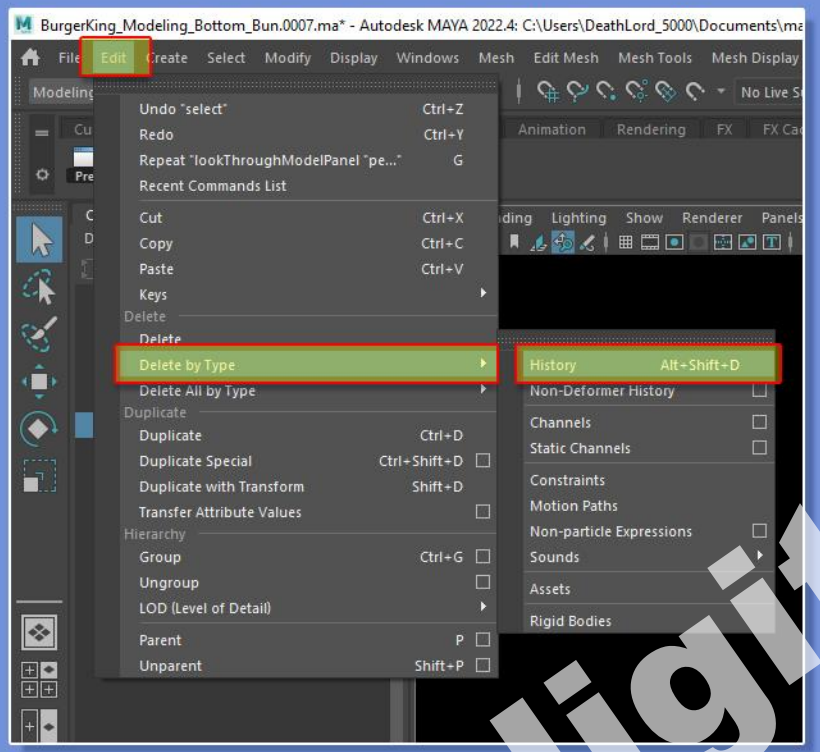
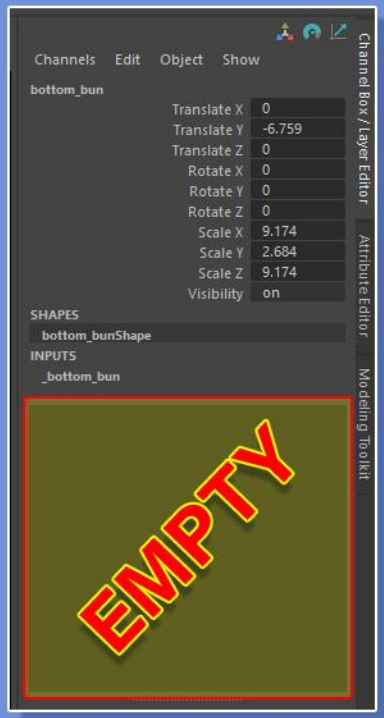
Burger King Project Guide: Delete History



Select All Your Modeled Items

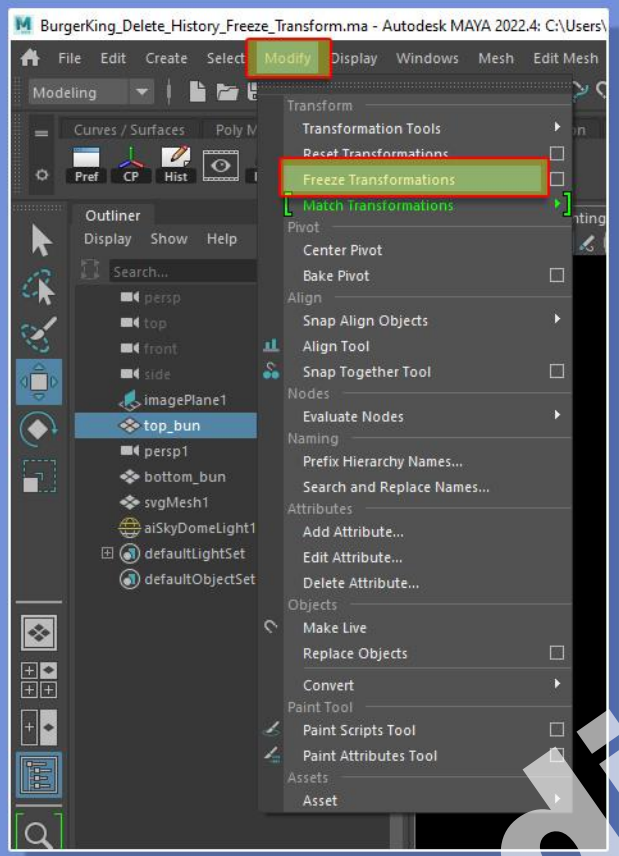
1. Edit>
2. >Delete by Type>
3. >History

Reminder: This deletes the construction history of the item that was created.
Reason: Deleting history prevents your model from becoming unstable/corrupted.



Each of your **models** should have an empty list under: "INPUTS"

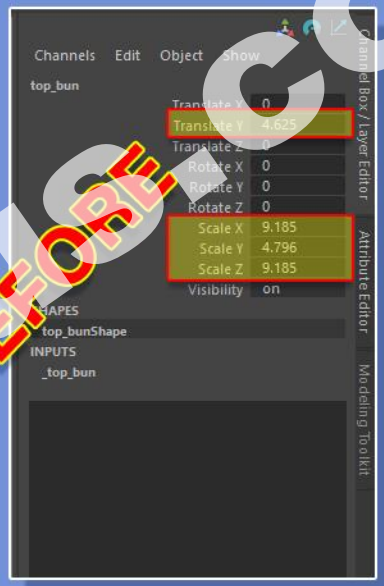
Burger King Project Guide: Freeze Transform

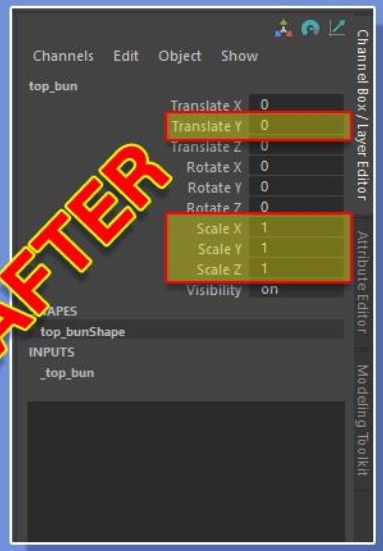


Select **All** Your Models & Apply
"Freeze Transformation"

Reminder: This resets all of your Channel Box data.
(Translate, Rotate and Scale)
Back to default AND still maintains all the translate/rotate/scale changes that you applied during the modeling.

