

Now, we texture.

(Notice in the Material Editor images below, I took a picture of the window at its default and just circled the buttons and boxes with Fireworks 8.)

Follow closely and complete these steps.

47.) MINIMIZE, don't close out, but minimize your 3ds Max scene, and go to your

Halo CE\data\levels\test\tutorial\bitmaps

* 48.) You're going to see a bunch of textures, some may even be familiar to you from Halo PC, or other Halo CE maps.

49.) COPY these two bitmaps:

Example_tutorial_panels

Example_tutorial_plate_floor

50.) Go back to your data\levels\box\bitmaps folder, and paste them in.

51.) Go back into your 3dsMax Scene.

52.) Press the "M" button on your keyboard. This opens up the material editor window. This is where all of your textures get put into your map.

53.) The first thing you should notice is the combo box with 01- Default Highlighted. Next to it is a button saying "Standard". Click the "Standard" button.

54.) Material\Map Browser window appears. Click on Multi-Sub Object and hit OK.

55.) Replace material window comes up. Leave the "Keep old material as sub-material?" radio button checked. Click OK.

56.) Now, this window is where you name and assign your textures. It's kind of like the "Material Index" if you will. You should see a window that looks like this...

[10] [Set Number]		[Add] [Delete]
[ID]	[Name]	[Sub Material]
[1]	[]	[01-Default (Standard)
[2]	[]	Material #3 (Standard)
[3]	[]	Material #4 (Standard)
[4]	[]	Material #5 (Standard)
[5]	[]	Material #6 (Standard)
[6]	[]	Material #7 (Standard)
[7]	[]	Material #8 (Standard)
[8]	[]	Material #9 (Standard)
[9]	[]	Material #10 (Standard)
[10]	[]	Material #11 (Standard)

Or at least some-what like that...

The [10] [Set Number] is what you use to set the number of textures you think you might use. You can always add or delete materials, but just in case you know exactly how many you will be using, you can just set the number.

The [Add] and [Delete] buttons are the buttons you use to, as if I really had to explain this, Add or Delete materials. Just in case you put too many or not enough materials in the Set Number box.

Now, remember the Set ID and Select ID buttons? Well, this is the part where you name the textures, assign the textures, and, (we've already done it, but) set the IDs of texture.

Follow again.

57.) Go to this text box.

[ID]	[Name]	[Sub Material]
[1]	[]	[01-Default (Standard)]

