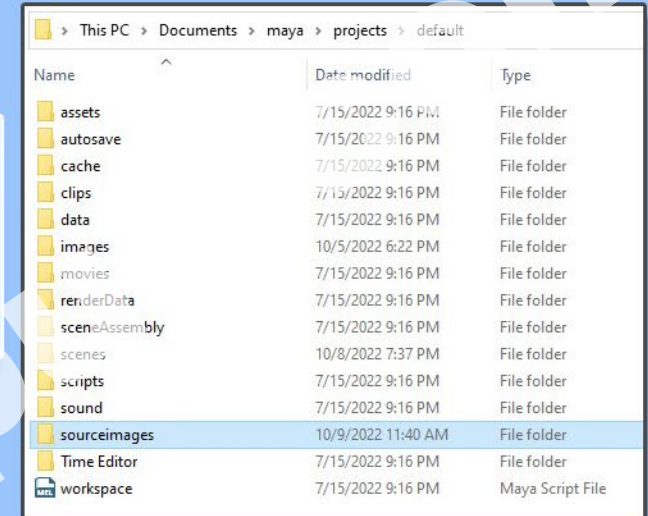


Burger King Project Guide: Reference Image Setup

Download
BurgerKing_Ref_PNG.png
and
Burgerking_Text_Vector_Asset.svg
images from Blackboard
or from your email.

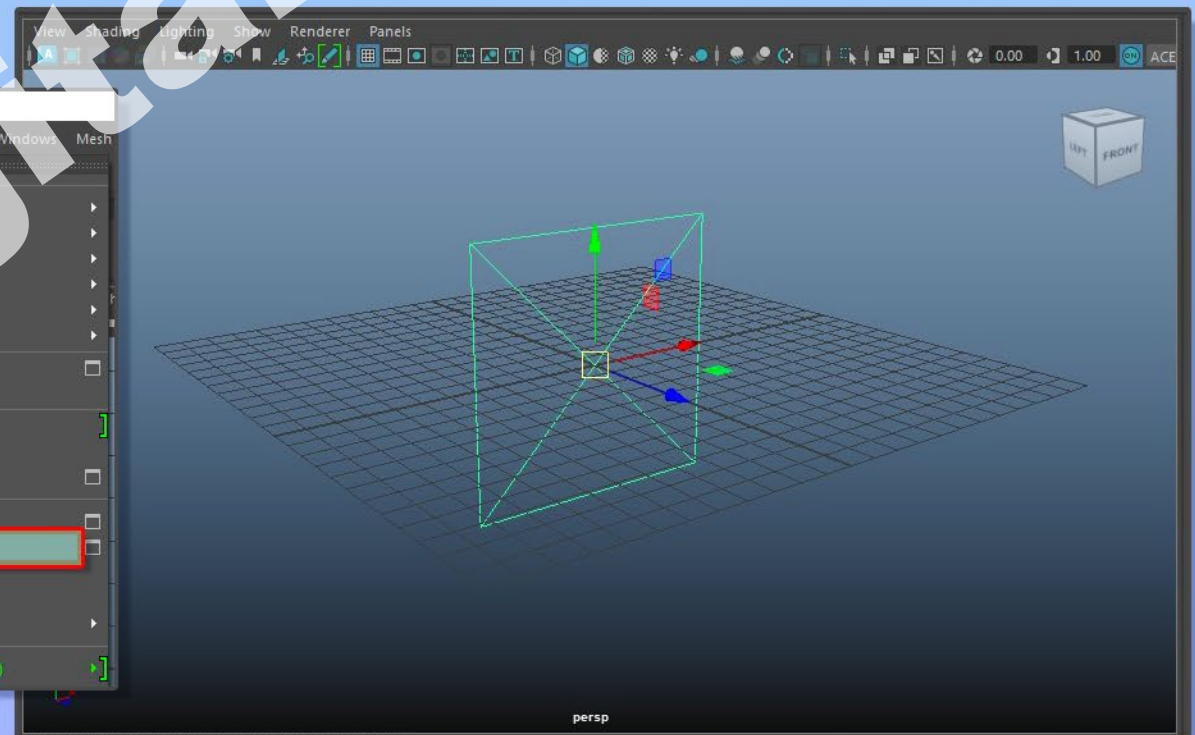
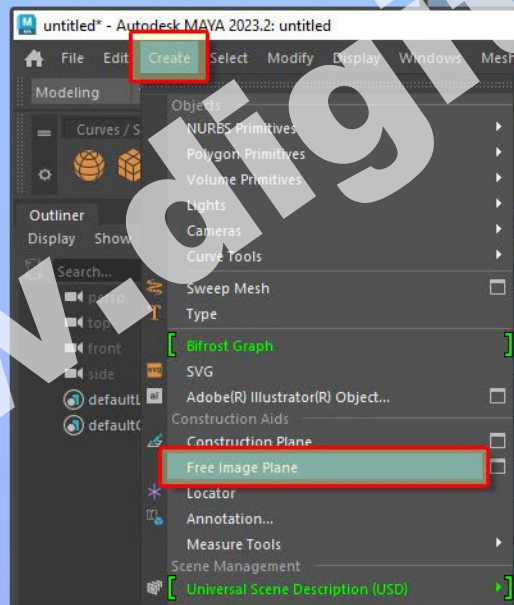


Copy and paste the
Burger King image
into the "source images"
folder in your Maya
project directory.



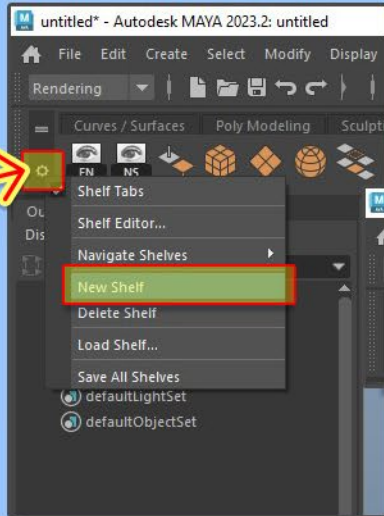
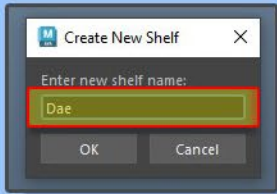
**Create & Import
Reference Image**

Create >
Free Image Plane

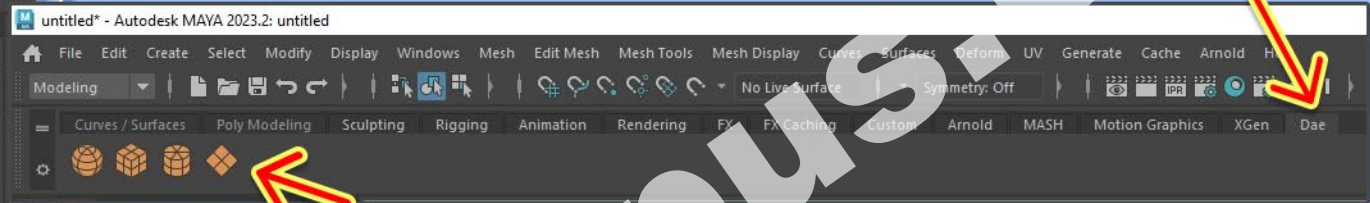


Basic Workflow Setup: Making Your Tools Shelf

1. Click the gear icon to create a new shelf.

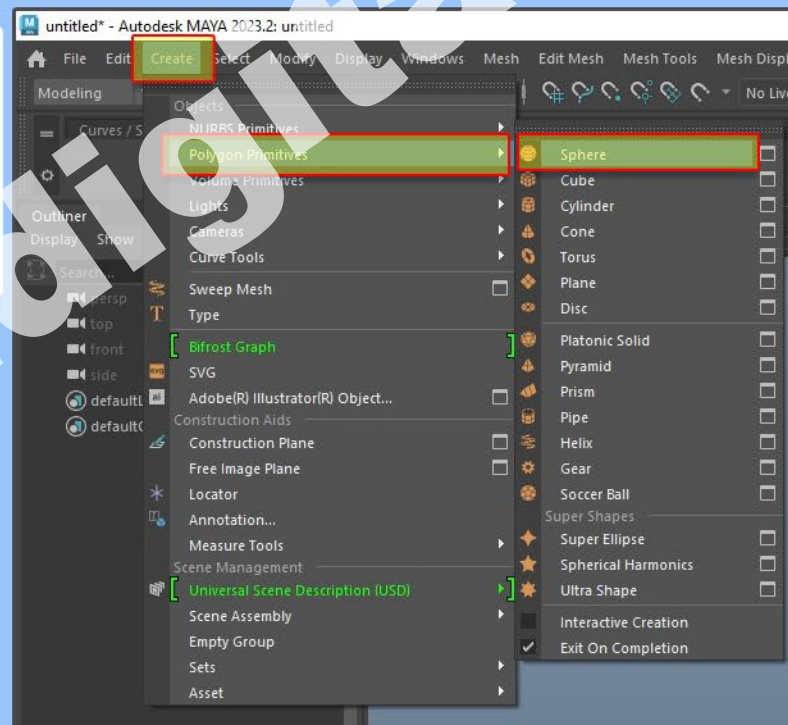


*** Here is your new custom shelf assigned to your name.

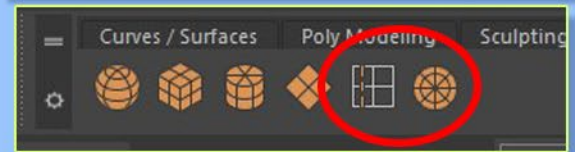


*** This is your essential tools shelf.

2. This is how you assign tools to your shelf. Hover over the "Sphere" icon and: **shift+CTRL+left mouse click**



3. Next add these two new tools.
a. **Edit Mesh>Merge to Center**
b. **Mesh Tools>Insert Edge Loop**



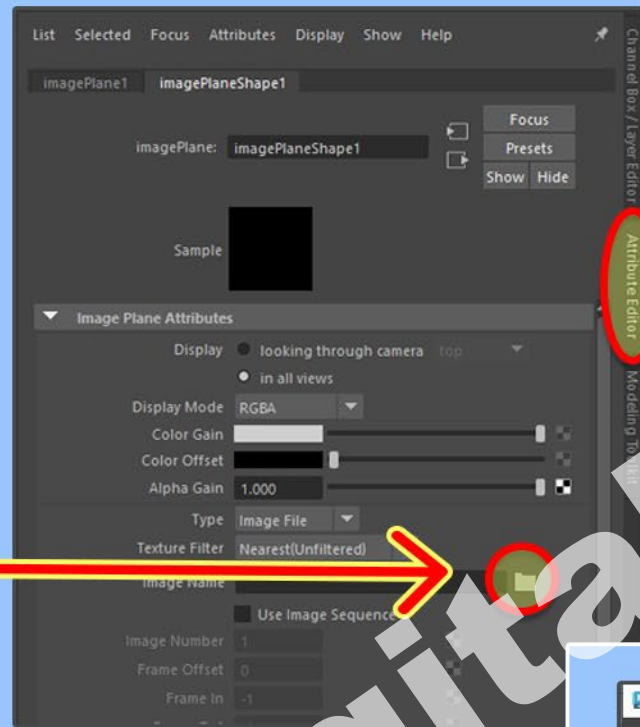
WWW.W

Burger King Project Guide: Image Reference Setup

Make sure your **imagePlane1** is selected. Then click on the **Attribute Editor** tab.