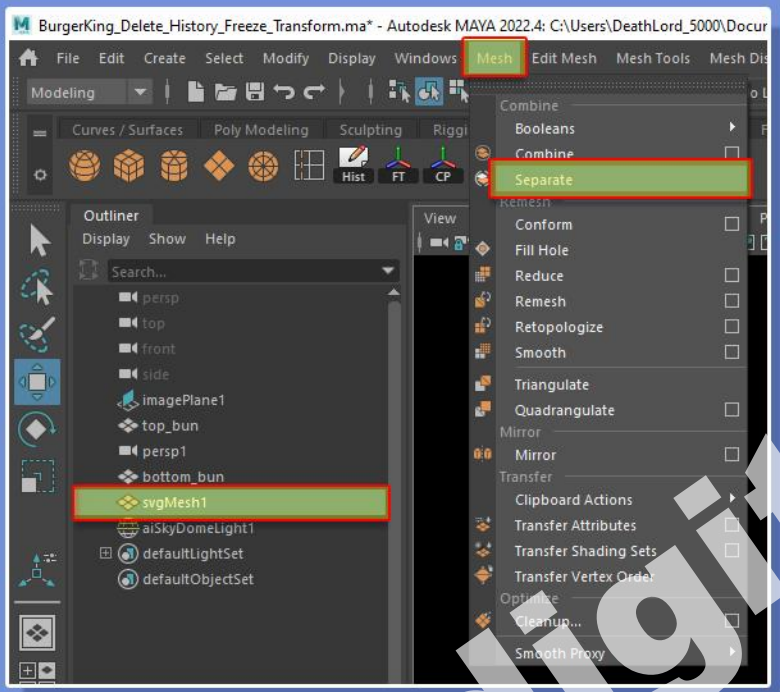
Reason: "Freezing transformations" on your models gives them a clean slate for a starting/beginning point.
Example: If you don't like where you positioned your model to be animated, you just reset the location back to...
ZERO
(where it originally started from).





Burger King Project Guide: Separate Burger King Text

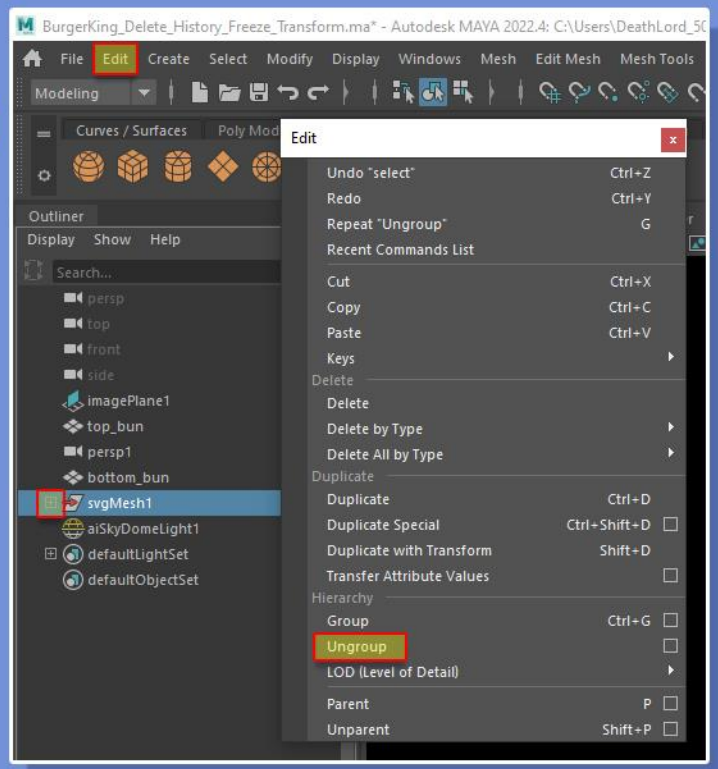
A.



Turn Burger King "svgMesh1" into separate pieces.

1. Select "svgMesh1"
2. Mesh>
3. >Separate

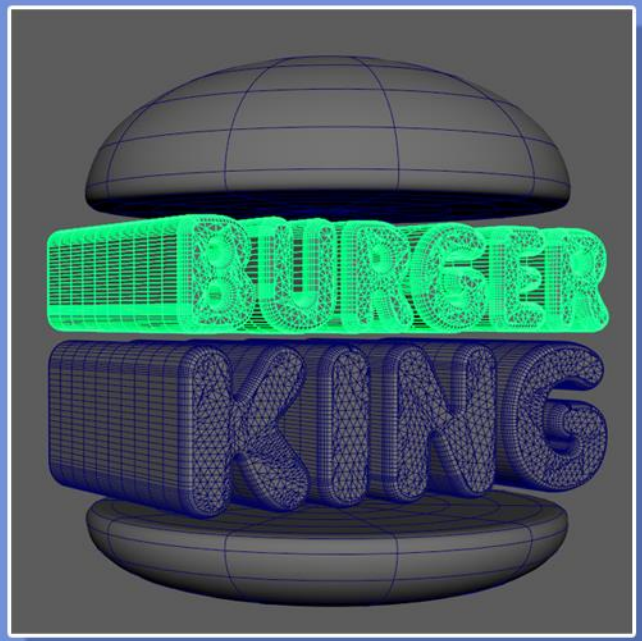
B.

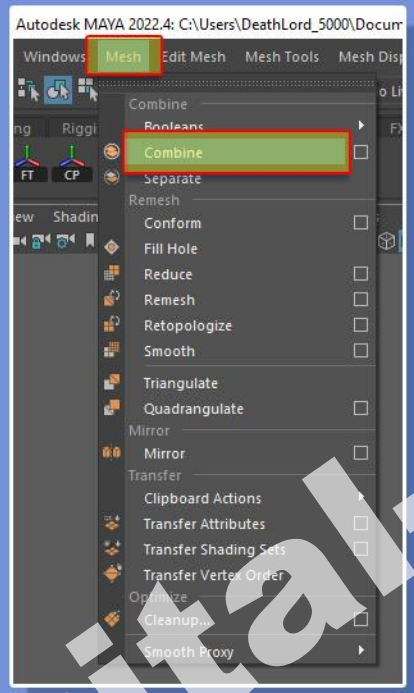


After "Separate", you will **Ungroup** the svgMesh1.

1. Select "svgMesh1"
2. Edit>Ungroup

Burger King Project Guide: Combine/Delete History "Burger" & "King"



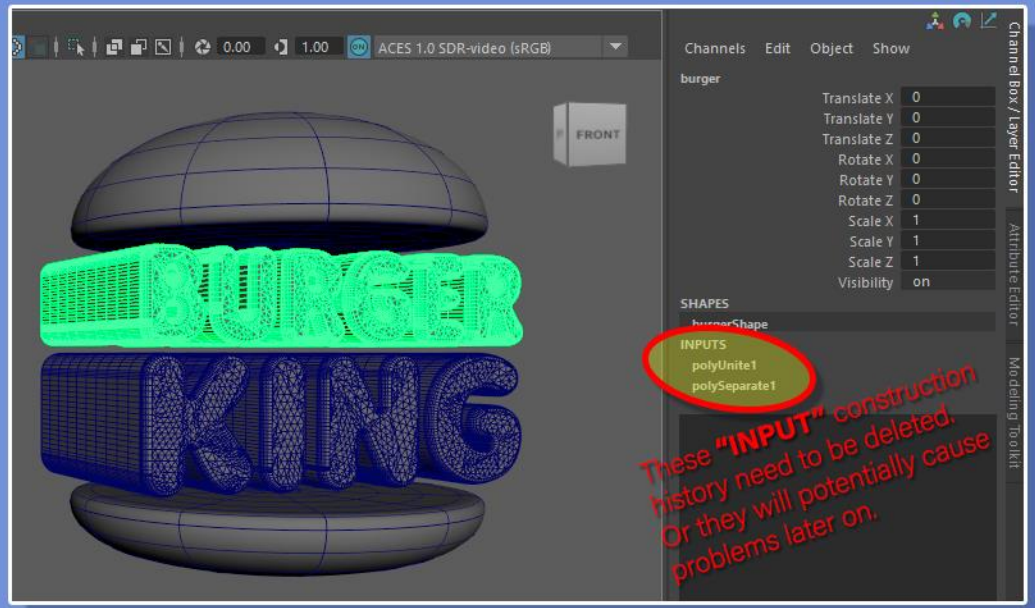


A.