58.) Type in this... (This is going to be your sky later)
+sky

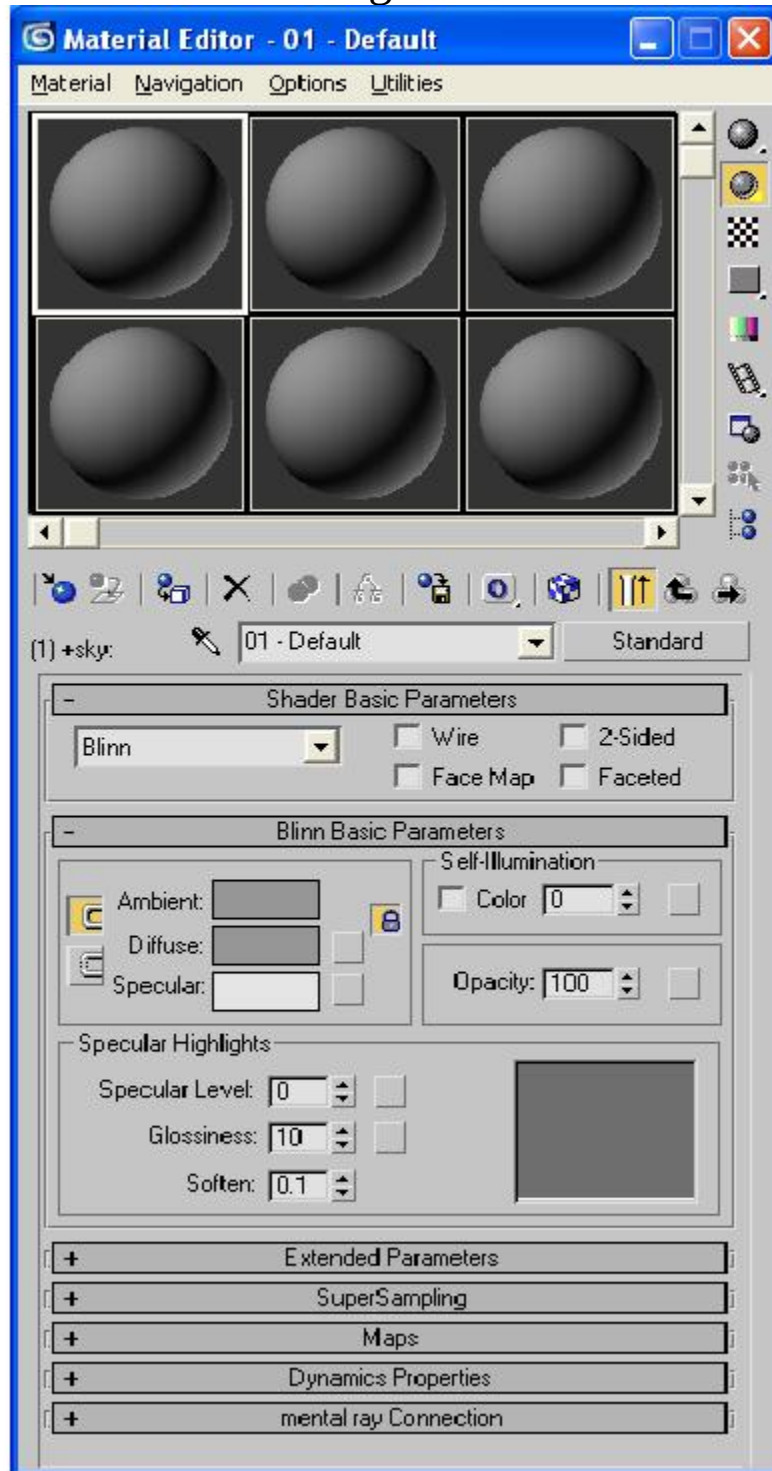
DO NOT forget the plus.

59.) Click on this button.

[ID]	[Name]	[Sub Material]
[1]	[]	[01-Default (Standard)]