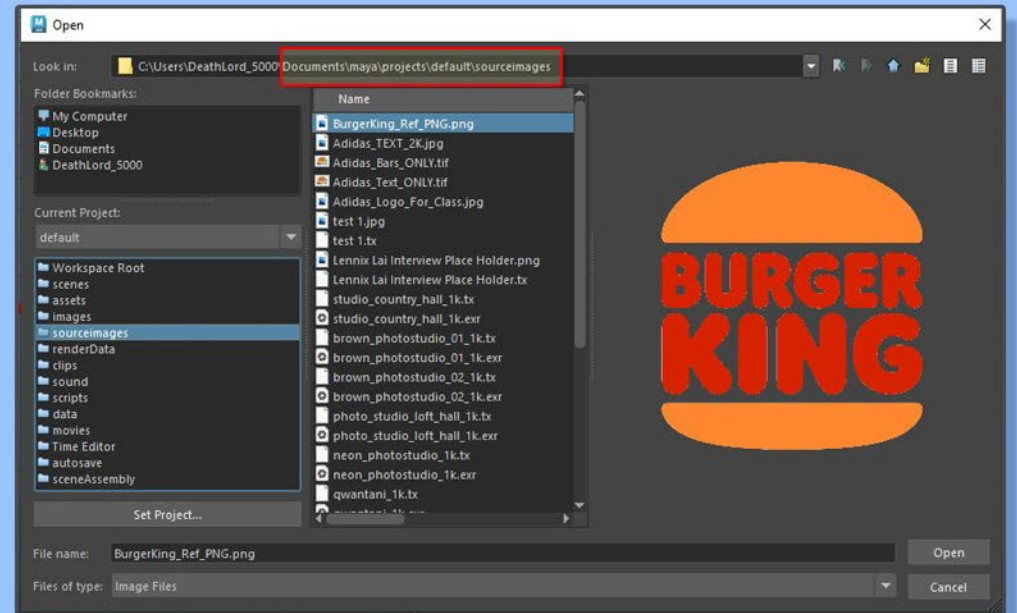
1. Now import your reference image onto **imagePlane1**.

2. Click on the folder icon to import the image reference.

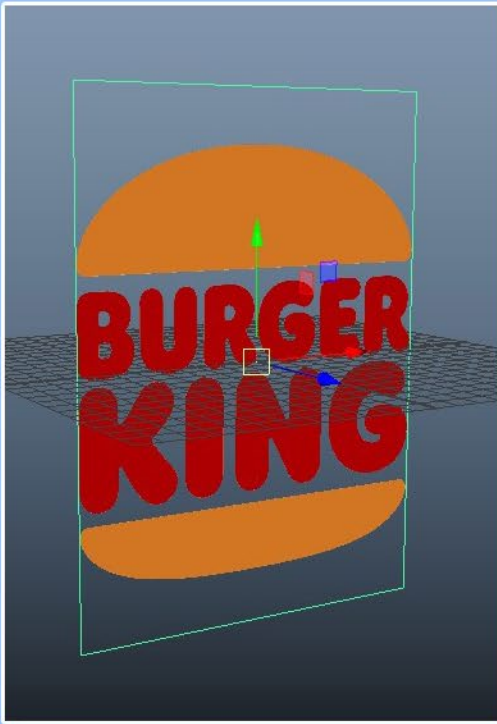


Documents>maya>projects>default>sourceimages

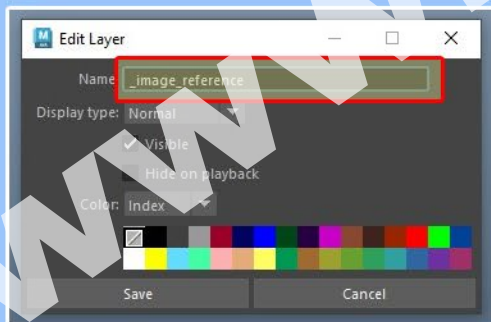
3. Find the **Burger King** reference image in the *source images* folder



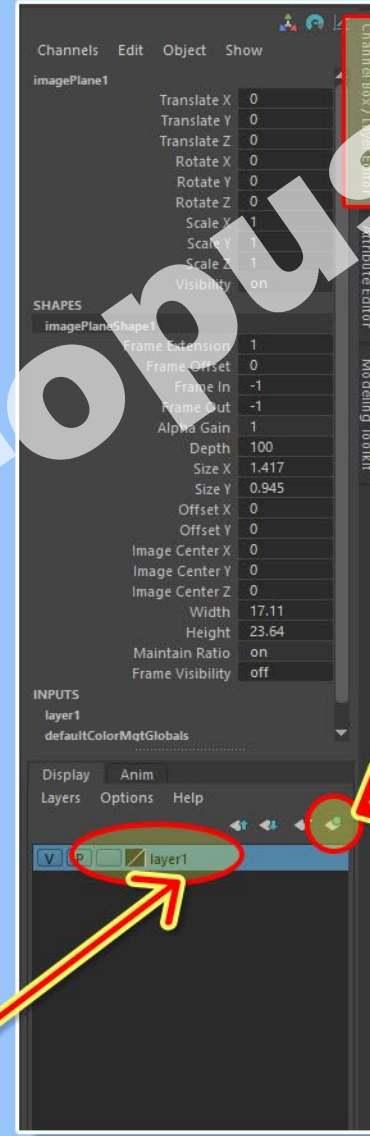
Burger King Project Guide: Image Reference Setup 02



We will add the image reference to a display layer and name it: **"image_reference"**.



3. Double click on the "layer1" text. The "Edit Layer" window will pop out. Name this layer, **"_image_reference"**.



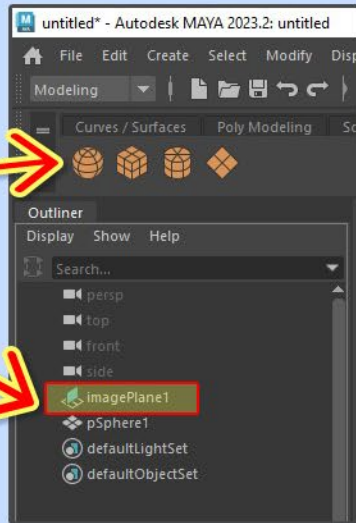
1. Click the **"Channel Box"** tab.

2. Click this icon **while** selecting the image reference.

Burger King Project Guide: Part 01

1. Create a sphere from the custom tool shelf. Then adjust its position, scale and subdivisions by clicking on the Channel Box tab.

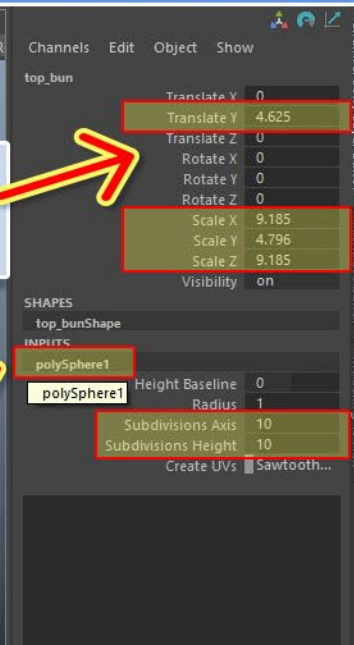
Rename it "top_bun" by double clicking on the original name "pSphere1".



2. With your sphere still selected, press "3" and it will change its shape to be smoother looking. This is called "smooth proxy". Go back to the original state by pressing the "1" key.

3. Punch in these numbers into the Channel Box for the "top_bun".

4. Double click "polySphere1". Change Subdivisions to "10".



5. Select the top_bun and change to "Face" mode. Right click+hold and sub-menu will pop out. Chose the face option box.

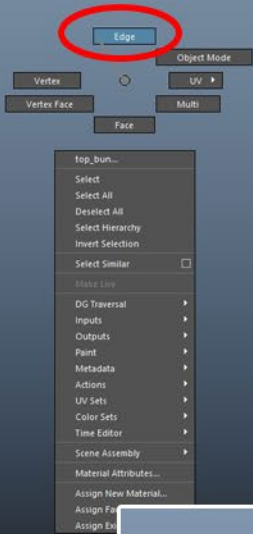
6. Delete these faces. I suggest using the front camera to select faces.

7. After deleting those specific faces, it should look like this.



Burger King Project Guide: Part 02

1. Right mouse click press and hold, anywhere on the viewport screen. This will pull up your components sub-menu. Hover over and chose "Edge" mode.



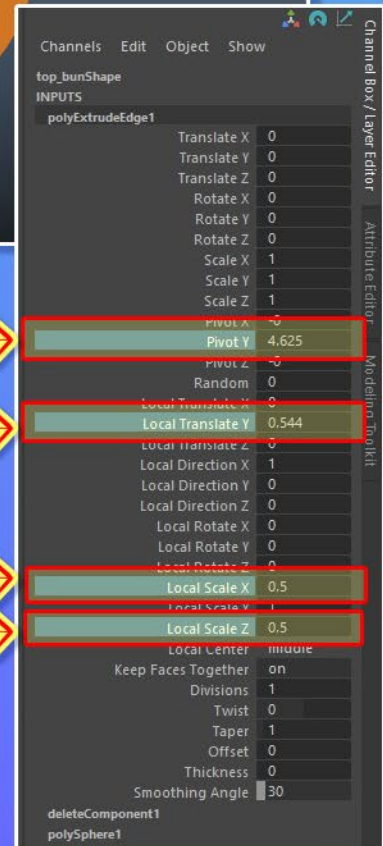
2. Double click on any of the outer edges, (green line). Now the entire outer edge circumference is selected.