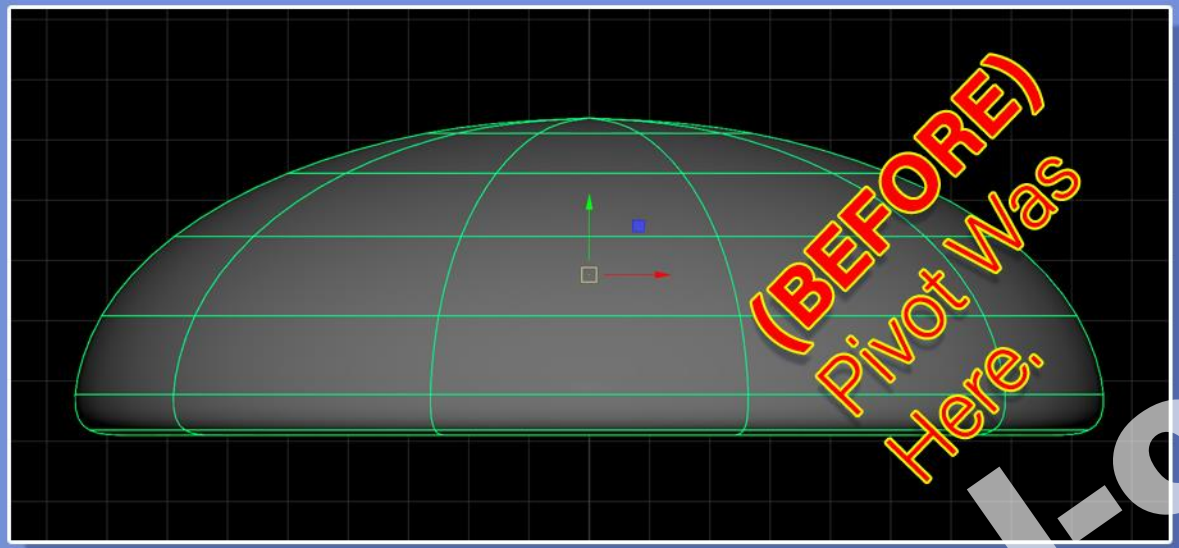
1. Select just the **"BURGER"** letters.
2. Mesh>Combine
3. "Burger" should now be **green,** as one mesh.
4. **Repeat** these steps, also for the **"KING"** text.

B.

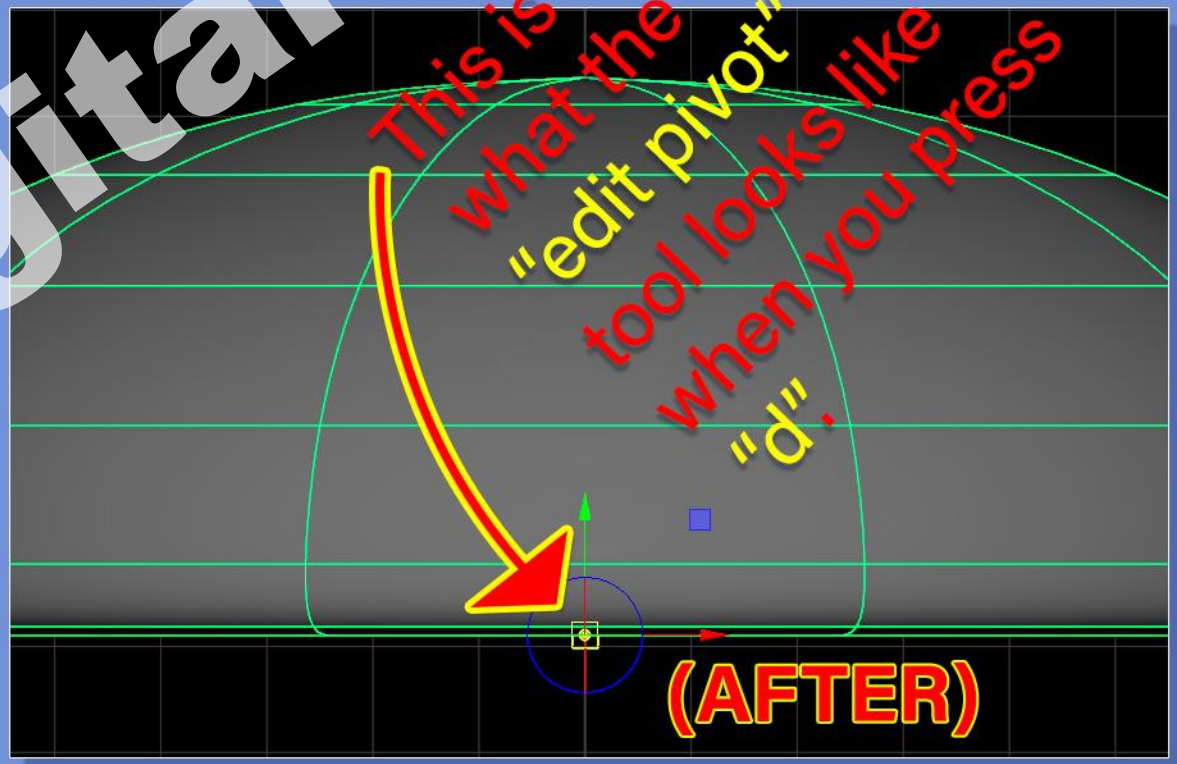
1. Select just the "BURGER" text.
2. **Edit>Delete by Type>History**
3. "INPUTS" should have nothing listed.
4. **Repeat** these steps, also for the "KING" text.



Burger King Project Guide: Modify Pivot Part 01



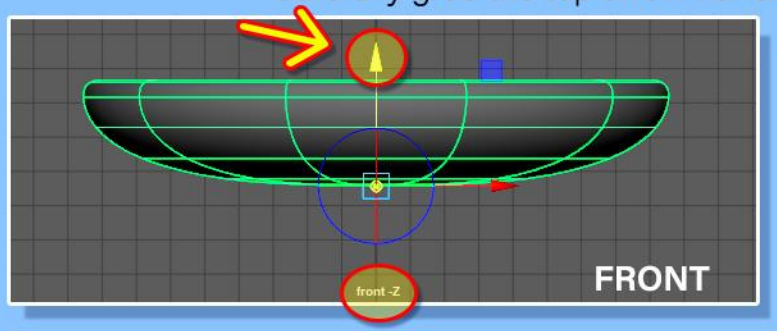
1. Work from the **"front"** camera.
2. Select the "top bun".
3. Press **"w"** to activate "move tool".