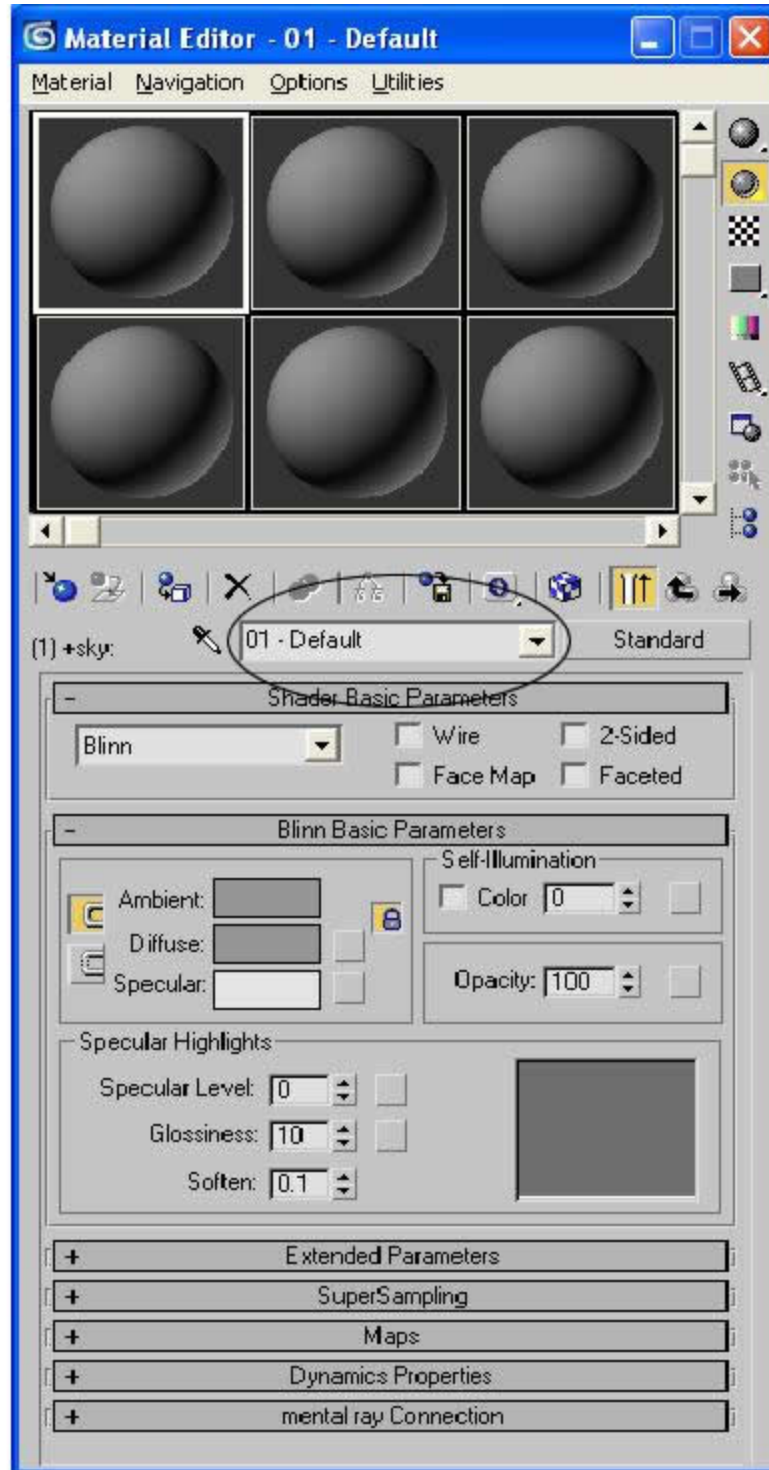
60.) When you click on it, this EXACT window should come up.

Image 1



61.) Observe the highlighted Textbox.