3. Press & hold Shift+Right Mouse, now select: "Extrude Edge"

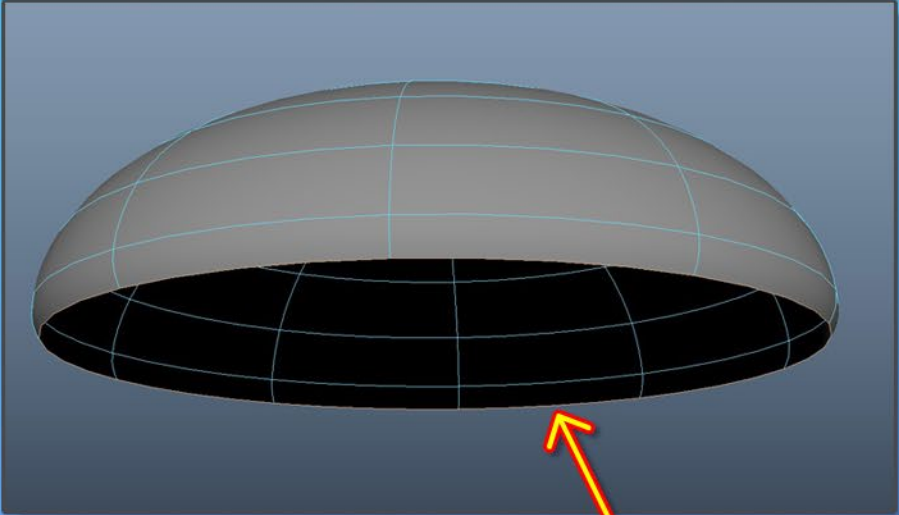


4. Punch in these numbers into the Channel Box. The model will update.

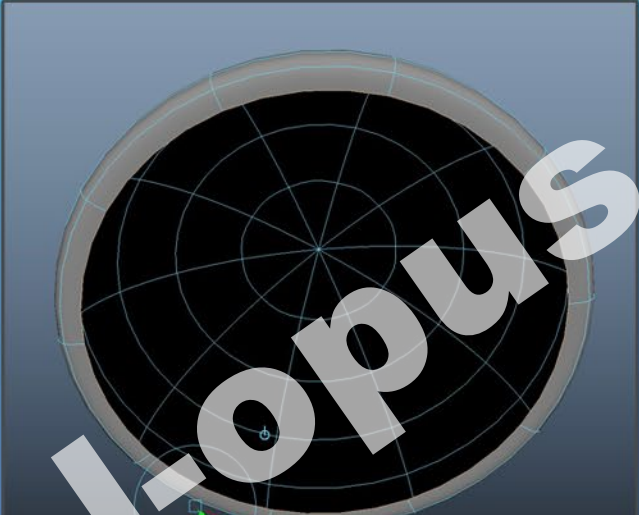


Burger King Project Guide: Part 03

BEFORE

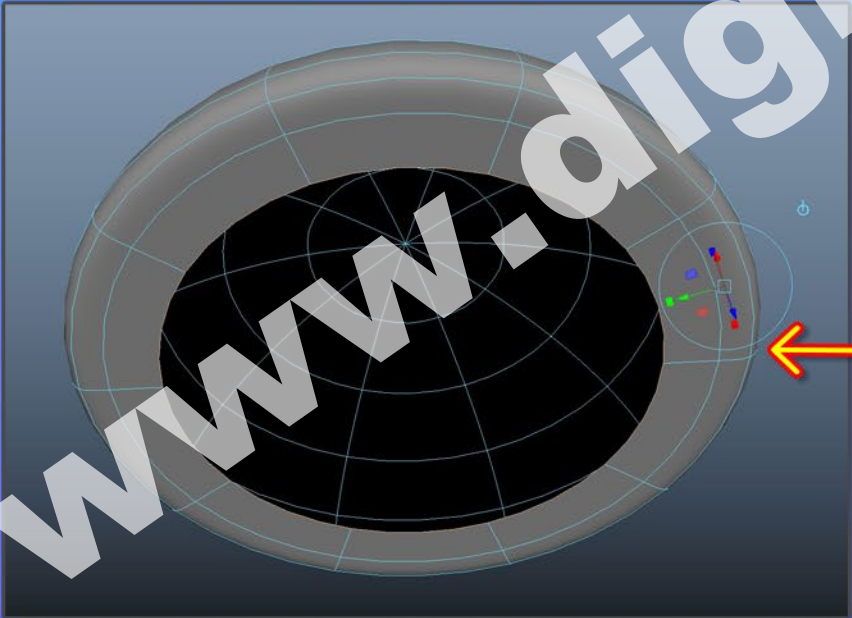
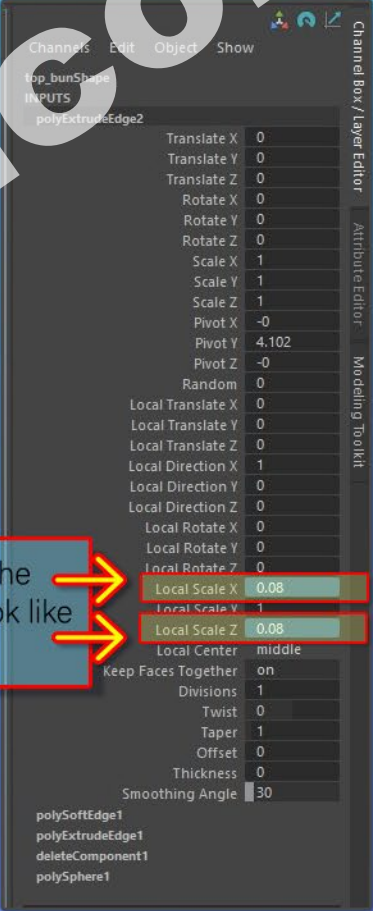


AFTER

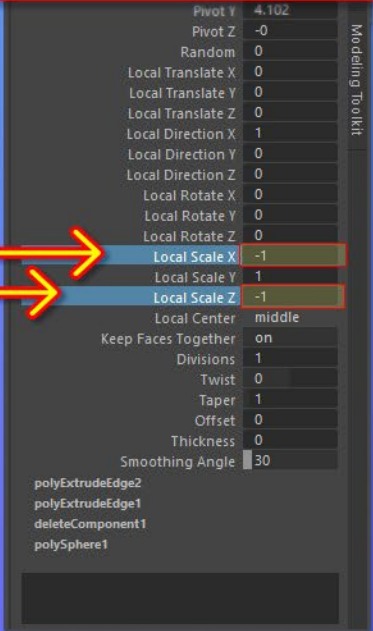


1. You will repeat the same process of "extruding the edge", but now the edges will only extrude (in-ward) creating a lip.

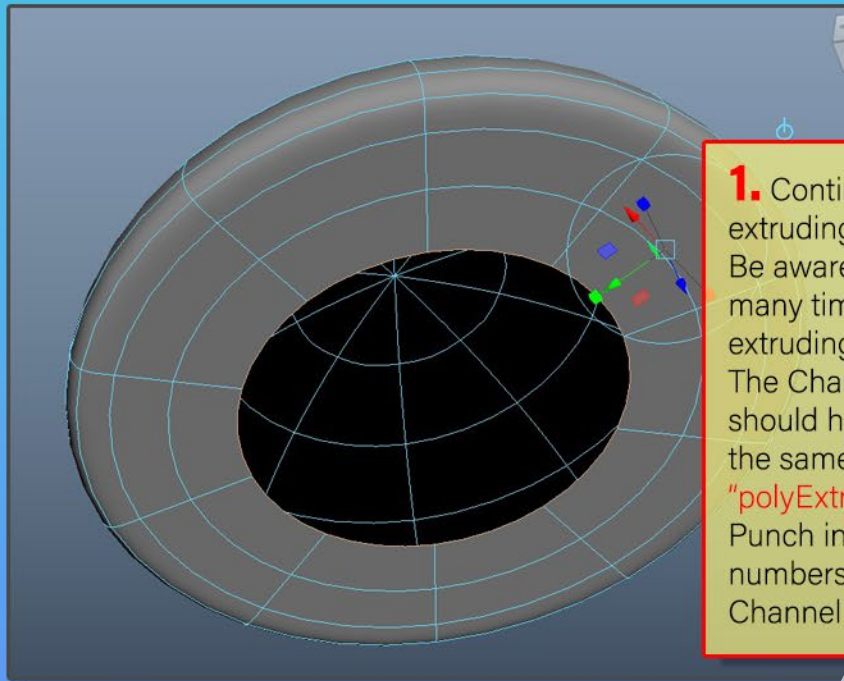
2. Punch in these numbers within the Channel Box. The model should look like the above picture.



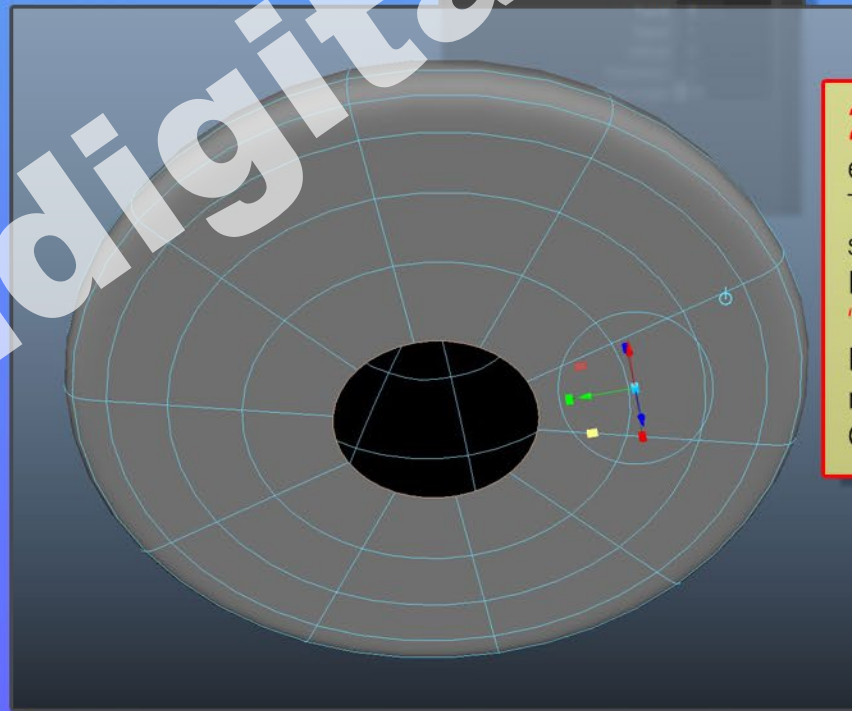
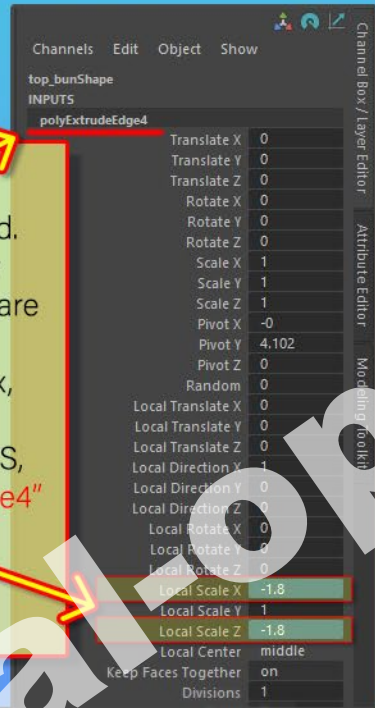
3. Now you will extrude the edge again. Punch in these values. It should look like this.



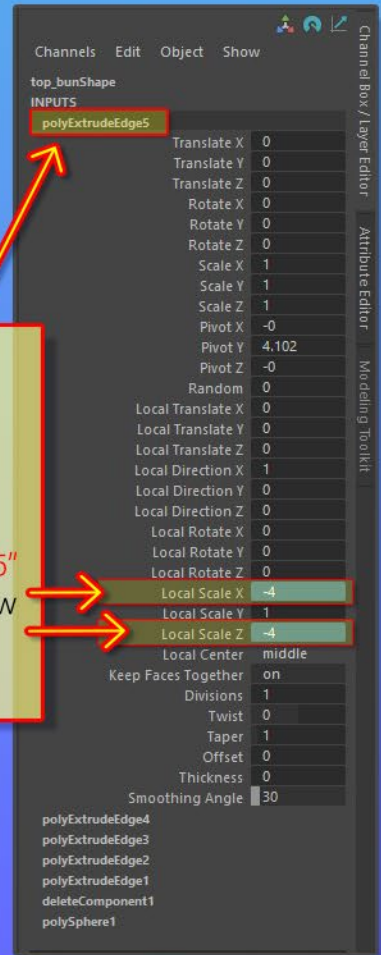
Burger King Project Guide: Part 04



1. Continue extruding in-ward. Be aware of how many times you are extruding. The Channel Box, should have the same INPUTS, "polyExtrudeEdge4" Punch in these numbers in the Channel Box.