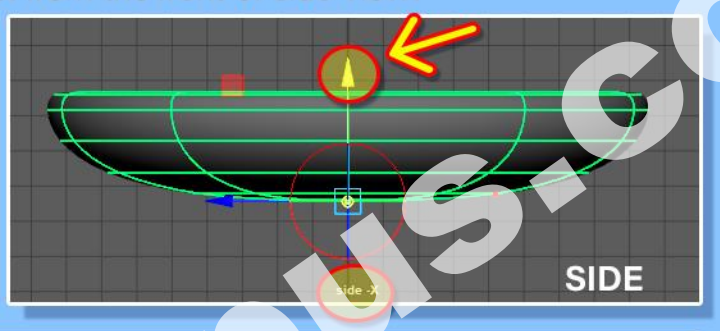


4. Press **"d"**, to activate the "edit pivot tool".
5. **Carefully** lower the "move tool" by dragging the **green arrow** down.
6. Press the **"w"** key and the "edit pivot" mode will turn off.

Burger King Project Guide: Modify Pivot Part 02

Carefully grab the top arrow handle & from the *front* or *side* view!



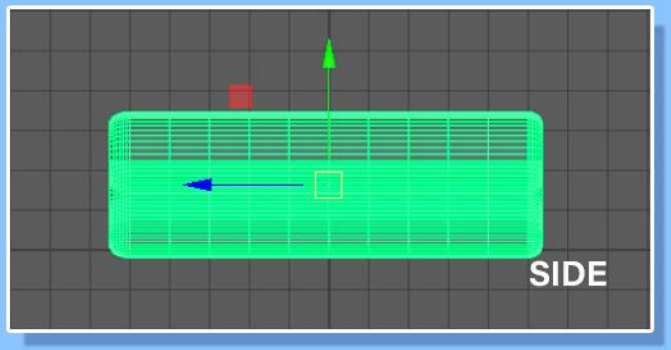


Move the pivot point for the "bottom bun" to the lowest surface point on the model.

1. Work from either the "front" or "side" camera. This prevents mistakes in placement.
2. Select "bottom bun"
3. Press **"d"** to activate the **"edit pivot"** mode.
4. **Carefully** lower the pivot point by pulling down on the *vertical arrow handle*.
5. Press **"w"** to exit the "modify pivot" mode. The move tool needs to be at the **bottom** & **center**.

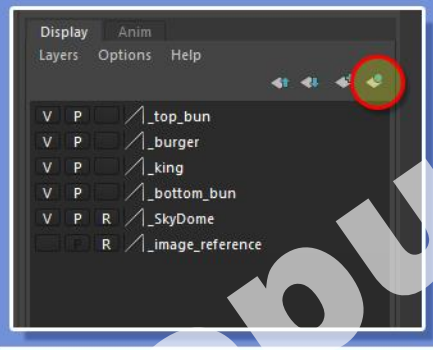
Perform a "Center Pivot" action" for the "Burger" and "King" polygon mesh.

1. Select "burger" polygon mesh & press **"w"** for the move tool.
2. Modify>Center Pivot
3. Repeat this process for the "king" polygon mesh.
4. The **"burger"** and **"king"** should have their "move tool" aligned like the images below.

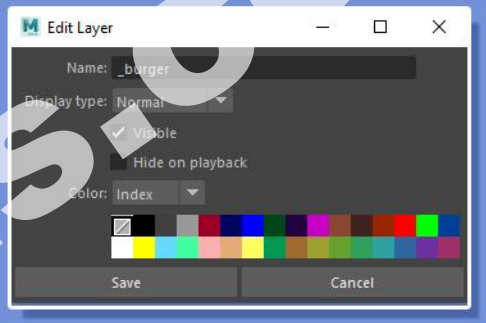


Burger King Project Guide: Creating Display Layers

1. Select a polygon mesh, ie. "BURGER".



2. With your polygon mesh selected, click on this icon. This will create a new layer & assign that object.



3. Double click on the newly created layer. The "Edit Layer" panel will pop out. Rename it with an underscore.
"_burger"
"_king"
"_SkyDome"

Burger King Project Guide: More Tools For Your Custom Shelf

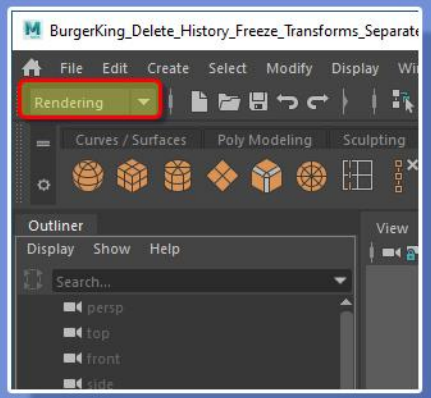
These tools should be on your custom shelf. (CTRL+Shift+Left Click on tool name)

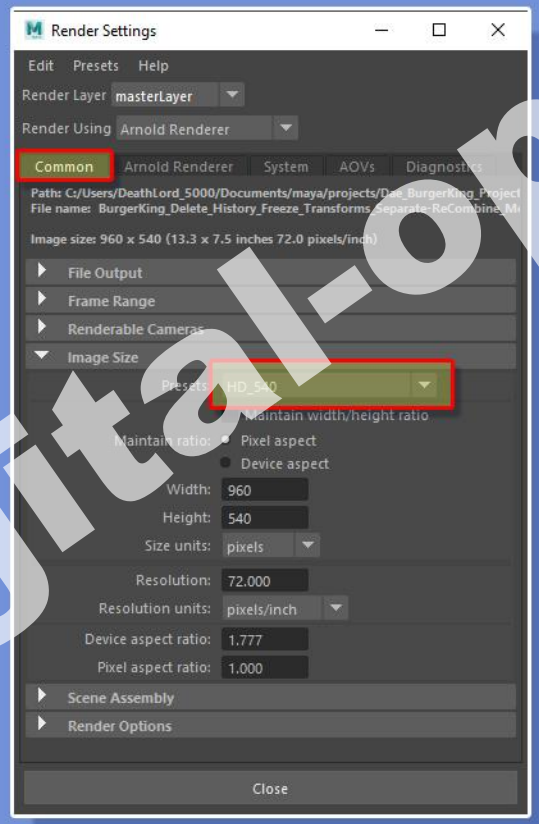
Select "Modeling" menu for tools #1 - #10