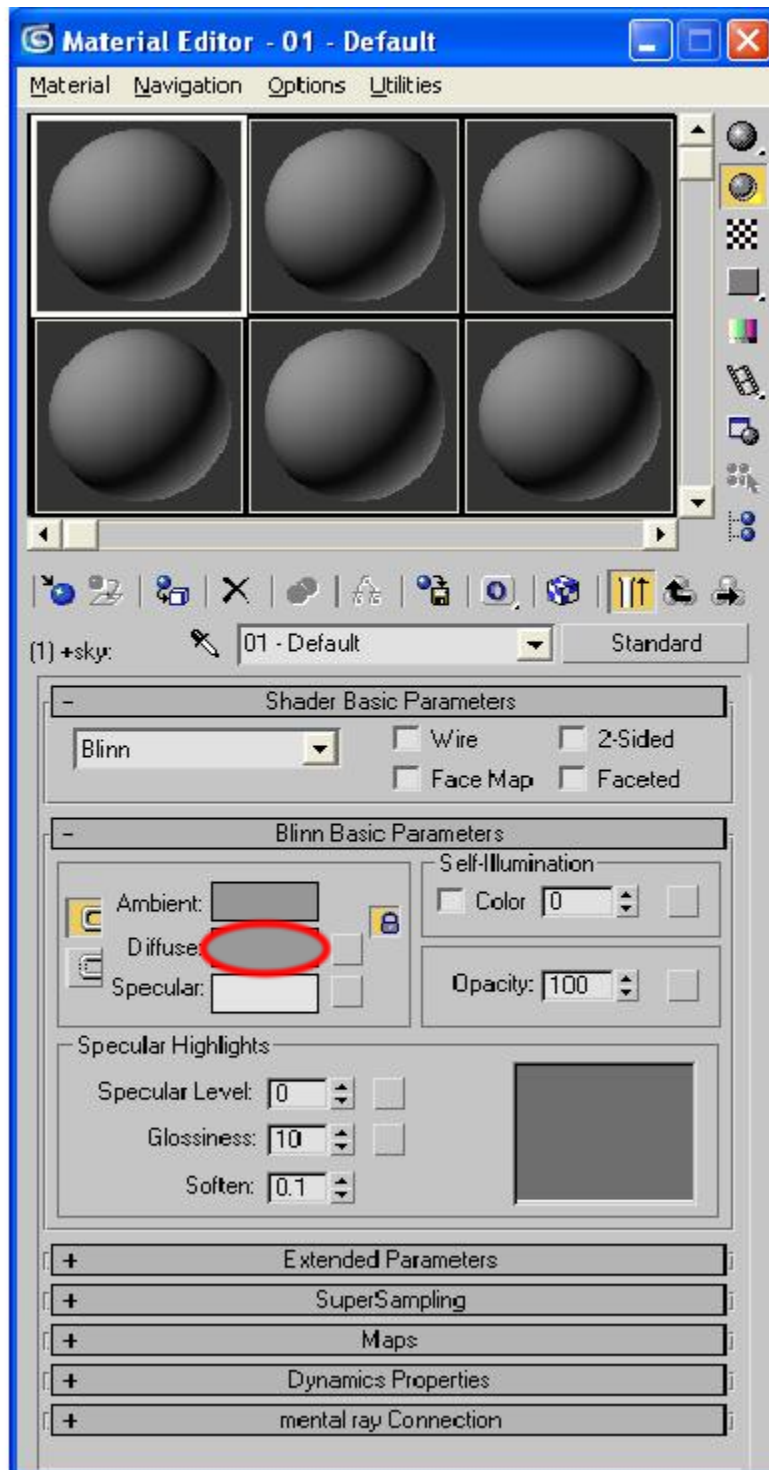
Image 2



You must change the content of this textbox to “+sky” also.

Then, in the picture below, notice the TWO DIFFUSE buttons. This is where you actually assign the texture. SO... click on the circled box.