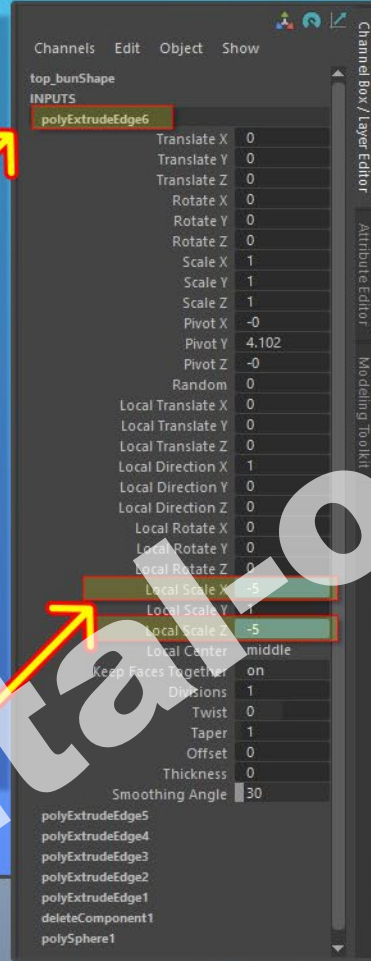
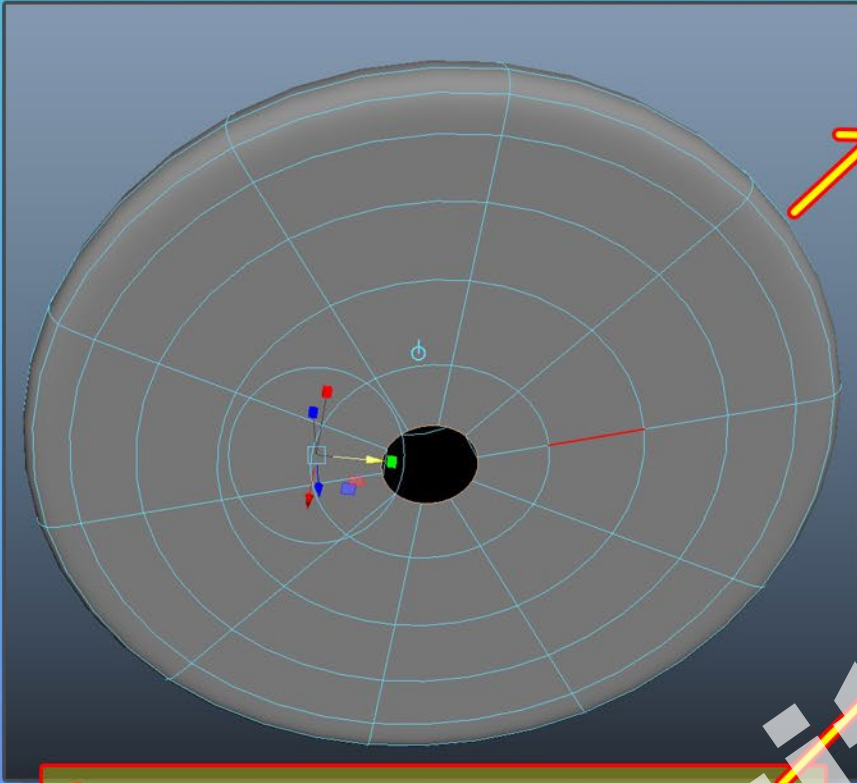


2. Continue extruding inside. The Channel Box, should have INPUTS, "polyExtrudeEdge5" Punch in these new numbers into the Channel Box.



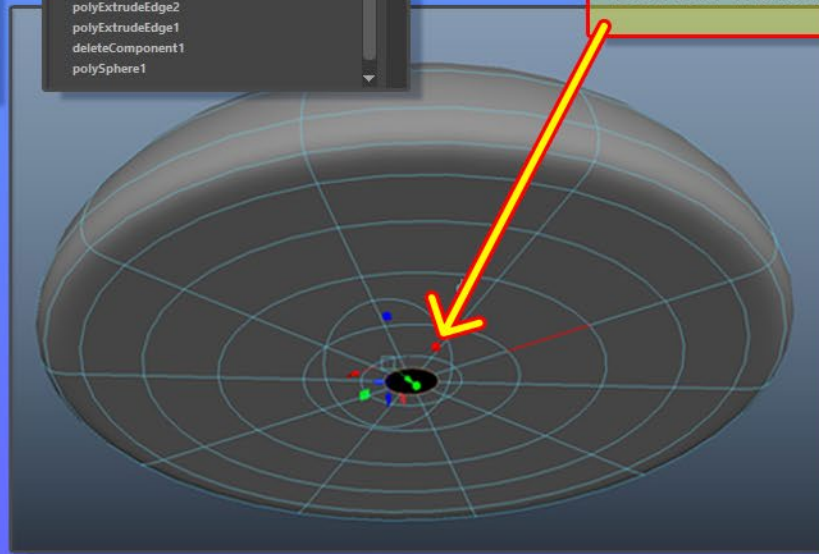
www.digitalartopus.com

Burger King Project Guide: Part 05



1. We are almost done extruding the edges. The goal is to close the surface. This step should be assigned in Channel Box as: **"polyExtrudeEdge6"**. Punch in these numbers for the Channel Box inputs.

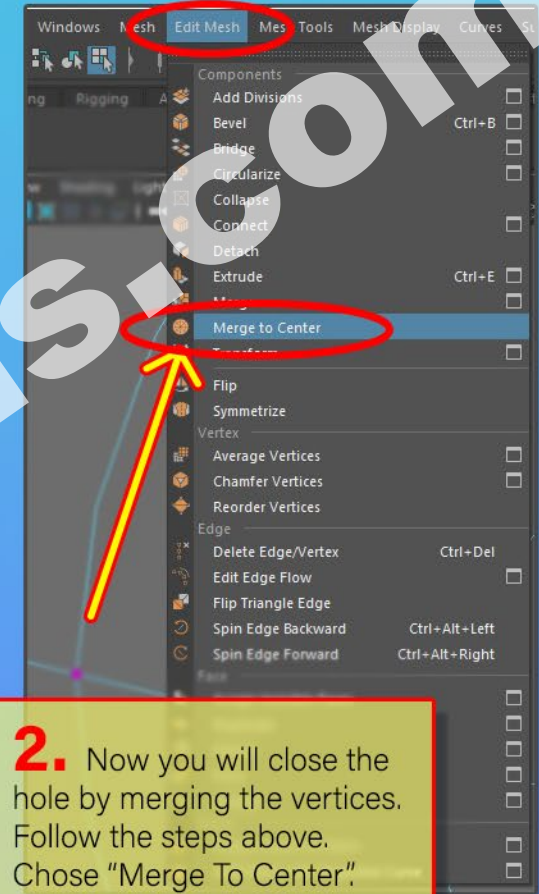
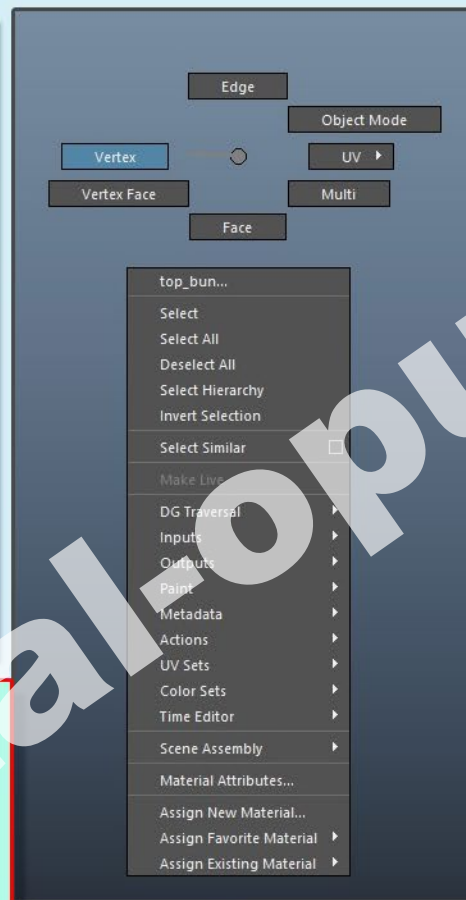
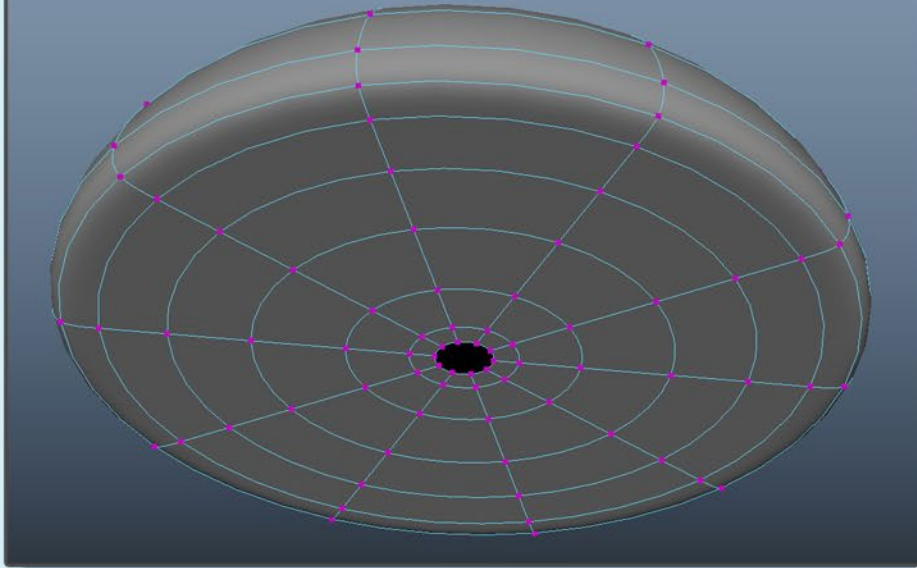
2. Now we will extrude one last time. Extrude **just enough** so that there is a hole about the size like this example. Do NOT make the hole any smaller.



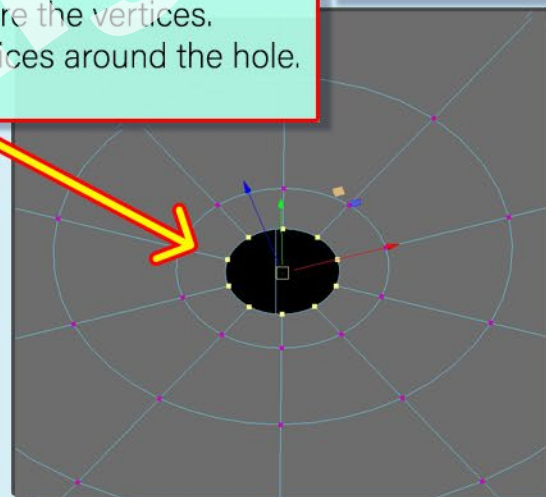
www.digitart.com/opus.com

Burger King Project Guide: Part 06

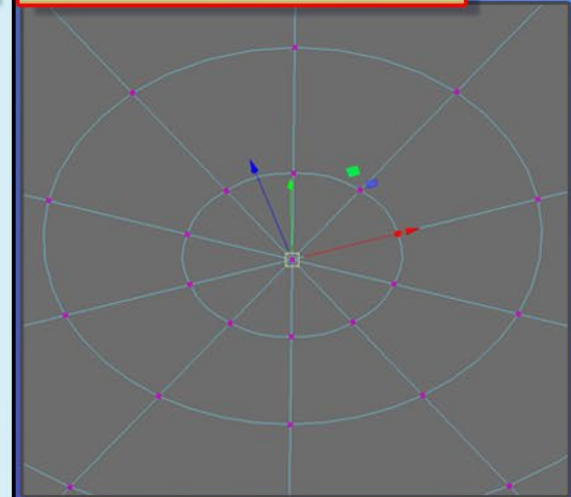
This is the "Vertex Mode"



1. Now we will switch over to vertex mode. The way to access vertex mode is the same as the other component modes. You press and hold, "right mouse button", and drag your mouse cursor over to the "vertex box", then release. Now you should see purple dots. Those are the vertices. You are going to **carefully** select the vertices around the hole.