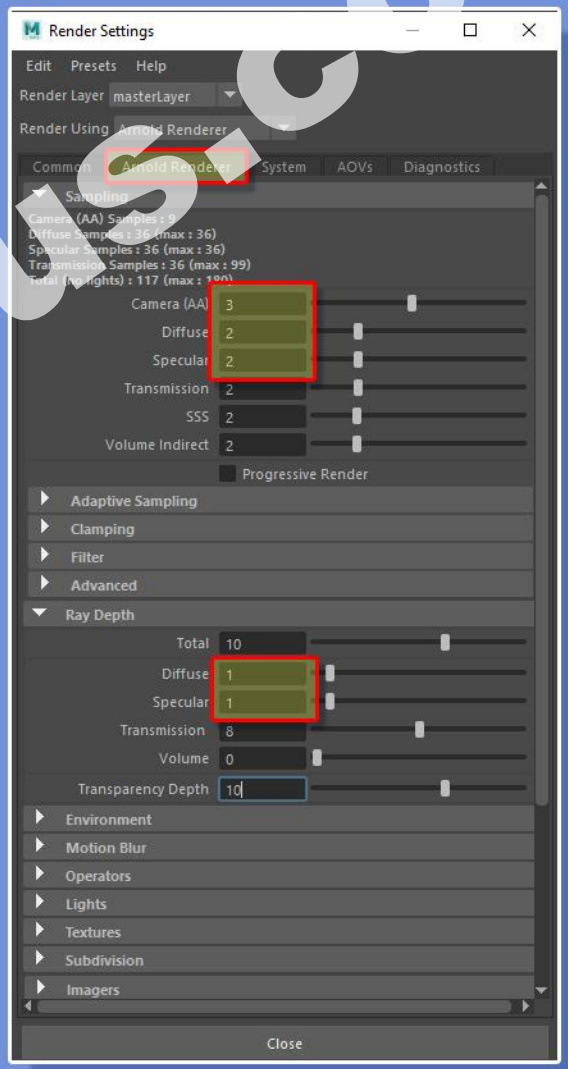
1. Create>Polygon Primitives>Sphere, Cube, Cylinder, Plane
2. Edit Mesh>Bevel 
3. Edit Mesh>Merge to Center 
4. Mesh Tools>Insert Edge Loop 
5. Edit Mesh>Delete Edge/Vertex 
6. Mesh>Separate 
7. Mesh>Combine 
8. Edit>Delete by Type>History 
9. Modify>Freeze Transformations 
10. Modify>Center Pivot 
11. Arnold>Open Arnold RenderView 
12. Arnold>Skydome Light 
13. Arnold>Lights>Area Light 

Select "Rendering" menu for tools #1 - #10

Burger King Project Guide: Render Settings Set to Default





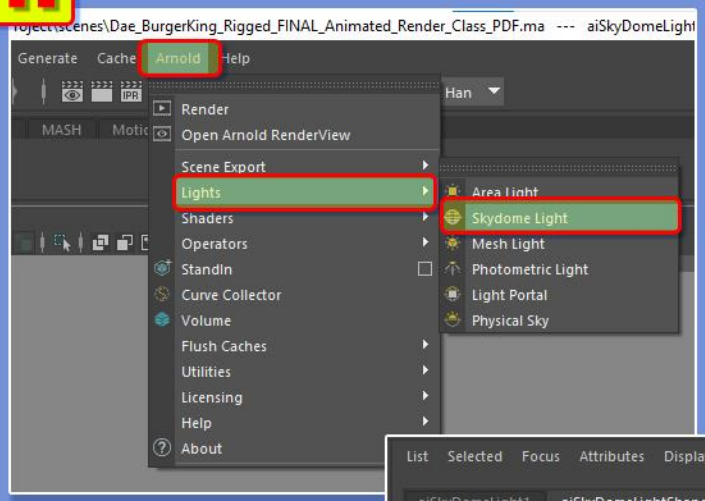


Setting "Render Settings" (back to default) before beginning lighting and shading.

1. (Menu Set) should be set to "Rendering".
2. Click on the "Render Settings" icon.
3. Set Image Size Presets to "HD_540"
4. Sampling & Ray Depth numbers should be like the example shown.

Burger King Project Guide: Create aiSkyDomeLight~ PART 01

1.



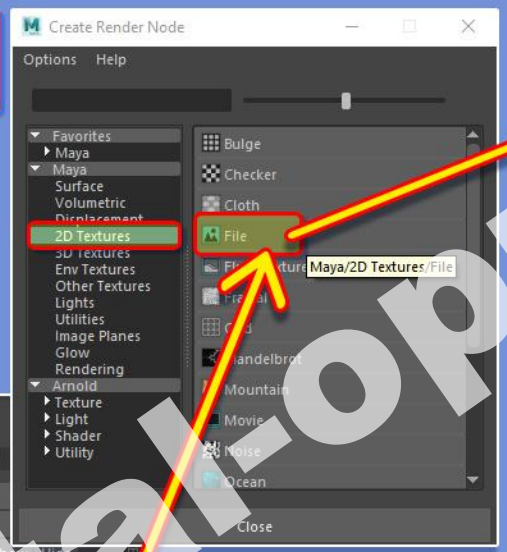
Make an Arnold Skydome Light **NOT** a Physical Sky.

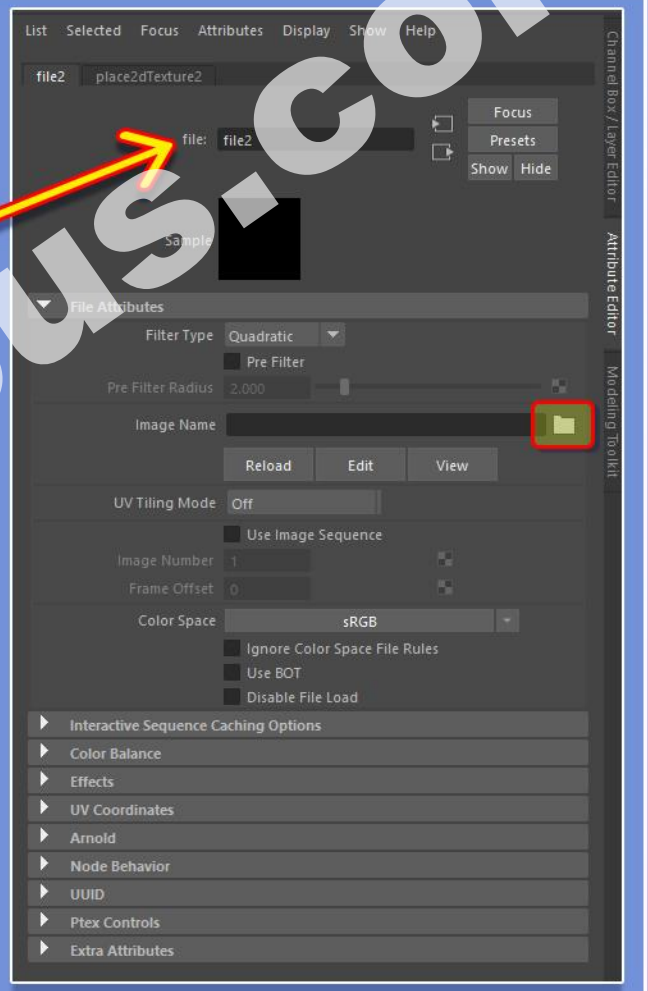
REASON:
Arnold Physical Sky is what you used previously.
The "*Skydome Light*" is very different from the "Physical Sky" **because** you will be pulling lighting data from a HDRI image that I will provide.

2.

Increase the "*Exposure*" **BUT** do not exceed "**2**".
Increase the "*Samples*" **BUT** do not exceed "**2**"

3.





Continue on to **Part 02** to import from a list of HDRI images and an explaination of HDRI images in relation to lighting.

Burger King Project Guide: Create aiSkyDomeLight~ PART 02

Use either one of these HDRI images to globally light your scene. They will give off the colors and lighting setup unique to each situation. **REMEMBER**, they will give off color into your scene.

