Getting Started with Tinkercad.com

Tinkercad is a FREE, easy-to-use app for 3D design, electronics, and coding. It’s used by teachers, kids, hobbyists, and designers to imagine, design, and make anything!

1. Create an account with your school email.
2. If you are under 13 you will need a teacher or parent to help you.
3. Once you have your account. Get ready to have fun!

Create a new design

1. Look for the icon in the upper left corner of your screen.

2. Make sure the first thing you do is rename your design. Choose something like your name and project title. Trying to find the funny names Tinkercad automatically assigns like Grand-Fulfuffy or Frantic Waasa will be very difficult for your teacher to identify as your work.

3. Don't worry about saving your designs as you build. Tinkercad automatically saves your work in the cloud so you will always have access no matter which computer you are working on in the future.

Now you are ready to begin learning how to Create 3D Models. Our simple, easy to follow lessons will give you the confidence to MAKE ANYTHING for a 3D Printer, Virtual Reality or Coding for games. Have fun and let us know how you do by signing up on our website at Create3DModels.com. Thanks and have fun creating!
Building a Crayon Box using Tinkercad.com

1. Log in to Tinkercad and create a new design in the upper left corner
   a. Change the name to “My name Crayon Box” by clicking the unusual name, type over the words then you must click enter to accept the changes.
2. Edit the grid to inches (lower right-hand corner)
3. Remember to Update Grid!
4. Change snap grid to off (same lower right-hand corner)

Notes

1. Select the “Polygon” tool located in Basic Shapes
2. Drag the “Polygon” tool to the workplane
3. Adjust sliders found to the right side of the workplane
   a. Sides = 12 (Click number to type it in)
   b. Bevel = 0
   c. Segments = 5
   d. Dimensions
      i. Width = 1"
      ii. Length = 1"
      iii. Height = 3/4 (middle white button)
4. Drag the “Paraboloid” tool to the workplane
5. Adjust slider found on the right side of the workplane
   a. Sides = 12
   b. Overall diameter = 1"x1"x1"
6. Click the black arrow located either above or below model to drag paraboloid up or down so that it sits on top of the polygon. At this time, just get the height correct. We will align in the next step.
7. Zoom in to make sure there is no gap between the two shapes.

1. Multi-select Polygon and Paraboloid
   a. Multi-select by clicking on Polygon and Paraboloid while holding down the shift key OR left click and drag a box around the Polygon and Paraboloid
2. Click the align tool (upper right corner)
   a. Hover over the tools to find the correct tool
   b. Align Polygon and Paraboloid by clicking the align button
   c. Then click the middle dots that appear on the bottom of the model (shown in red). This will shift both pieces into alignment. If the align tool is not visible it is because the shapes are not selected. (Repeat the selection process)
3. Right click the mouse to spin the workplane. Inspect where the paraboloid is placed in relation to the workplane. Make sure it is above the body of the polygon and there is no gap between the two.
4. Click and drag or shift-click all the pieces to group.
   a. The group tool is located in the (upper right corner. Hover over the tools to find group)
4. **Colors, Duplicate (Copy & Paste)**

1. Change the color of the 1st crayon to (green)
   a. Colors are found to the right in the upper circle. Shapes can be solid or made into a hole.
2. Select the 1st crayon
3. Copy, paste and move the first crayon (Command or Ctrl C, Command or Ctrl V or click on copy then paste - clipboard icon)
4. Change the color of the 2nd crayon to yellow
5. Copy, paste, move to add space. Change the color of 3rd crayon to red.
6. Repeat for blue
7. Click and drag across all the crayons, then align horizontally
8. Hold shift while moving to tighten the gaps to increase speed
9. Set the crayons aside for now

5. **Make a Hole**

1. Click, drag and drop a box in the center of the workplane
   a. Width = 1 1/4
   b. Length = 4 1/2
   c. Height = 3
   d. Change color to yellow
2. Copy and paste the box, then convert to a hole
3. Change the size of the hole
   a. Width = 1
   b. Length = 4 1/4
   c. Height = 3 1/4
4. Select both box and hole, then align
5. **Important** Click and drag the boxes to group
6. Right click to spin the plane and look inside the box. Check the bottom
7. If there is no bottom, then what????
8. Move the hole up slightly with the black arrow to create a base. If the hole cuts through the entire model it will not create a base.

6. **Text & Rotation**

1. Move crayons into the box
2. Click and drag to select everything
3. Align type and box using only the bottom center dot as shown here
4. Use text tool to type the word “Crayons” in the drop down menu under the colors
5. To rotate the text simply use the curved arrows located on each axis. Drag your mouse outside the radius of the curved arrow and spin or type the angle measurement. Ex. 45°, 90°, or 180°

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**Level I Complete**

You can find more lessons like this at Create3DModels.com