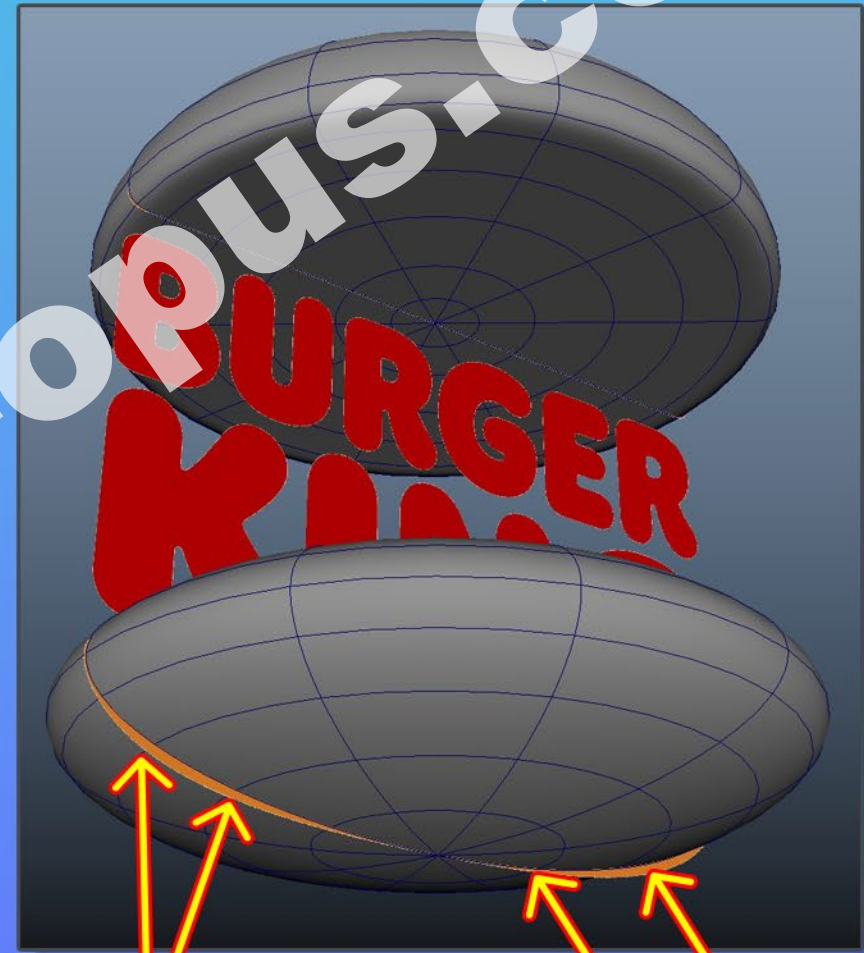
2. Now you will close the hole by merging the vertices. Follow the steps above. Chose "Merge To Center".



Burger King Project Guide: Part 07



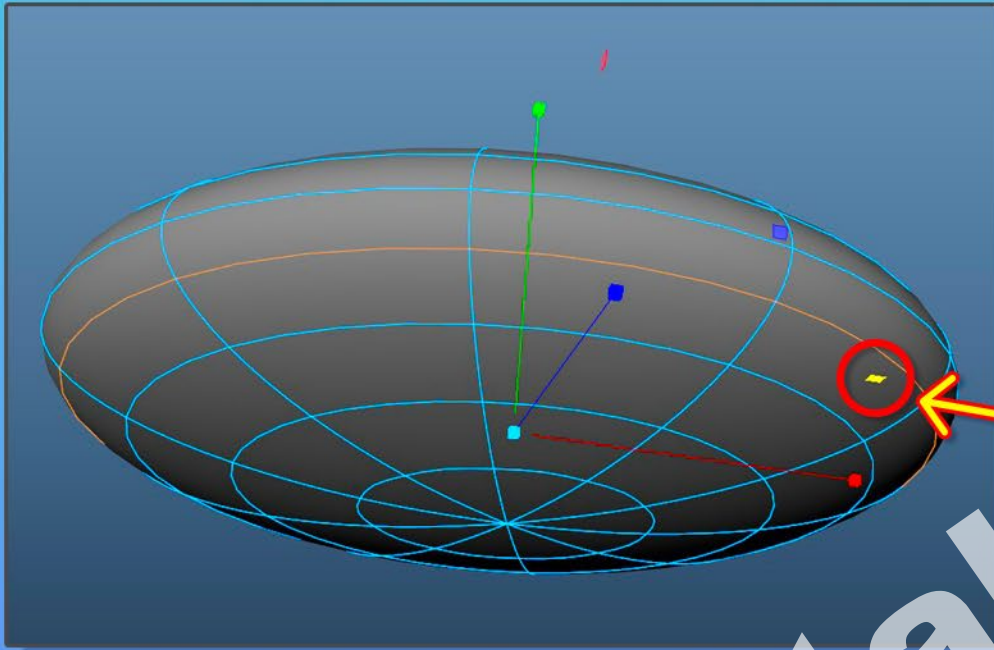
1. Just like the top bun, you are going to create the bottom bun but with one additional modeling trick. First part, punch in the values that you see in the Channel Box for your newly made polySphere and also name it, "bottom bun".



2. You will notice that scaling the bottom bun in "object mode" will only get you so far. Now we will learn to manipulate the "edges" of the bottom bun so that it fits perfectly with the original design.

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Burger King Project Guide: Part 08

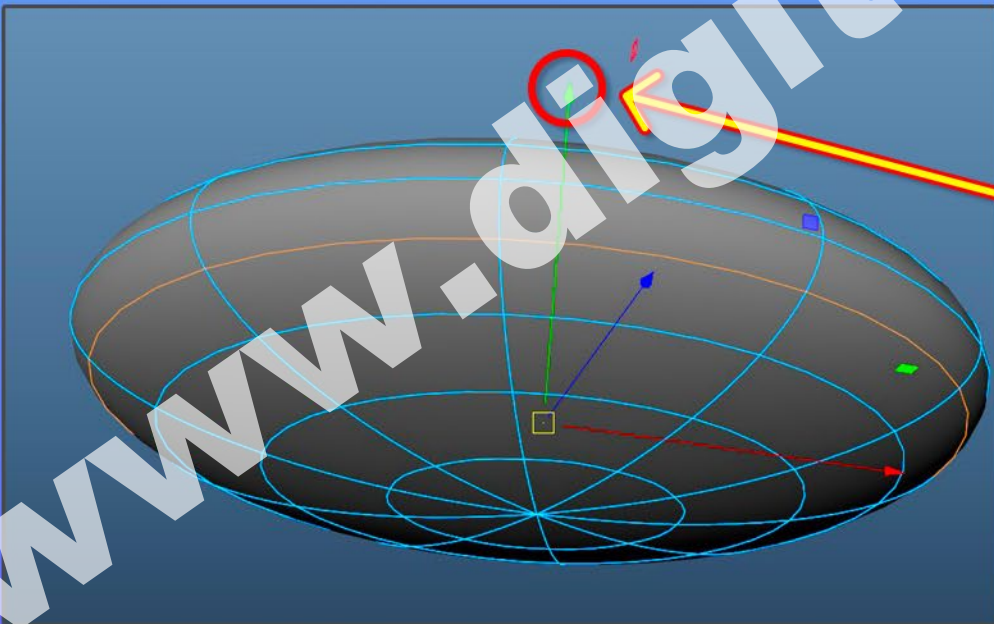


Activate the SCALE tool by pressing:

"r"

Fine tuned modeling the bottom bun is different from the top bun modeling because we can't just punch in numbers to get the exact shape, (this time around). We have to eye-ball and shape the curvature using two methods.

- We will **simultaneously** scale the looped edges in the **X (Red)** and **Z (Blue)** planes, using the X & Z scale tool identified in the red circle.



Activate the MOVE tool by pressing:

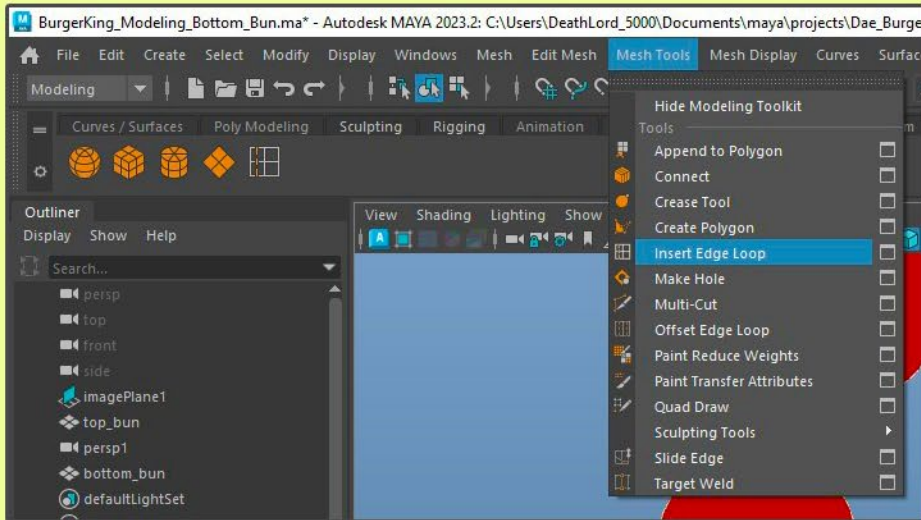
"w"

We will also be using the up and down, **(Y)** move tool to help shape our bottom bun. **DO NOT** mess with the other move handles at all.

Watch the video tutorial for this part because modeling the bottom bun is tricky and it is best explained by watching.

Burger King Project Guide: Part 09

Now we are going to use a new tool called: "Insert Edge Loop"



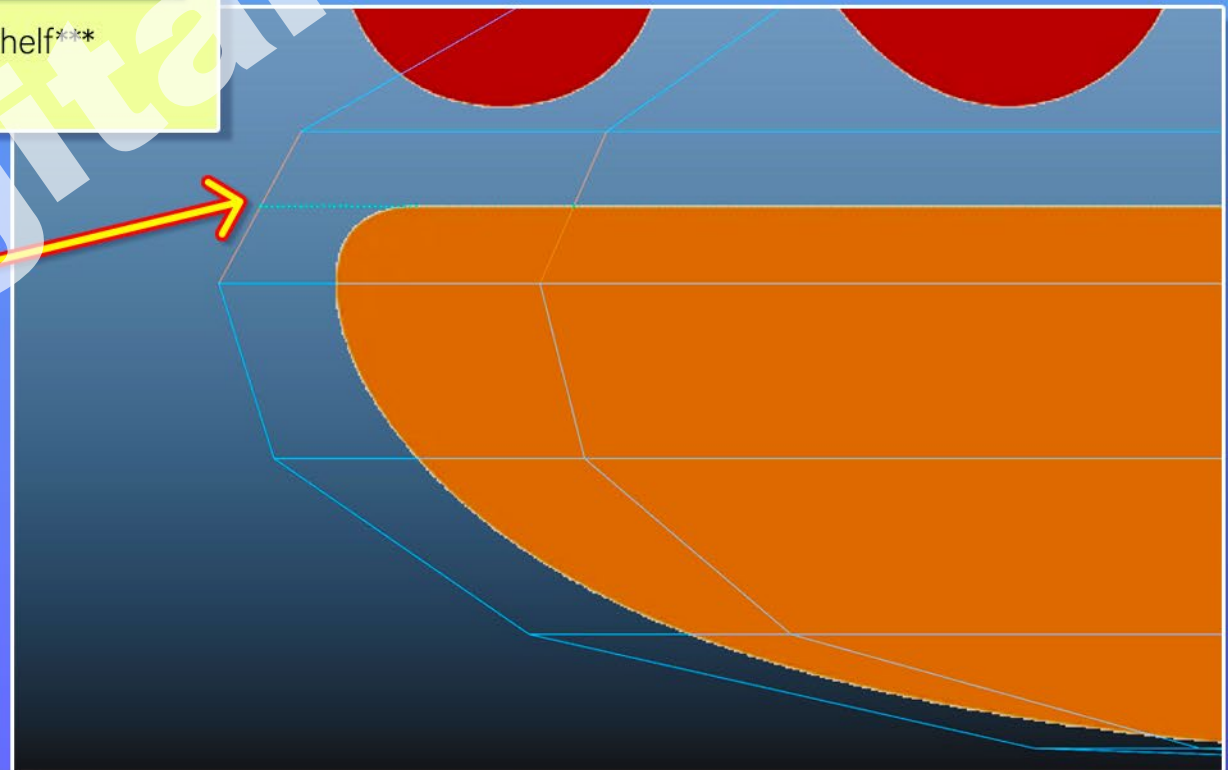
Make sure to add this tool to your custom shelf
(CTRL+Shift+Left Mouse Click)

We are going to ADD an edge loop to use as a border to delete the upper half of the model.