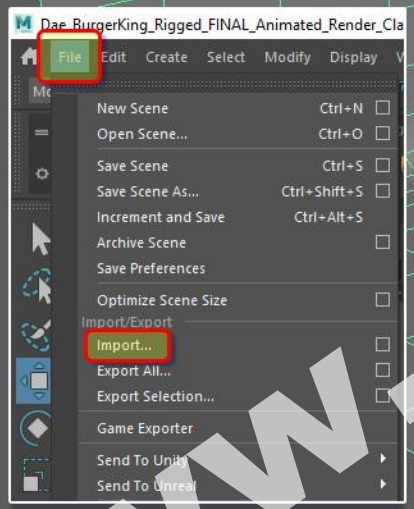
Burger King Project Guide: Skydome Lighting Setup

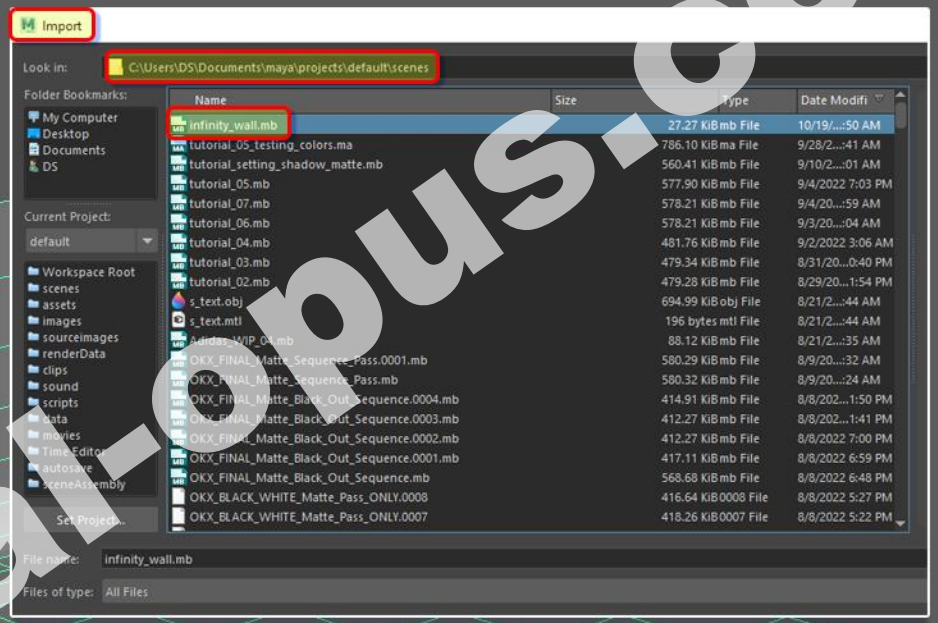
This render is with just the Skydome light set to default values only.
Lighting strategy, is to use **one** light source **at a time...**
To maximize how much brighter you can make the scene. To use that **ONE** light source to it's fullest without blowing out the scene with too much exposure/brightness.

This second render is with the SAME skydome light (no changes to values), BUT with the "infinity" wall added to the scene. The "infinity" wall's white background, (aiShadowMatte) is throwing lighting color & energy, to the scene. It is helping the skydome to light the scene & also allows for shadows to be seen now.

Burger King Project Guide: Importing Infinity Wall

This is the "infinity wall/backdrop". It's a wall backdrop to give the illusion of a studio setup and it also gives off light/color & shadows to the scene, (this is in addition to the global illumination skydome). You will import this asset into your own scene and use it.



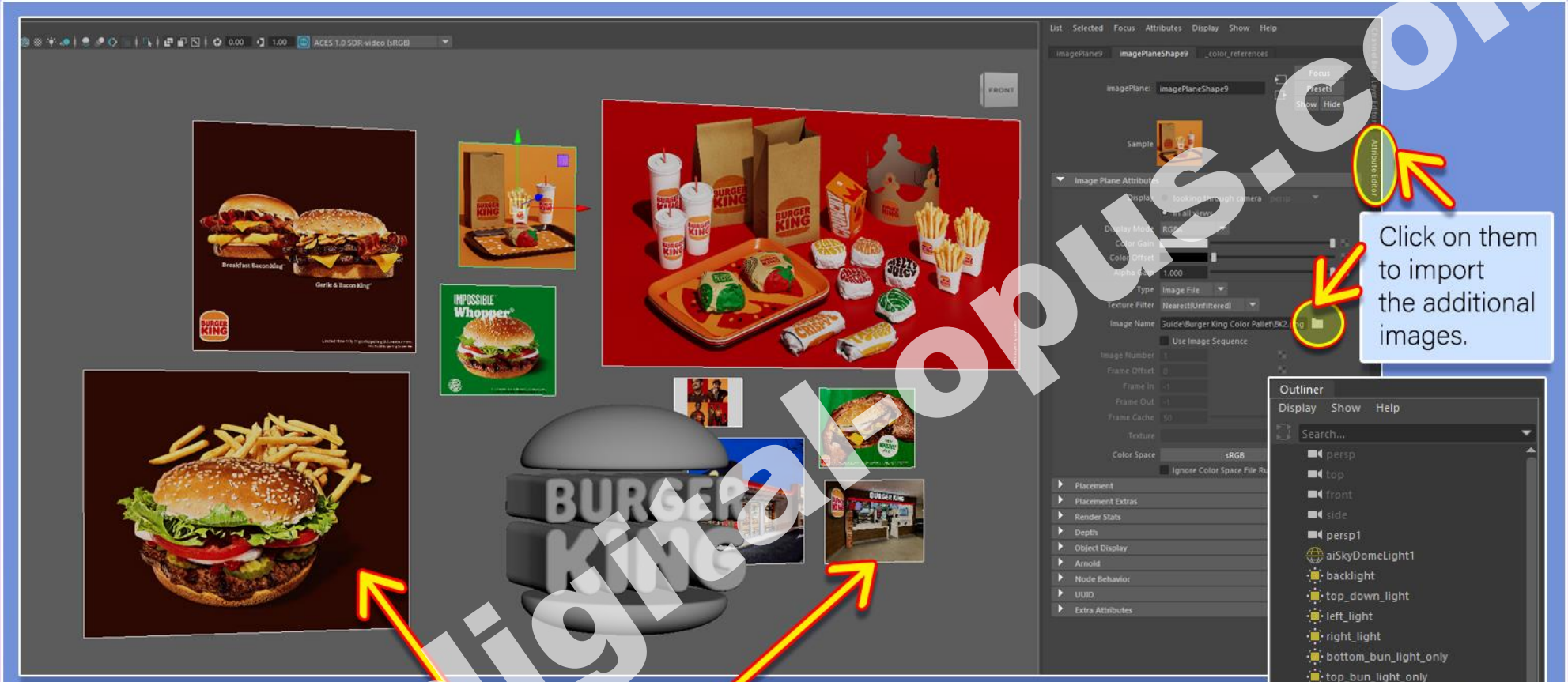


1. First download the "infinity wall" Maya file from your email that I sent out.

2. Place the file into your Maya "scenes" folder.

3. File>Import>"infinity_wall"

Burger King Project Guide: Image References For Color



These additional images will be stored in your "sourceImages" folder. They will be sent to you through your school email.