Image 3

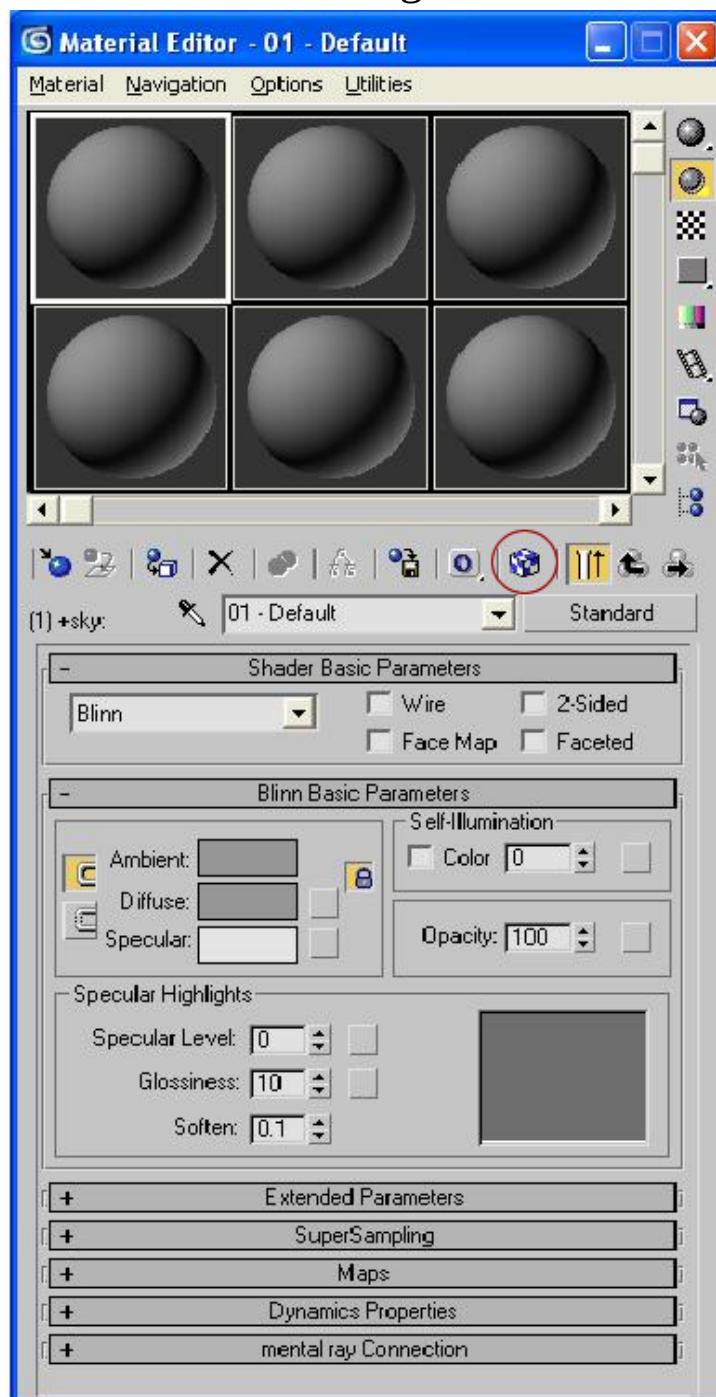


62.) Now, in the window that appears, you need to choose a color. WHAT color does not matter, but since it's the sky, and so you don't get confused later on, you should make it a shade of blue.