We're going to be using the "front" view camera for this part.

- 1.** Select your bottom bun and press "1" to have your model back to the original, normal, blocky shaped look.
- 2.** Then press "4" to view the model in wireframe mode. Now activate the "Insert Edge Loop" tool and also add it to your shelf.

Add the edge loop along the side wall, shown as a row of light brown lines. The new edge will be shown as a green dotted line. Placement is interactive, so place it accurately. That green line will dictate where you will chop off the top half.



Burger King Project Guide: Part 010

Revert the 3D model back to "smooth proxy" mode.
Select the model and press "3".



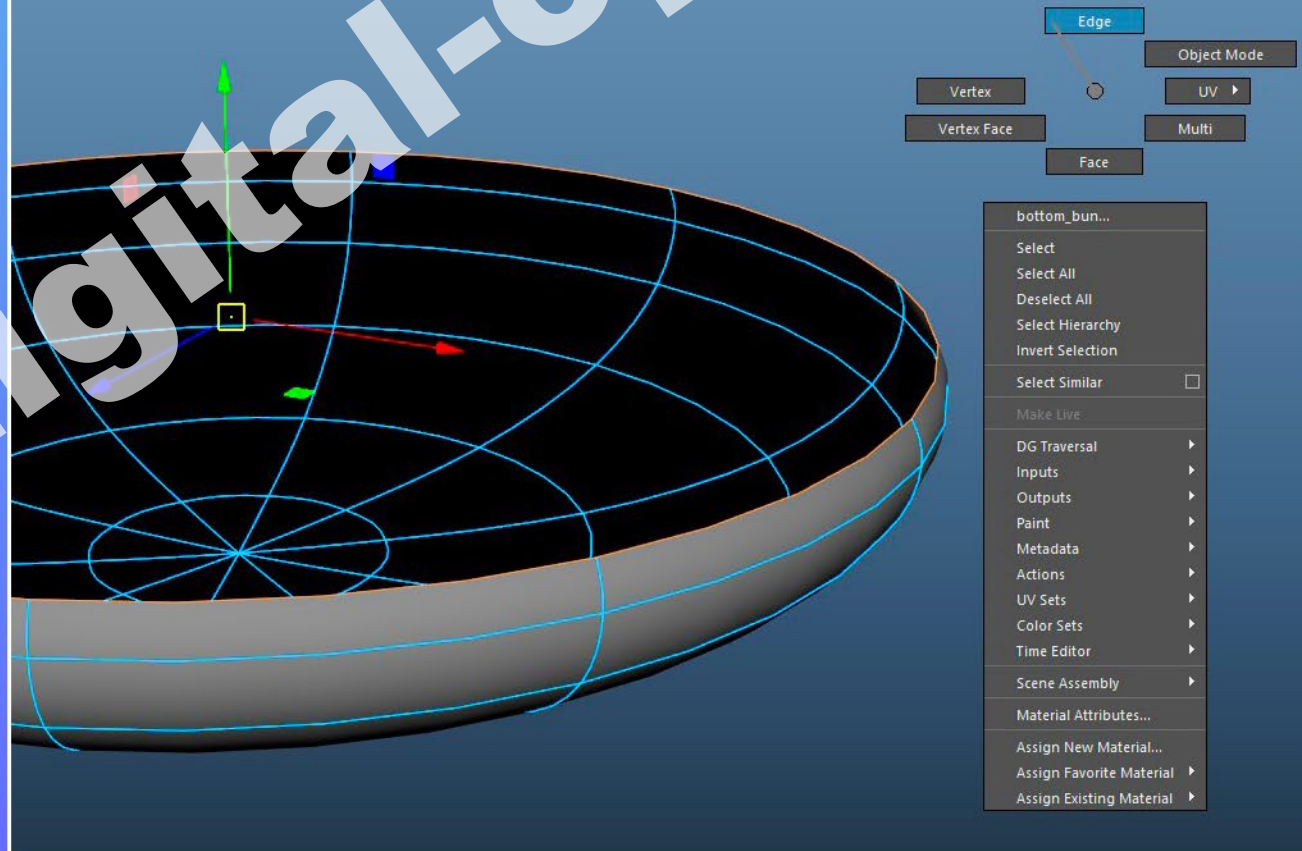
1. Use the "front camera" to select the top faces, above the new edge loop line.

DO NOT USE THE PERSPECTIVE CAMERA. You're going to get REKT if you use the perspective camera to select the faces. =(

2. Select these top faces and delete them.

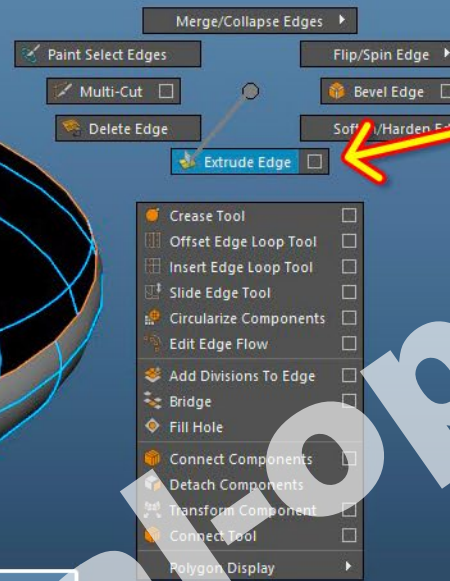
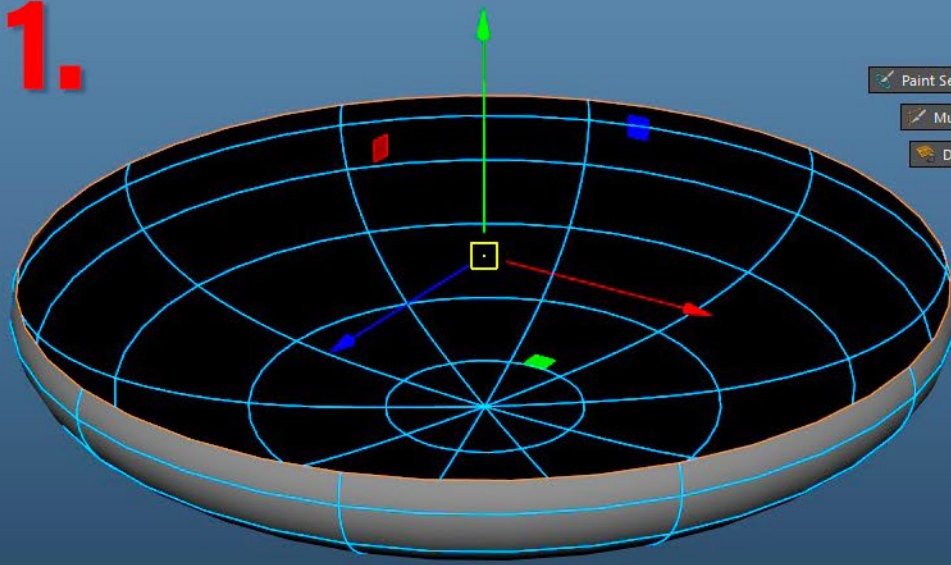
Now we are going to extrude the outer edge loop (in-ward), like the top bun.

1. Right mouse click+hold... activates components menu.
2. Chose "Edge" mode.
3. **Double click** to automatically select the outer edge loop.



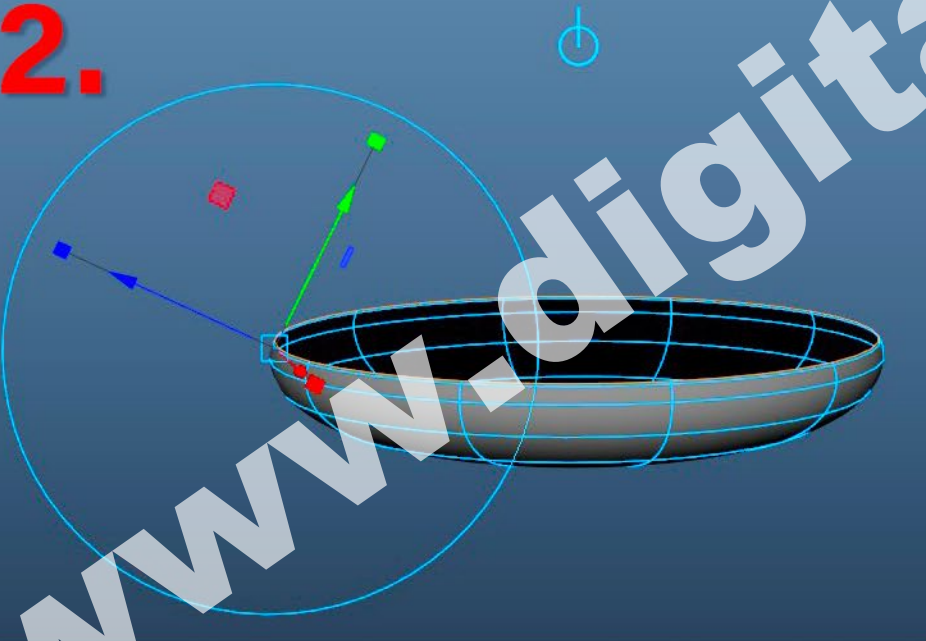
Burger King Project Guide: Part 011

1.



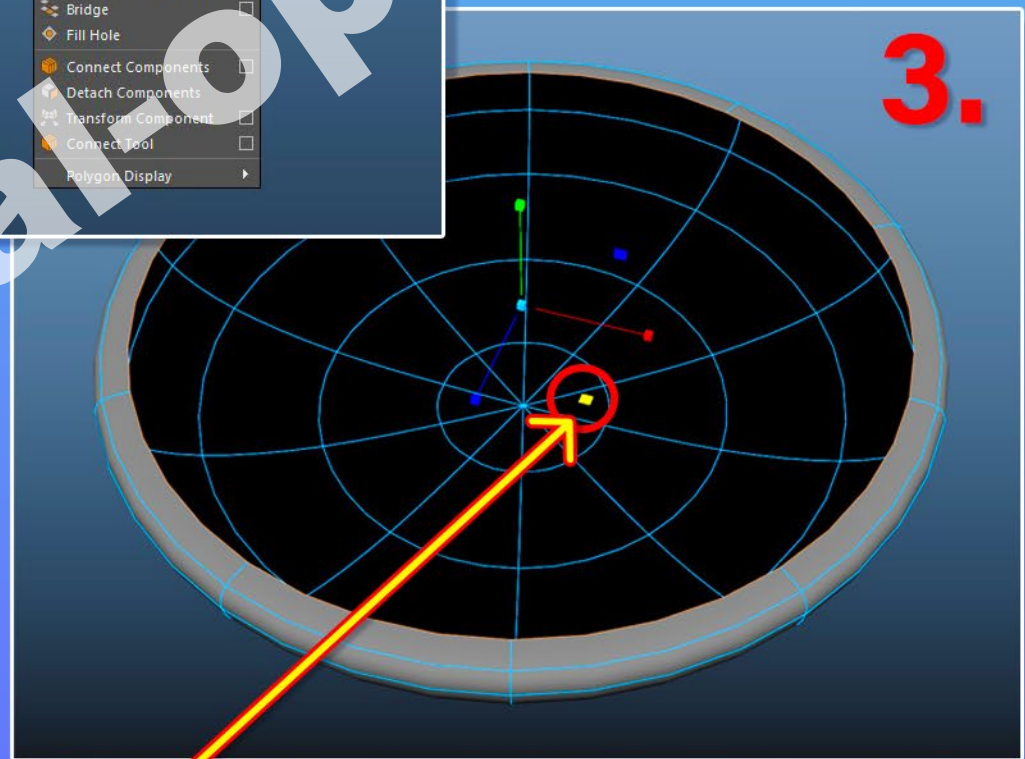
Activate the modeling menu:
1. Shift+Right click+Hold
2. Select "Extrude Edge"

2.