Add these additional images to new "image Planes".
Create>Free Image Plane

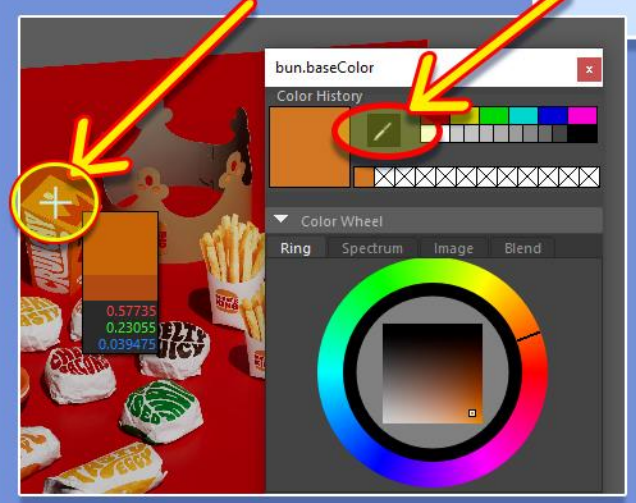
Reason:
You will have creative freedom to pull colors from these examples as color samples for your "bun" & "burgerking" & infinity wall shaders.

Burger King Project Guide: Using the Color Eye-Dropper

1. Select your shader through the **HyperShade Menu**. Then click on the **Attribute Editor**. Next *double click* on the colors.

2. **Double click** the color swatch to activate eye dropper.

"eye dropper"
(target handle)

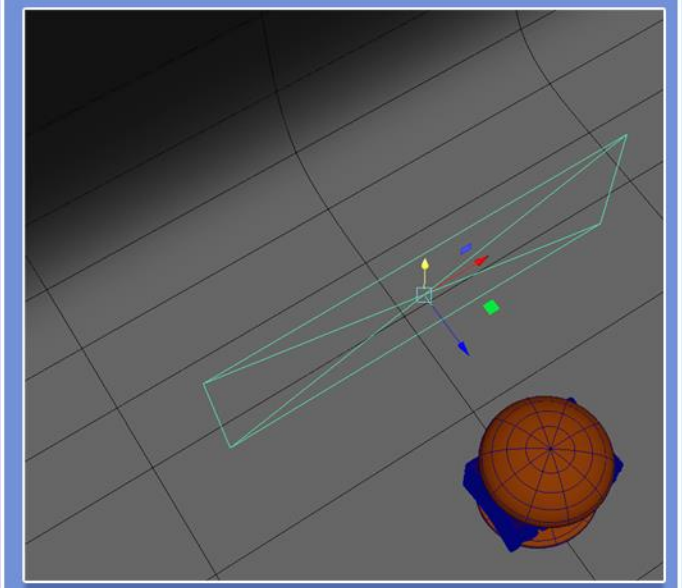


Burger King Project Guide: Shader Setup

Adjust the shaders to these specifications, **AND OR** also mess around with the **Weight** values and **Roughness** values, to get subtle variations in color tone and glossiness for your shaders. Experiment with the "base/specular weight and colors" for the (bun & text) shaders. Go ahead and experiement with picking colors from the additional image references that I have provided.

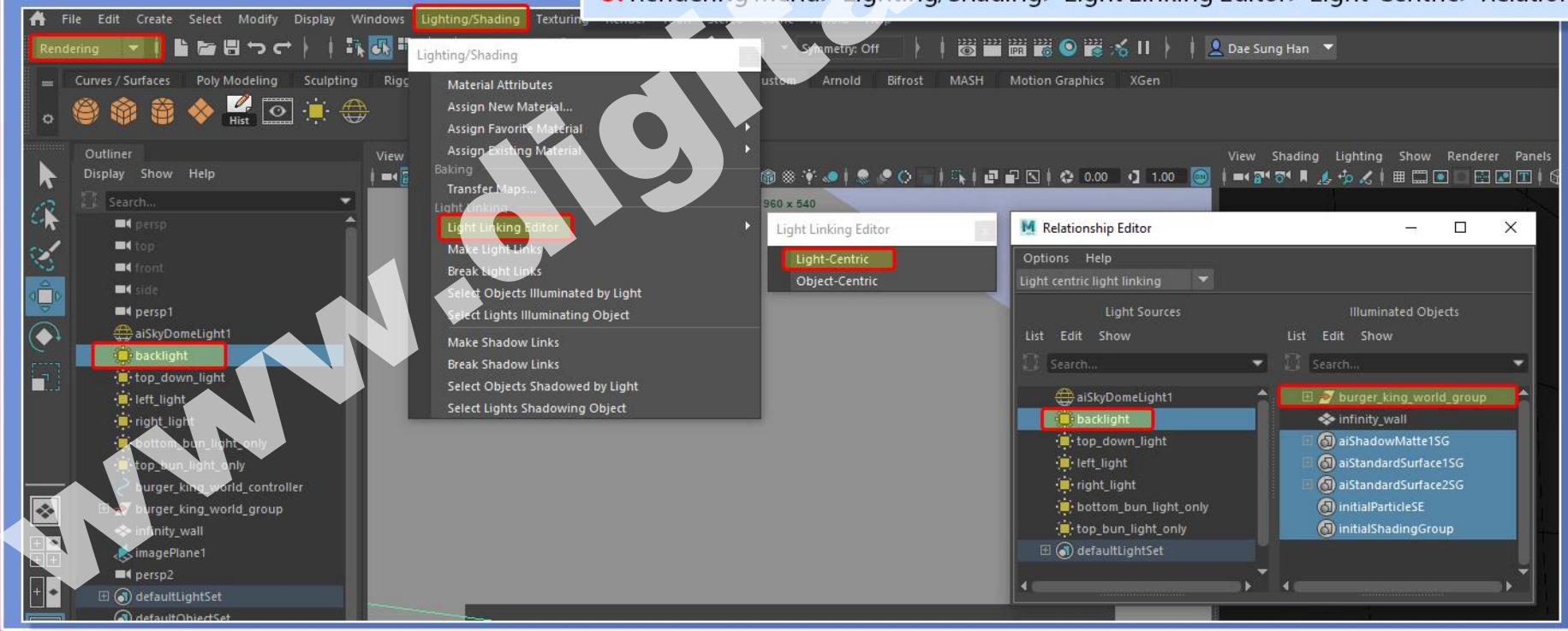
1. You can pick the colors from the image references by using the eye-dropper to select colors from the reference images.