63.) Click on Close after you've selected a color.

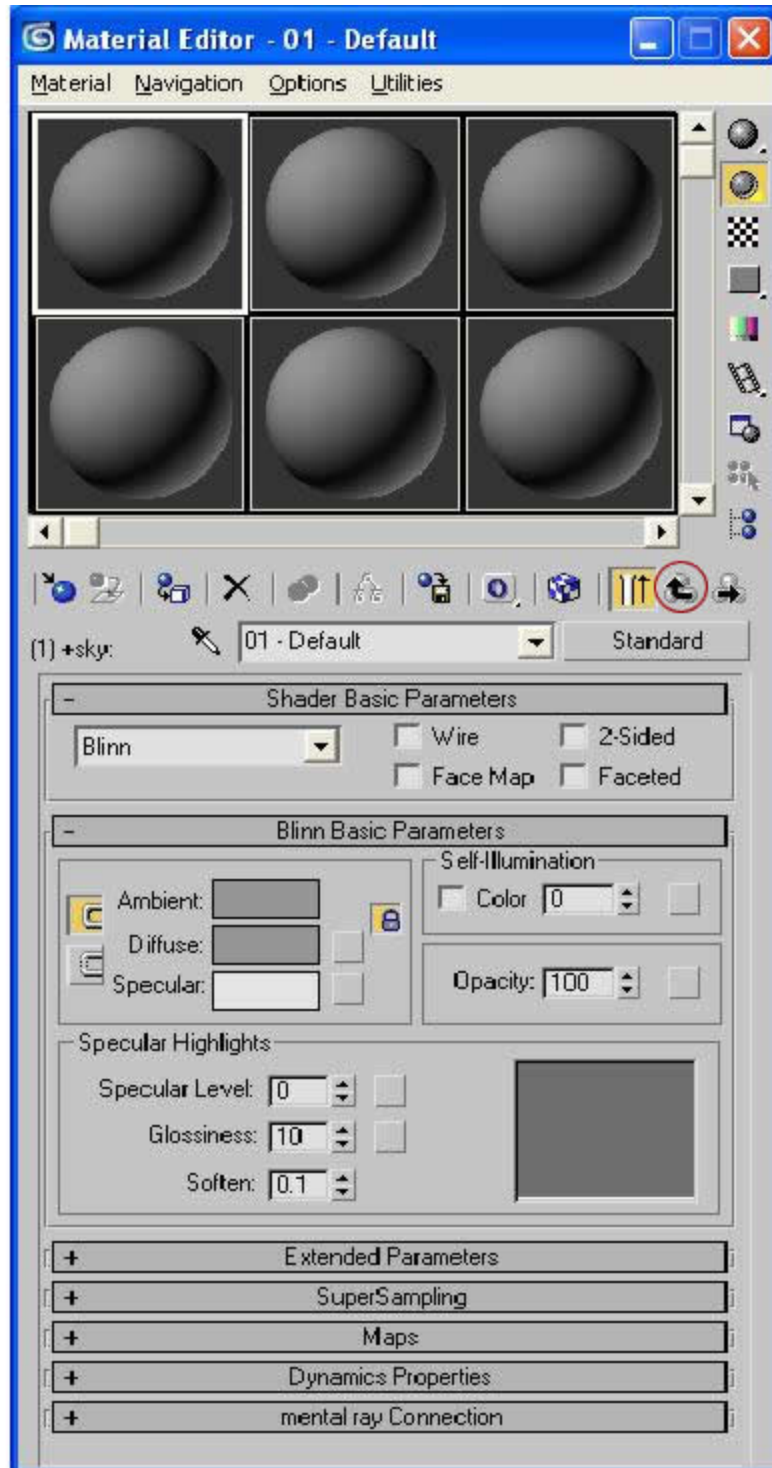
64.) Now, we need to make it so that the texture can show up on our 3ds Max scene. SO, click the circled blue and white checkered box button. "Show map in view port".