You will NOT use these modeling handles or the Channel Box.

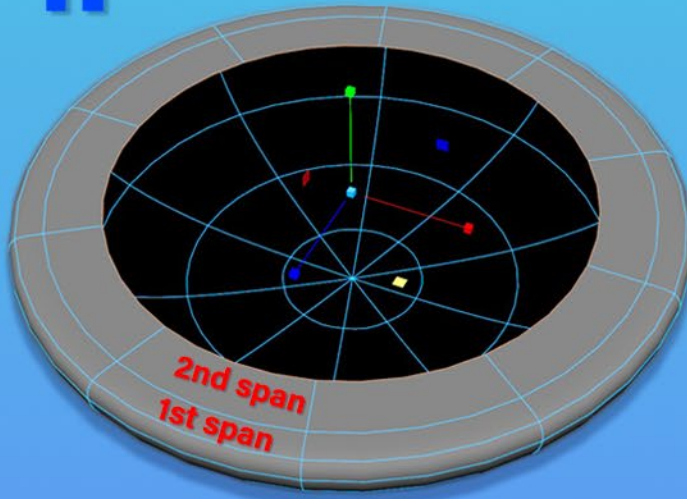
3.



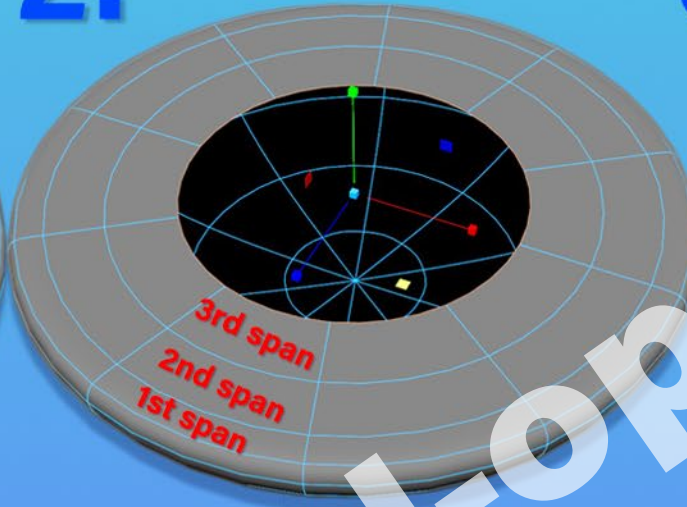
Instead, press "r" to activate the Scale tool. Left-click and pull on that yellow square & you will see the new edges pull in. We will be modeling visually. Follow along and extrude yours, so it looks just like this.

Burger King Project Guide: Part 012

1. Be mindful of the spacing between spans.



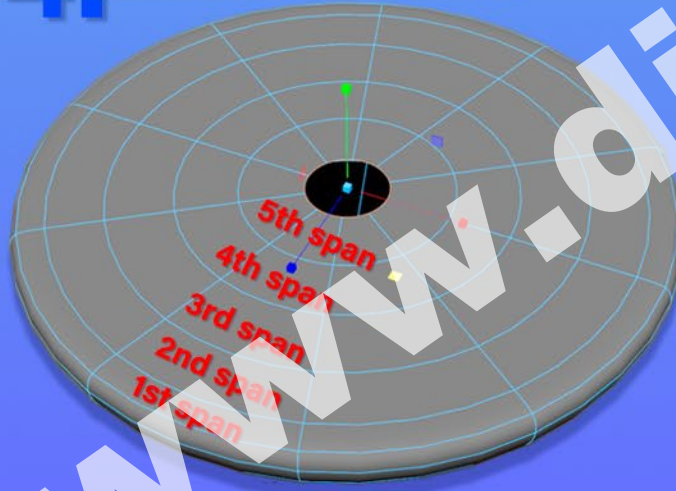
2. Only the 1st span will be tight.



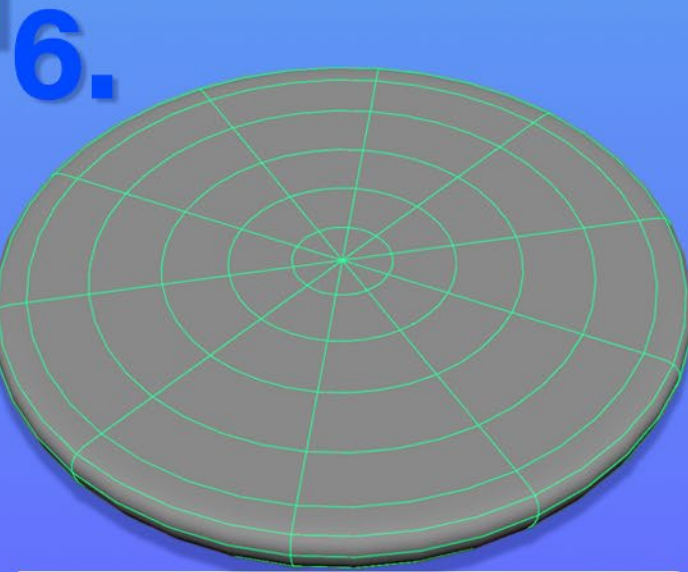
3. Every span after that will be evenly spaced.



4. There is a total of 6 spans. On the 6th span, the hole will be merged.



Close the hole by converting to "vertex" mode (Right Mouse Click & select Vertex).

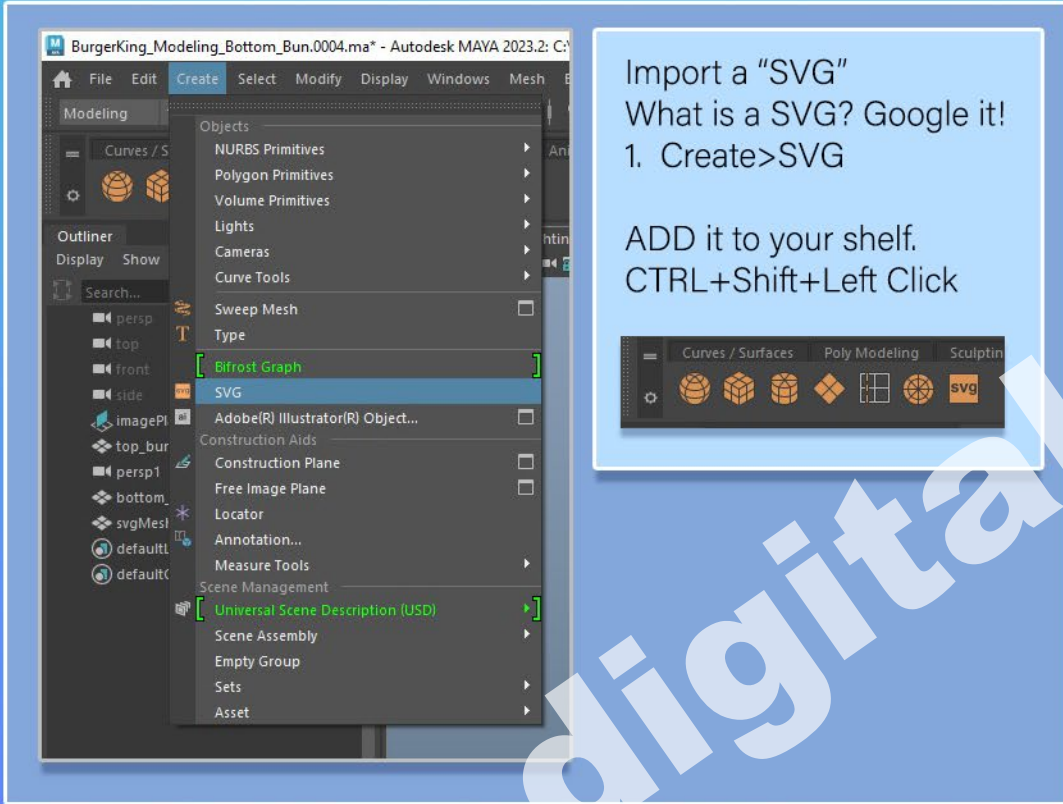


1. Carefully, (shift+select) the inner vertices.
2. Then: Edit Mesh>Merge to Center

This is how your model should look at the end.

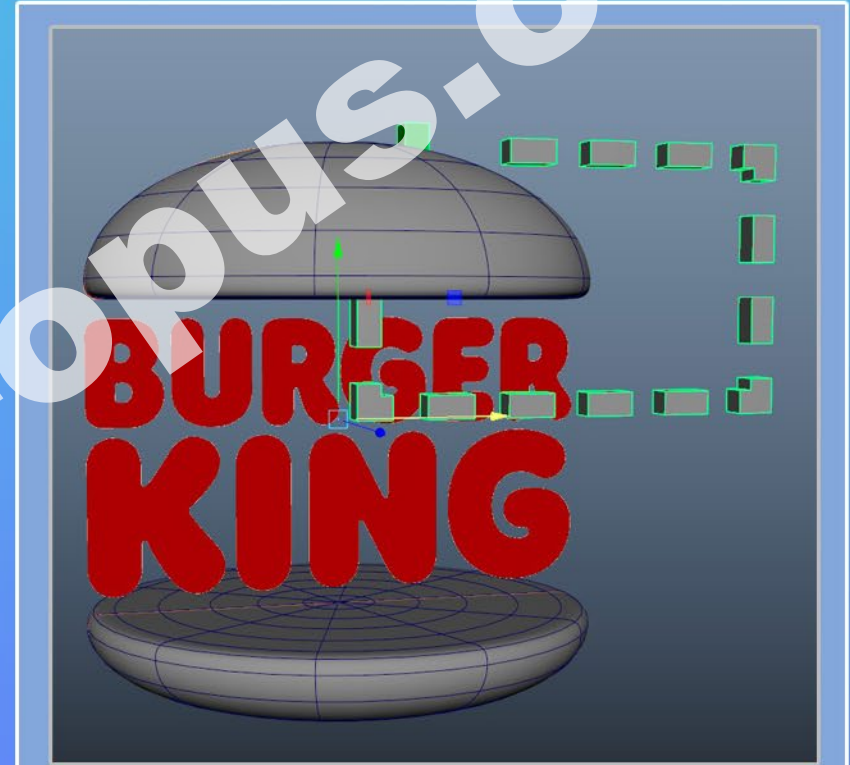
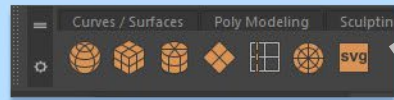
www.digitalexpress.com

