This tutorial will teach you how to use basic shaders as textures on your models. In this example, we will be using a pumpkin model. The first step assumes you have already modeled a proficient, unshaded, pumpkin model, as shown below.

The next step is to give the pumpkin a nice orange color. To do so, hold your right mouse button down on the pumpkin until a menu pops-up. While still holding the right mouse button down, navigate to the menu that says “Assign New Material”, then select “Blinn.” If you have selected it carefully, your screen should look like this.

You should notice that your pumpkin has become nice and plastic-y looking and a new menu toolbox should open up to your right. The next step is to click on the “Color” box as shown below.
You should notice a box called “Color Chooser” pop up. You can now apply a color to your pumpkin by picking the appropriate color. Pick a nice orange color of your choice and click “Accept.” Now for the tricky part. The next step is to open up your Hypershade. This can be found by going to the top menu bar and choosing Window->Rendering Editors->Hypershade. A window should open that looks similar to the picture below.

In the area labeled “1”, I will be referring to this area as the “side tool bar” and the area labeled “2”, I will be referring to this area as the “work space.” The next step is to select your pumpkin shader (called “blinn1” for me) and click the button as shown in the picture below.
Your screen should match the picture. What we’re going to do next is add a bump map to our pumpkin. To do this, select “blinn1” from the workspace in Hypershade, then switch over to the attribute editor on the main screen. Look for the “Bump Mapping” tool line as shown below and hit the option box.

A window called “Create Render Node” should pop up. From there, choose the “Noise” button. Your attribute editor should change accordingly and should look like the picture shown below.
From here, you can play with the setting to set how deep your bump map will affect your pumpkin. Play with it as you please to get the look you want. To adjust your bump map options even more, select the “noise1” tab and adjust the attributes there to get the look you want. You may notice that you don’t see the changes on screen immediately. This is because you have to render the scene to see the effects of the bump map. Play with these settings until you are satisfied. My bump mapped pumpkin looks like this:

Now, the final step in making our pumpkin awesome is to project a jack-o-lantern face onto it from a file of our choice. I downloaded one online that looks like this.
It’s important to get an image that is black and white like this. Once you find a picture you like, go back into the Hypershade menu in Maya. Repeat the step to show your shader in the Hypershade menu as mentioned above. Your Hypershade should look like the picture below.

Now in the side tool bar, under the “2D Textures” menu, select the “As projection” option circle (by default, the “Normal” option circle should be filled in). Click on the “File” node as shown below.
You should notice 3 new icons that appeared in your workspace as shown below.

Click on the “projection1” node in your workspace. Now minimize your Hypershade, and go back to your attribute editor in Maya. Your window should look like this.
Now, look for the “Image” tool line, and select the option box. Your attribute editor should change and look like the picture below.

Look for the “Image Name” tool line and select the folder icon. From here, navigate your hard drive and locate that black and white jack-o-lantern face that you downloaded. Next open up your minimized Hypershade menu again. In the workspace, select the “place2dtexture2” node in the workspace as shown below.
Now minimize your Hypershade again and look at the attribute editor menu in Maya. Your window should look like this.

Next, uncheck the “Mirror U” and “Mirror V” boxes. Make sure these boxes are UNCHECKED. Now open up your minimized Hypershade menu again. Now in the side tool bar of your Hypershade, scroll down until you find a node called “Blend Colors”, as shown below. Select this node.
You should notice that a “blendColors1” icon pop up in your workspace in your Hypershade. Now what we want to do is hold your right mouse button down on the right most arrow of your “projection1” node and then select “outAlpha.” You should now notice a line that’s connected to wherever your mouse is. To connect it, you want to hover your mouse over the left most arrow of the “blendColors1” node and hold your right mouse button down. Choose “blender” from the menu that pops up. You should now notice a blue line connecting your “projection1” node to your “blendColors1” node.

Next, hold your right mouse button down over the right most arrow of the “blendColors1” node. Choose output->output from the menu that pops up. You should notice that a line now follows your mouse pointer as before. To connect this, hover your pointer over the left most arrow of the “blinn1” node and hold the right mouse button down. From the menu that pops up, select “color.” You should now notice a green line connecting your “blendColors1” node to your “blinn1” node.

If you’ve done everything correctly, your workspace should match the one shown below.
Next, select your “blendColors1” and minimize your Hypershade. Your pumpkin should now be white. To have it show file textures, you want to hit the number “6” on your keyboard in the main window.

This is what my pumpkin looks like right now. Make sure you have your “blendColors1” node selected in your Hypershade if you don’t see the “blendColors1” tab in your attribute editor. What we want to adjust here are the colors. In “Color1” change it to that nice orangey color you had before (the blend node changed the color by default so you have to reset it). In “Color2” make it pitch black. Try to match the picture below.
Your pumpkin should start looking decent now. You can see a test render right now to see for yourself. You should notice that the colors and face show up on the pumpkin along with the bump map. However, you may also notice that there is a light colored square surrounding your face. Don’t worry, we’re going to fix that now. To do this, click on the option box of the “Blender” tool line. Then navigate to the “file1” tab as shown below.
Next, look for the “Color Balance” option line (if its options aren’t visible, hit the arrow button to drop the option menu down). From there, change the “Default Color” to absolute white. Hit a test render now and you should notice that the colored square surrounding your face is now gone! This is what my test render looks like at the moment.

Now, let’s adjust the face so that it looks better. To do this, open up your minimized Hypershade menu again and choose the “place3dtexture1” node in the workspace. Minimize your Hypershade to switch back to the Maya window.

You should now notice that a lightly colored green square is selected. This is the planar projection of the black and white face file we are projecting onto our pumpkin. You can scale, translate, and rotate this square. What we’re going to do is just scale and translate the box to position our face better on our pumpkin. To see the effects of each move, just hit a test render and go from there. Move and scale this square so that you are satisfied with the placement of the face.
Great! Now hit a test render to see your pumpkin in full effect.

You’re now done with your completely textured pumpkin!

You may notice that you have a face on both sides of your pumpkin right now. If you only want one face, you can open up your minimized Hypershade menu and select the “projection1” node. Once selected, minimize your Hypershade and look at the attribute editor in Maya. Look for a drop down menu called “Proj Type”. By default, “Planar” should be selected. To have only 1 face, choose “Cylindrical”. You should now notice that the green square that once projected our file image onto our
pumpkin is now a green cylinder shape. You can also translate and scale this as you please to adjust the positioning of your face.

Another alternative is to hook up a “Ramp” shader to your blender node (as “Color1”) and have the nice gradient on your pumpkin for a more special look. There’s a lot of nodes to play with and a lot of options to tweak. You now know how to use the basic Hypershade menu to play with textures. I suggest you tweak some options here and there and have fun with it. You don’t necessarily need to have a traditional pumpkin. I personally like my pumpkins neon and glowing 😊!!

*Remember, there’s a million different ways to do things in Maya. If you can find another way to do something that makes more sense to you, use that method instead. This tutorial was just a guideline to get you guys started.*