# CREATING A SNOWPERSON IN TINKERCAD

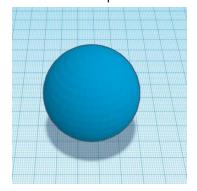


## Before You Begin

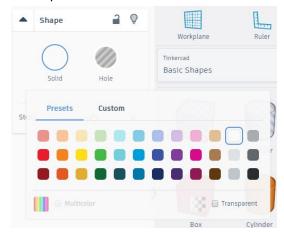
- 1. Sign in to <u>Tinkercad.com</u> and click the <u>Create New Design</u> button.
- 2. Brainstorm about how you would like your snowperson to look.

## Creating The Snow Body

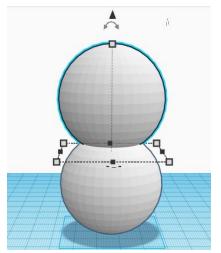
1. Drag and drop a sphere onto the workplane



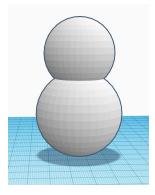
- 2. Hold down the shift key and drag one of the white squares to resize the sphere to desired size. This will be the bottom of the snowperson.
- 3. Change the color of the sphere to white.



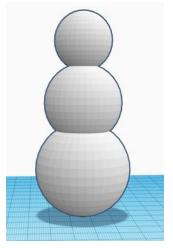
4. Duplicate the sphere (CTRL + D) and raise it up so it is resting on top of the first sphere.



- 5. Hold down the shift key and drag one of the white squares of the second sphere to resize it slightly smaller than the first sphere.
- 6. Select both spheres and use the Align button to center them.



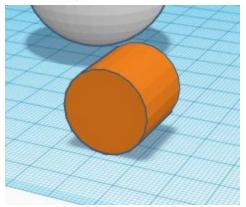
7. Repeat the previous 3 steps to make a third sphere that is slightly smaller than the second sphere and rests on top of the second sphere.



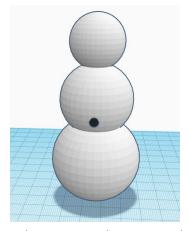
8. Select all three spheres and group them together.

## Adding Buttons

- 1. Drag and drop a cylinder onto the workplane.
- 2. Rotate the cylinder forwards 90 degrees.



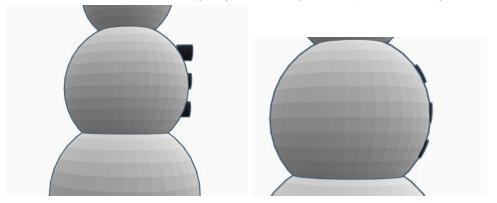
- 3. Holding down the shift key, use the white squares to resize the cylinder to desired size.
- 4. Change the color of the cylinder to black.
- 5. Lift and move the cylinder to desired location for the first button.



6. Duplicate the cylinder twice and move each one to desired location for other two buttons. Select the snow body and all three buttons and use the align tool to align them along the center.

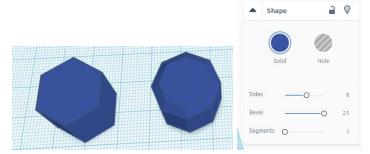


7. Rotate your view to the side and select the bottom button. Rotate the top and bottom buttons so that they lay relatively flat against the sphere.

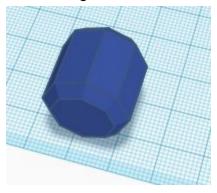


## Creating the Face

- 1. Drag and drop a polygon to the workplane.
- 2. Adjust the number of sides and amount of bevel if you wish.



3. Rotate the polygon to the front 90 degrees.



- 4. Holding the shift key, drag the white squares to resize to desired size.
- 5. Change the color of the polygon black.
- 6. Lift and move the polygon to the position of one of the eyes.



7. View the eye from the side and rotate it so that it lays flat on the head.



8. Duplicate the polygon (CTRL-D) and move it over to the location of the second eye.



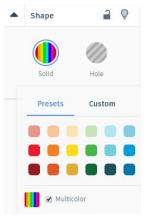
- 9. Drag and drop a cone to the workplane.
- 10. Change the color to orange.
- 11. Resize the cone to have more of a carrot shape



- 12. Rotate the cone forward 90 degrees.
- 13. Lift and move the cone to place it where the nose should be. Make any adjustments to resize the nose.
- 14. Make any additional adjustments to the placement and size of the eyes.