Burger King Project Guide: Part 013



Import a "SVG"
What is a SVG? Google it!
1. Create>SVG

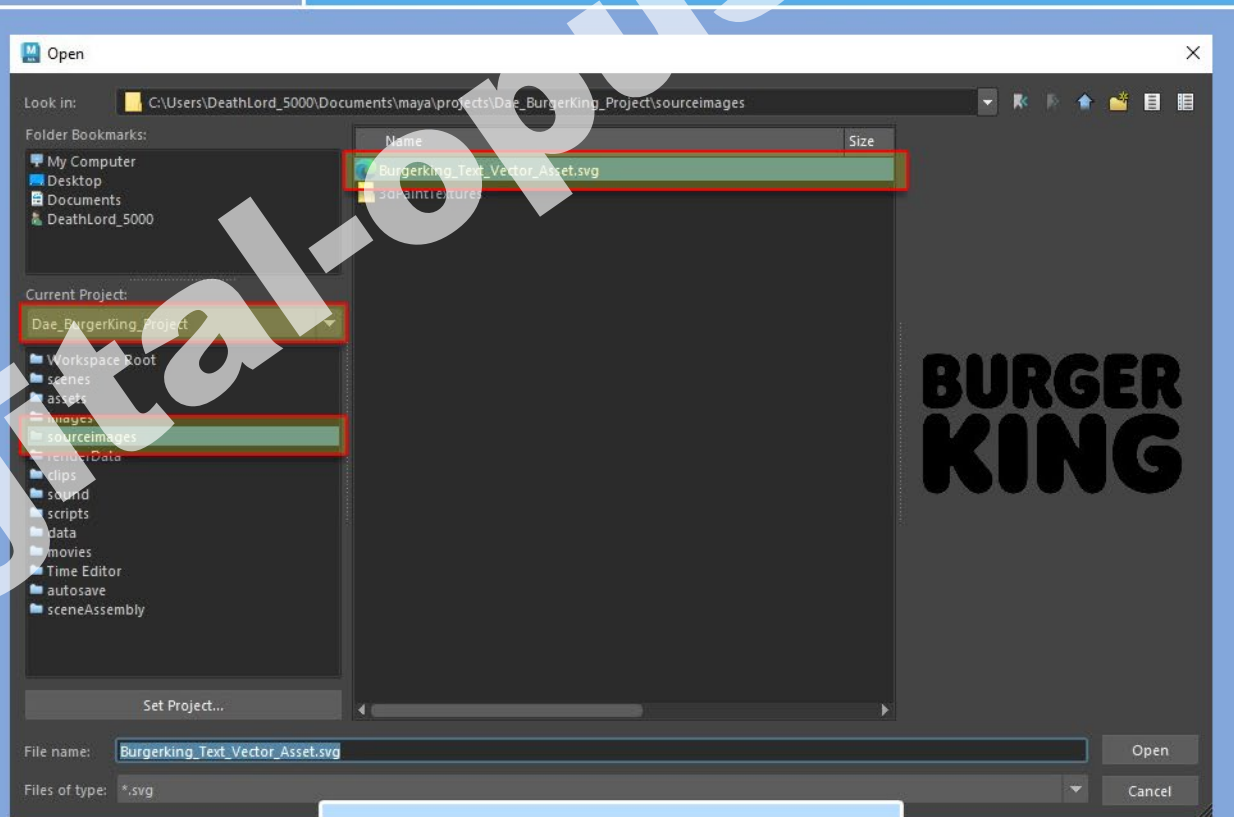
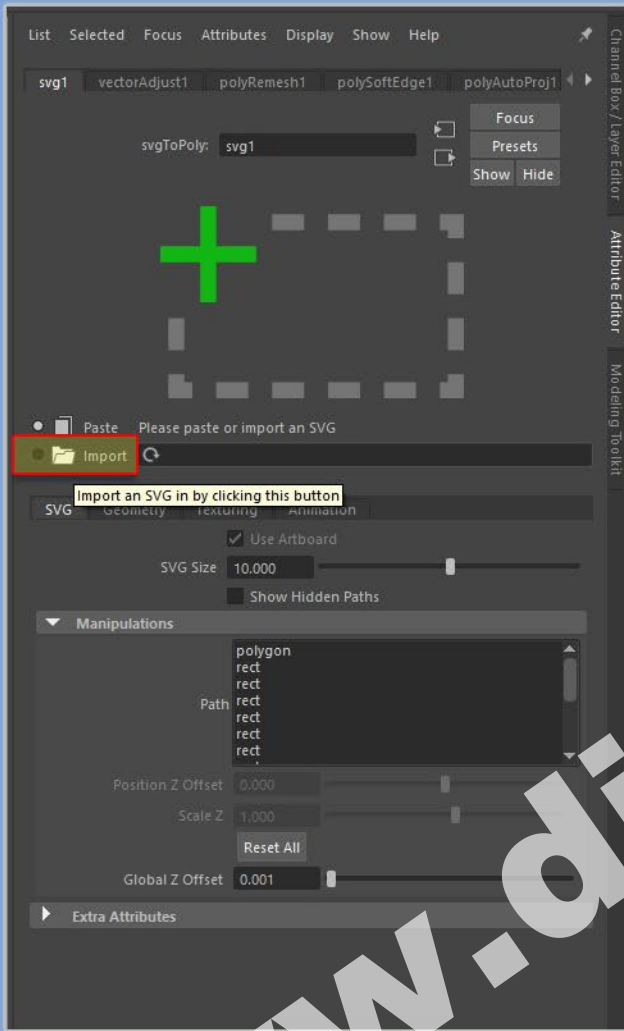
ADD it to your shelf.
CTRL+Shift+Left Click



Suddenly you will see this weird looking thing being created. This is the SVG controller. Click on the **Attribute Editor** to import the SVG image.

Burger King Project Guide: Part 014

Here we are in the Attribute Editor.
1. Click on the "Import" icon.



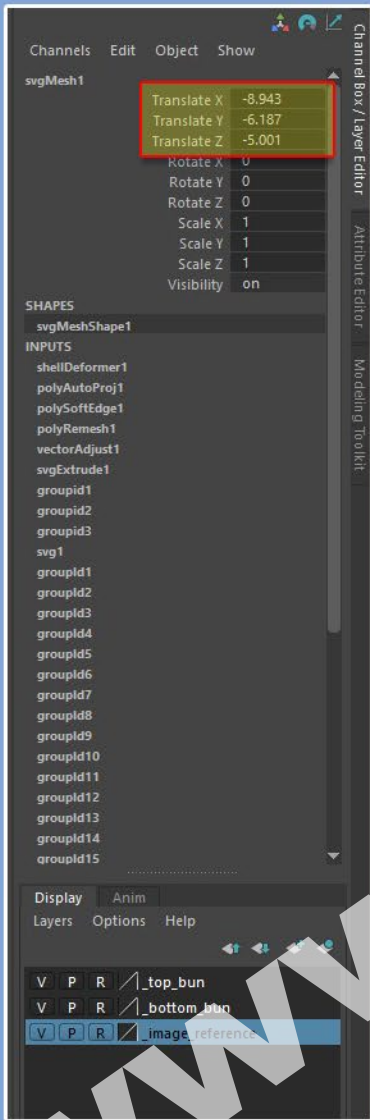
Your SVG image should be in the
"sourceimages folder".

Select and open:
"Burgerking_Text_Vector.svg"

Burger King Project Guide: Part 015

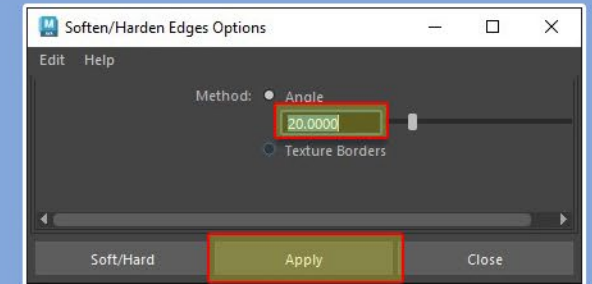
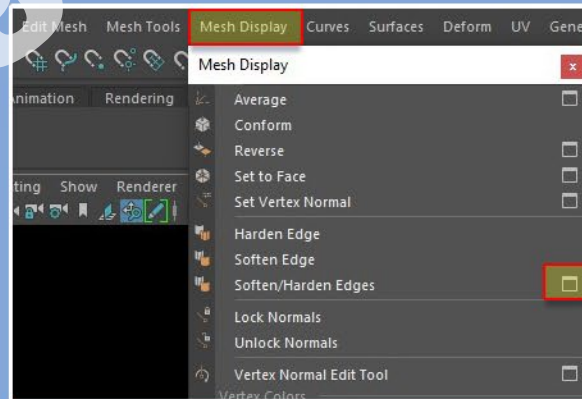
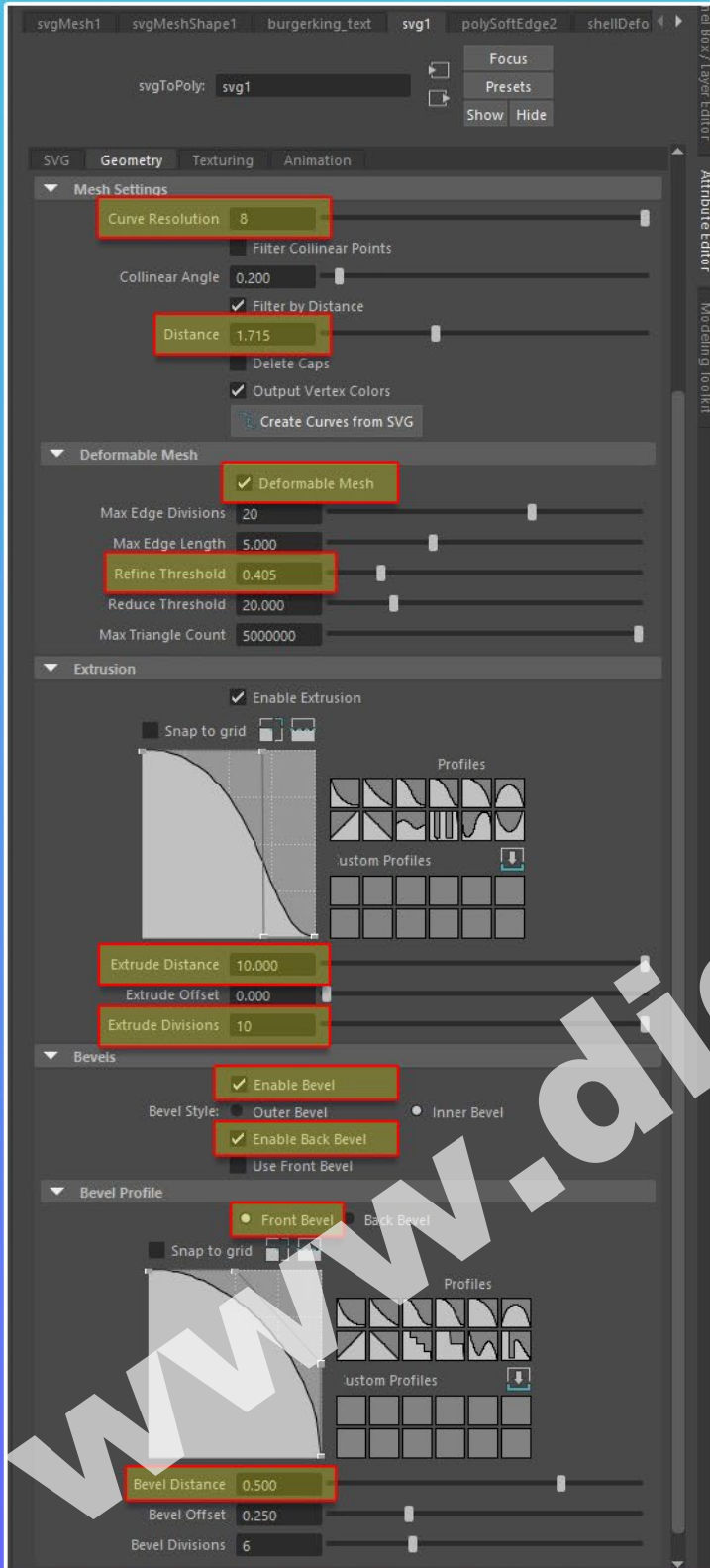
1.

Set these numbers in the Channel Box for "svgMesh1".



2. Set the SVG Size to 10.070

Burger King Project Guide: Part 016



Now apply a "Soften/Harden Edge" of (20)

1. Select the svgMesh1
2. Mesh Display>Soften/Harden Edges Options

Also add this tool to your shelf.