Image 4



65.) Once you hit that, and the background of the button turns yellow, you should hit the back to parent button. This button is circled below.

(Image 5)



66.) Go ALL the way back to the Material Index, which we said before was the window with all of the textures listed.

67.) Now, we need to name texture 2. Go to this row in the table, and in the circled part, type in box_floor.

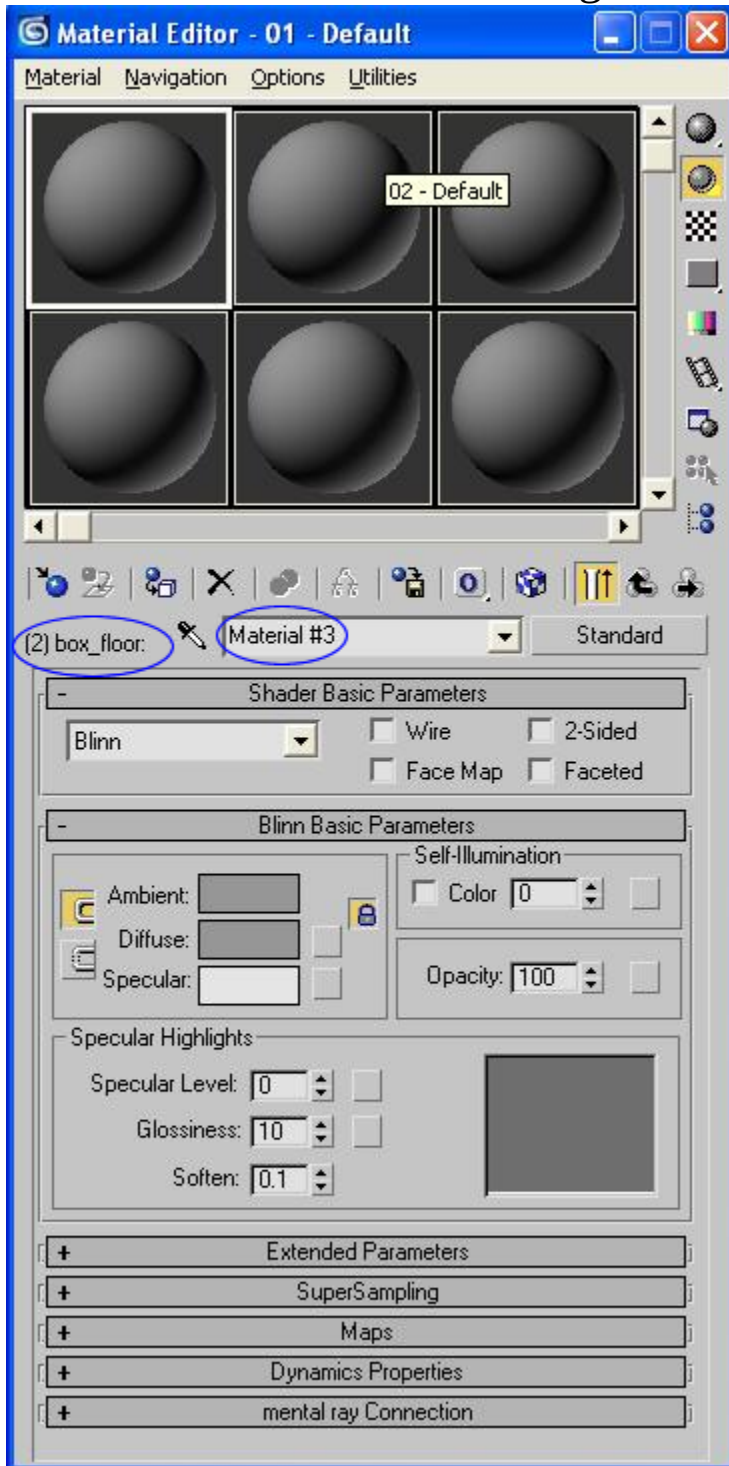
[2]	[]	Material #3 (Standard)
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67.) When you finish naming it, press this button.

