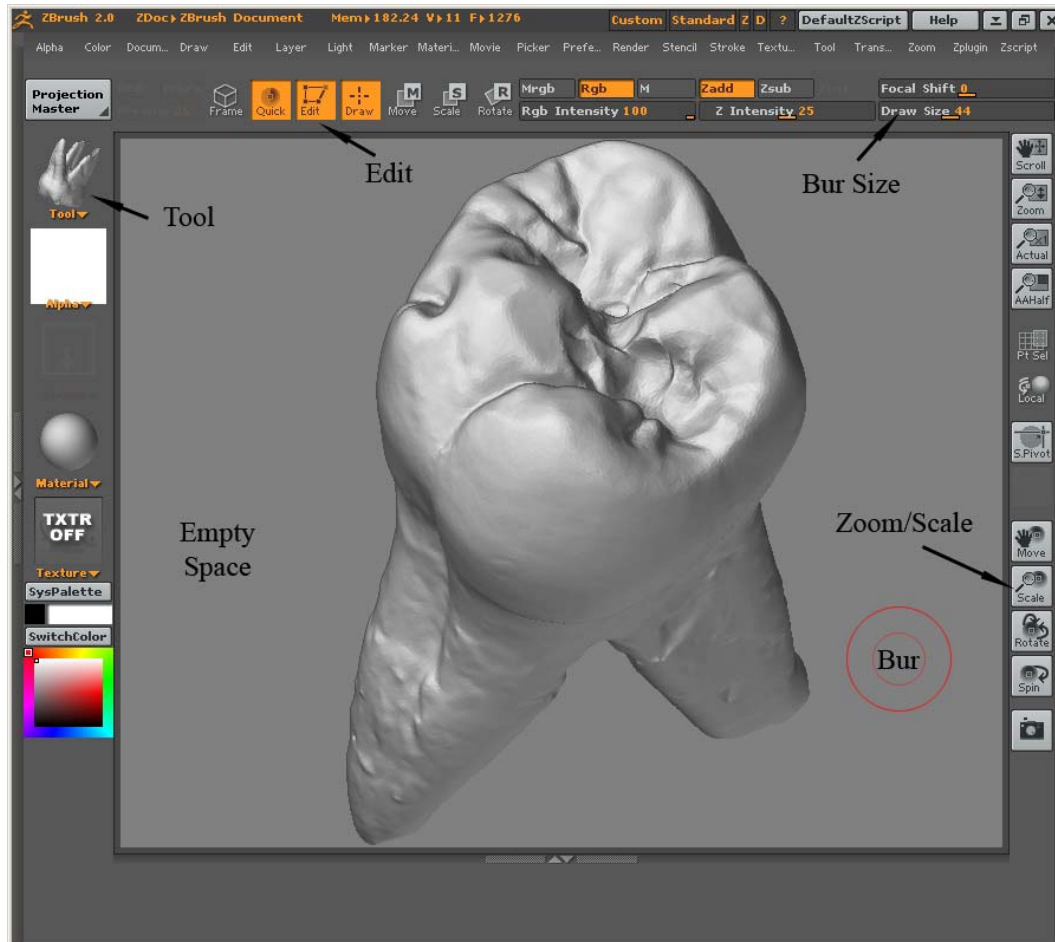




Quick Tips for Using ZBrush (Basic)



A Simulation Tool for Preclinical Instruction




How to Maximize the Canvas

1. The canvas is the light colored rectangular area in the center of the screen.
2. To make the canvas full size, click on the **Document** menu at the top of the screen.
3. Select **Double** (about half way down on the right side of the Document menu).
4. You must maximize the canvas before you load the model or the model will become pixelated.

How to Load a Model


1. Click/Press on the **Tool** icon on the left-hand side of the screen; then click on the **Load Tool** button.
2. A list of files will appear in a dialogue box. Select the tooth file you wish to load and click **OK**.
3. The **Load Tool** button will look dark gray and recessed while the tooth is loading. These files are quite large so it may take 15-20 seconds for them to load.

4. When the **Load Tool** button returns to normal, place the cursor (+) in the center of the screen, press the stylus on the tablet and drag the stylus towards the top of the tablet. This draws and sizes the tooth on screen. As you're sizing the tooth, you can press/hold the **SHIFT** key to lock the tooth along the 1° axis.
5. **Immediately PRESS the "T" key.** This is a critical next step. Before you can work on the model you have just loaded you must tell the system you want to modify/edit it. If you don't do this, you will keep inserting a new model with each click. The easiest and quickest way to set the Edit mode is to press the **"T"** key on your keyboard. Clicking on the **Edit Icon** — look for this →  at the top of the screen—will have the same effect and place you in **Edit Mode**.

Note: If you insert multiple teeth onscreen, press **CTRL+Z** to undo the operations or click on **Layer->Clear** to try again. You must clear all models and start with a blank screen in order to edit the model.

6. When you are in **Edit Mode** a red circle within a circle will appear on your canvas. The red circle represents your bur.
7. Set the bur size (see diagram above). Set **Focal Shift** to -50. **Focal Shift** specifies how sharp the bur is (lower=sharper). Set **Draw size** to 40. **Draw Size** is the overall size of the bur. Resize your bur by using the **Draw Size** and **Focal Shift** sliders at the top of the screen.
8. Set the depth of cut. To set the depth of the cut, adjust the **Z Intensity** setting to 80.
9. Click and drag the stylus in empty space (blank area next to the tooth) this will rotate the tooth. As you are rotating the tooth, hold the **SHIFT** key on your keyboard to rotate in 45 increments. Rotate the tooth so you are looking directly at the occlusal surface of the model. You are now ready to modify the surface.

How to Cut a Prep:

1. Check that you are in **Edit Mode** 
2. Press and hold the **ALT** key. Drag the bur (+) across the surface in one continuous smooth motion.

Viewing your Prep:

- To **Rotate** the tooth, click-and-drag the stylus in empty space (blank area next to tooth).
- To **Pan** the tooth, hold down the **ALT Key** and click-and-drag the stylus in empty space.
- To **Zoom/Scale** the tooth, hold down the **ALT Key** and click-and-drag the stylus in empty space. While still dragging the stylus, release the **ALT Key** and drag the stylus up/down. Additionally, you can use the **Scale** button located on the right side of the screen.

Saving / Sharing your Work:

1. To **Save an Image** of your prep.
 - a. First, rotate the tooth so you have a clear view of your prep.
 - b. Click on **Document->Export** at the top of the screen.
 - c. From the drop-down list next to "save as type" choose **BMP**.
 - d. Navigate to where you would like to save the image, name it, and click **Save**.
2. To **Save a 3D Model** of your prep.
 - a. Click on **Tools** on the left side of the screen >Click on **Save As**
 - b. Navigate to where you want the file to be saved, name it, and click **Save**.
(**note:** if need to save as an OBJ file, choose "Export" instead of "Save As")