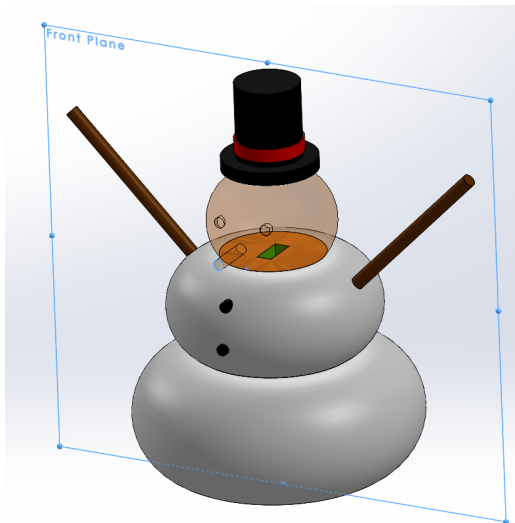
a.

9. Constrain the hat to be right on top of his head

a.

10. Use a parallel mate to keep the body from rotating around it's base

a.

11. Finally look up the Center of Mass with the Mass Properties Tool and submit them on Canvas

● Bonus: There are two other mates needed to Fully Define the Assembly: Do you know what they are?