15. Select all of the items that make up the snow person and group them together. Then click on the color and check the multicolor box.



#### Accessories

## Top Hat

- 1. Drag and drop a cylinder on the workplane.
- 2. Make it black.
- 3. Raise it up and place it on top of the snow persons head.



4. Make it thin and resize to be the base and brim of a hat.



5. Duplicate the cylinder and resize to be the top of the hat. Use the align tool to align the two hat pieces together.



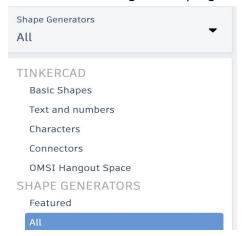
6. Duplicate the top of the hat and make a slightly larger ring around the bottom of the hat. Change its color to whatever you wish.



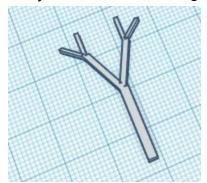
7. Select all three pieces of the hat and the snow person and use the Align tool to center everything.

#### Stick Arms

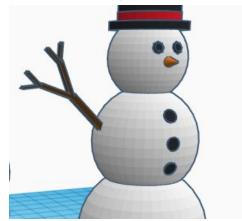
1. Open the Shape Generators Menu. Under Shape Generators, click on All. Then, scroll to the bottom and navigate to page 16.



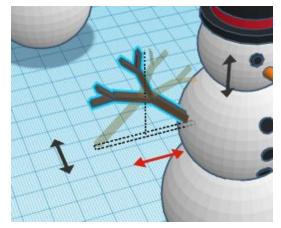
- 2. Find the Tree shape. Drag and drop it to the workplane.
- 3. Adjust the depth to 2 or 3. Adjust the other settings as desired.



- 4. Change the color to brown.
- 5. Rotate and move the tree to where you would like the arm. Select the arm and the snow person and use the align tools to center the arm if desired.



6. Duplicate the arm and use the Mirror button to reflect it for the other arm.

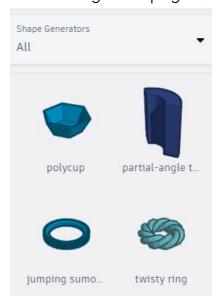


7. Move, rotate, and place the new arm on the other side of the body as you see fit.



#### Scarf 1

1. Open the Shape Generators Menu. Under Shape Generators, click on All. Then, scroll to the bottom and navigate to page 9.



Created By: Lindsey Kitchell, 3D Printing and Design Lead Intern, kitchell@iu.edu

- 2. Drag and drop the twisty ring object to the workplane. Adjust the settings however you want.
- 3. Lift up and move the ring to be around the snow person's neck. Adjust the size to fit properly. Change the color to whatever you want.

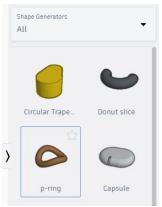


4. Go to page 7 and drag and drop a twisted polygon onto the workplane. Adjust the settings as you see fit and adjust the size. Lift the polygon and place it as the end of the scarf. Change the color to match the rest of the scarf.

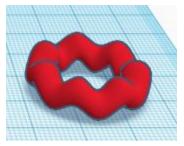


### Scarf 2

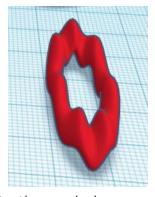
1. Open the Shape Generators Menu. Under Shape Generators, click on All. Then, scroll to the bottom and navigate to page 8.



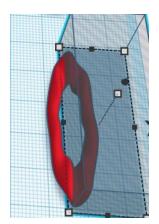
2. Drag and drop a p-ring onto the workplane. Increase the wave amount in the shape setting. This is the base of the scarf.



3. Duplicate your scarf (CTRL-D) and stretch it out. This will be the ends of the scarf.



4. Drag and drop a box - hole onto the workplane and adjust it so that it cuts off half of the ring.



- 5. Group the hole and the ring together to make the ends of the scarf.
- 6. Lift and move the intact ring (base of the scarf) to be placed around the snow person's neck. Lift and move and rotate the half ring (the ends of the scarf) so that it is the end of the scarf. Feel free to duplicate the half ring to have two ends of the scarf.