Burger King Project Guide: Area Lights~ Part 01: Backlight

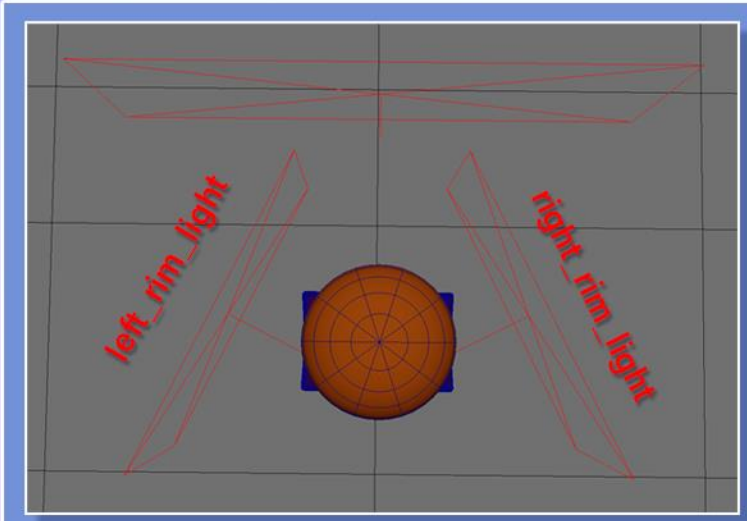


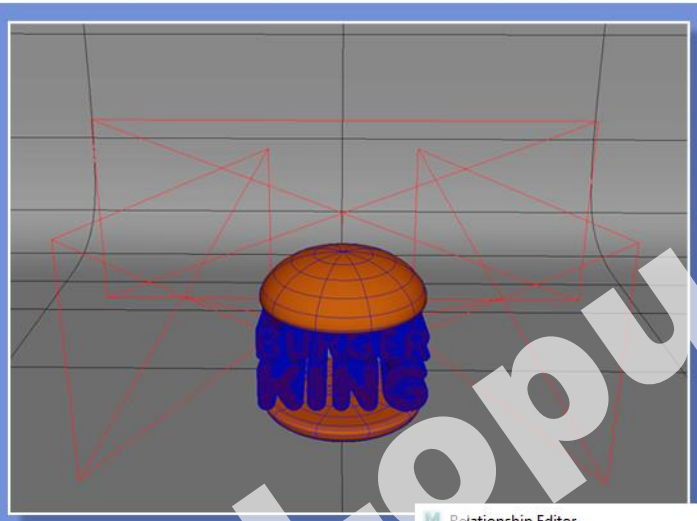
This render is AFTER creating and applying a "red" backlight with light-linking.

1. Make a area light. MAKE SURE to SCALE it as WIDE as the example.
2. Change the "color" to red or a color of your choice and increase the "Exposure" **to at least 10!**
4. Now use the technique of "light linking", to light ONLY 3D design, & not light the wall backdrop.
5. Rendering Menu> Lighting/Shading> Light Linking Editor> Light-Centric> Relationship Editor

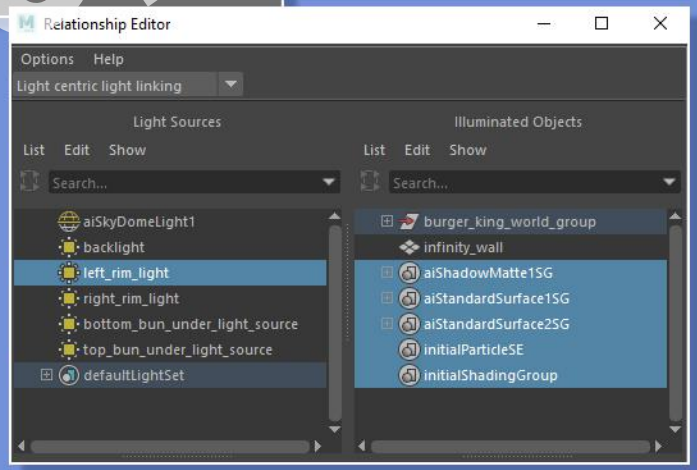


Burger King Project Guide: Area lights~ Part 02: Rim Lighting





1. The two lights are sized the same height as the backlight but with much less width.
2. They are also placed in a symmetry formation, for even lighting, all around. They act as "rim lighting" for the subject.
3. They use white light ONLY, with an exposure value over 8 and HIGHER.
4. You MUST also apply light-linking to these lights so that they **DO NOT** light the infinity wall.

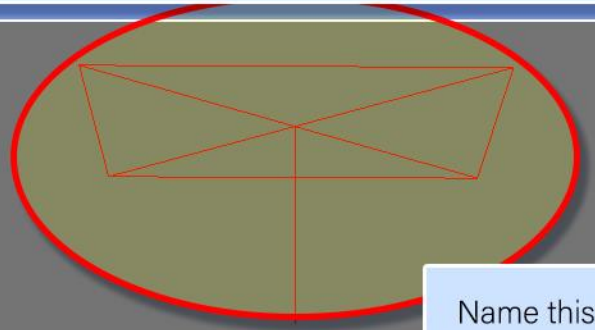


BEFORE

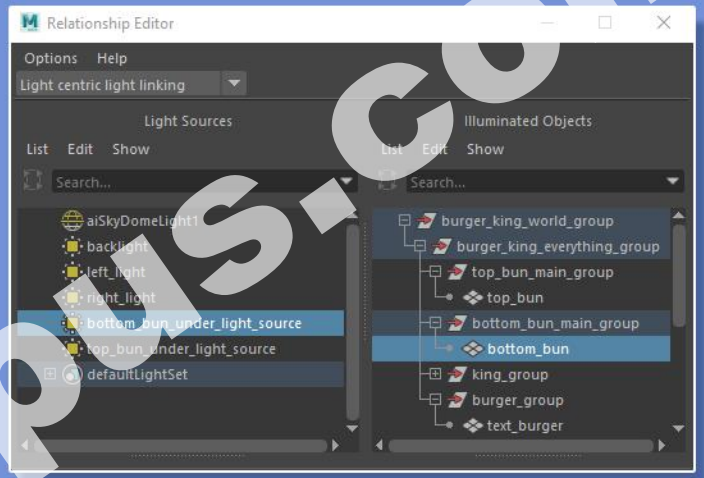
AFTER

A. Name the lights: **(left_rim_light)** and **(right_rim_light)**
B. Rendering Menu> Lighting/Shading> Light Linking Editor Light-Centric> Relationship Editor
C. In the "Relationship Editor", select the **left_rim_light**, then make sure that on the "Illuminated Objects" column, the "infinity_wall" is **NOT** highlighted/selected.
D. Do the same process for the "right_rim_light".

Burger King Project Guide: Area Lights~ Part 04: Trick Lighting Buns Continued...

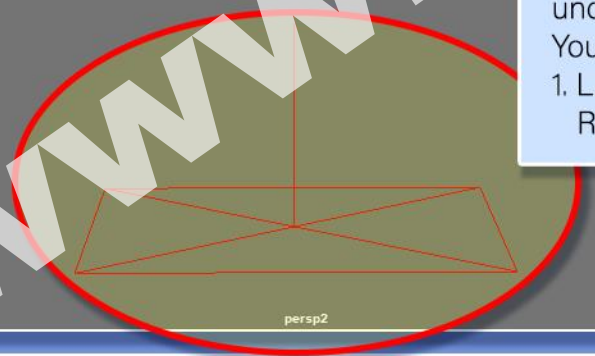


Name this light: "*bottom_bun_under_light_source*"
This light will be used to ONLY light the underside of the (bottom bun)!
You must light link it.
1. Lighting/Shading> Light Linking Editor> Relationship Editor



These two lights MUST be placed **far above their targets** as shown in my example. They must also be **very large**. Scale them to be as close to the size that you see here. Set the **"Intensity"** between 85 & 110! Experiment and find out! Also set the **"Exposure"** between 4 & 8. Experiment and find out the best value for you!

Reason: The **size, placement** & **Intensity/Exposure** value of these specific area lights create the very soft lighting for the buns' undersurface, (instead of the harsh & saturated look) from before applying this lighting trick setup.



Name this light: "*top_bun_under_light_source*"
This light will be used to ONLY light the underside of the (top bun)!
You must light link it.
1. Lighting/Shading> Light Linking Editor> Relationship Editor