[2]	[]	Material #3 (Standard)
-----	-----	------------------------

68.) Again, this window appears, only this time a few minor changes have occurred. They are circled below.

Image 6

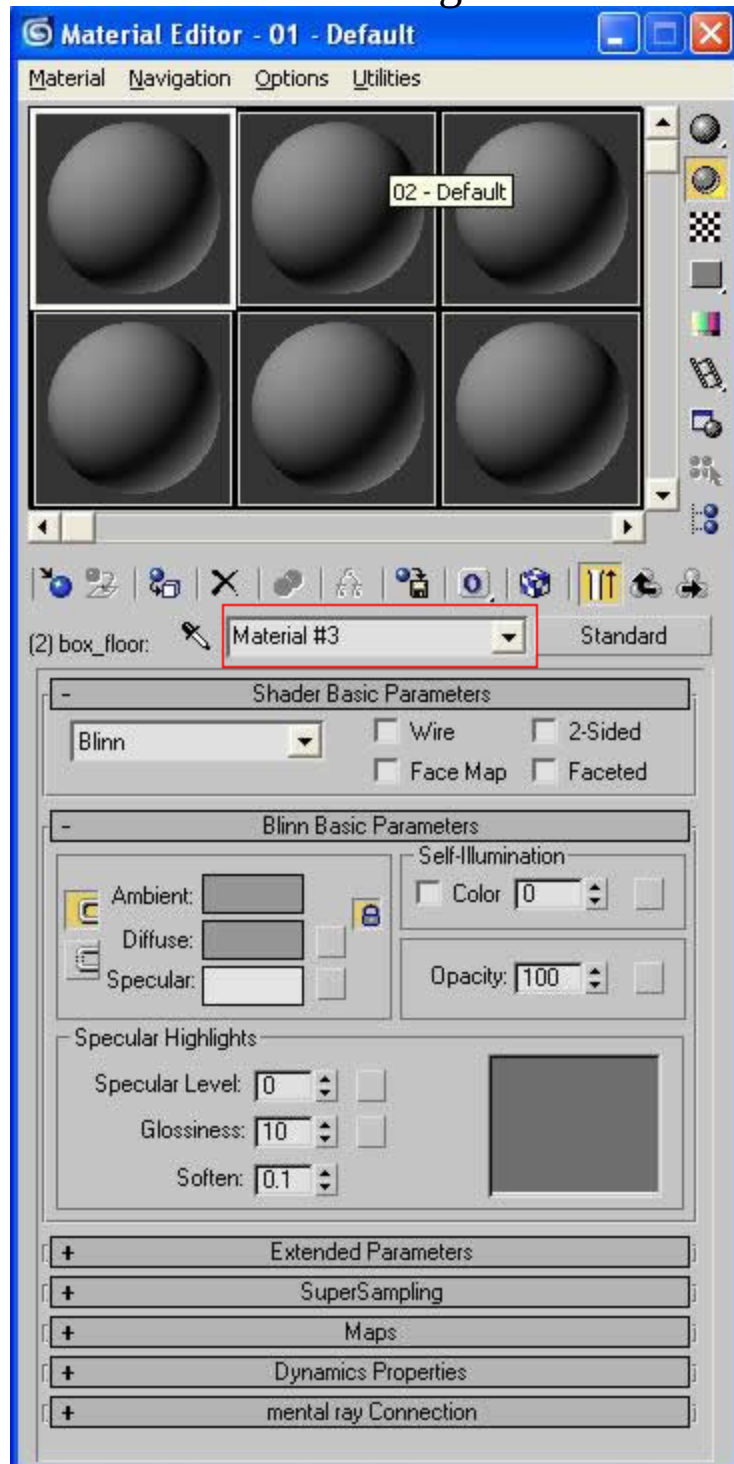


69.) Now, just like with +sky, we need to change the contents of the textbox next to the Standard button to the following:

“box_floor”

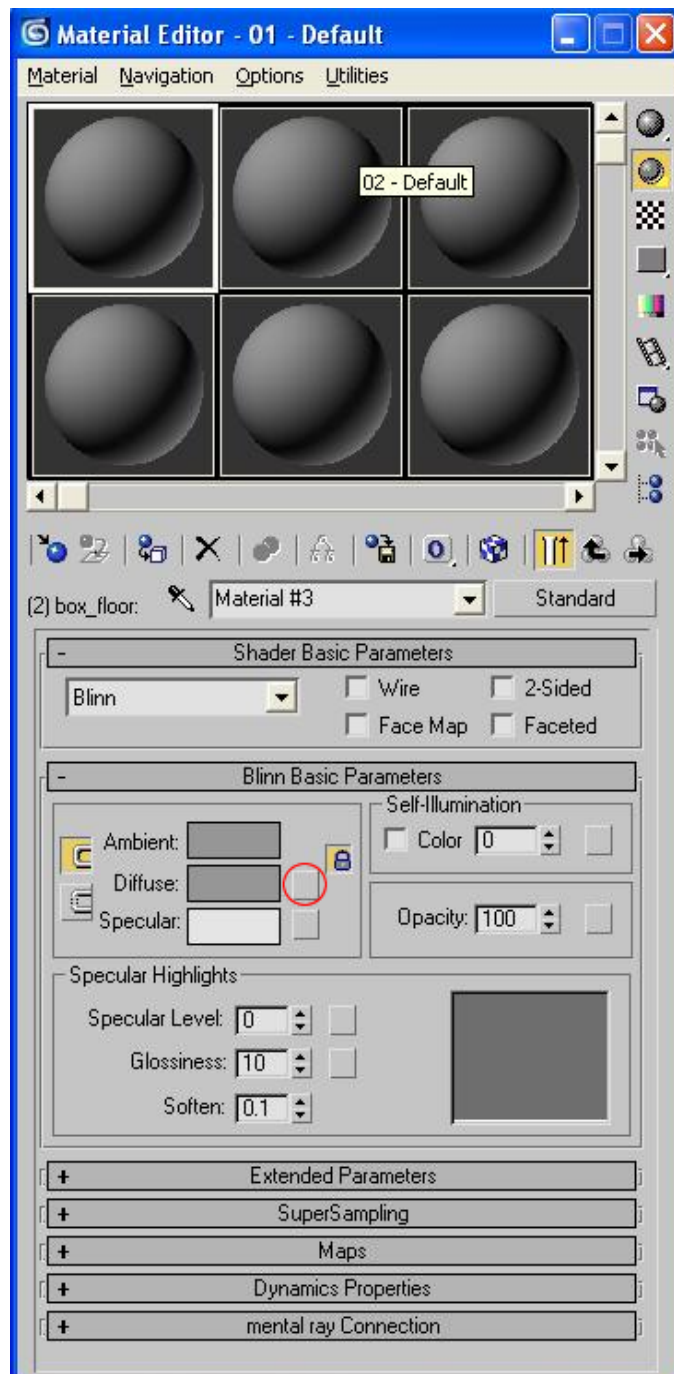
Text should be in the textbox below.

Image 7

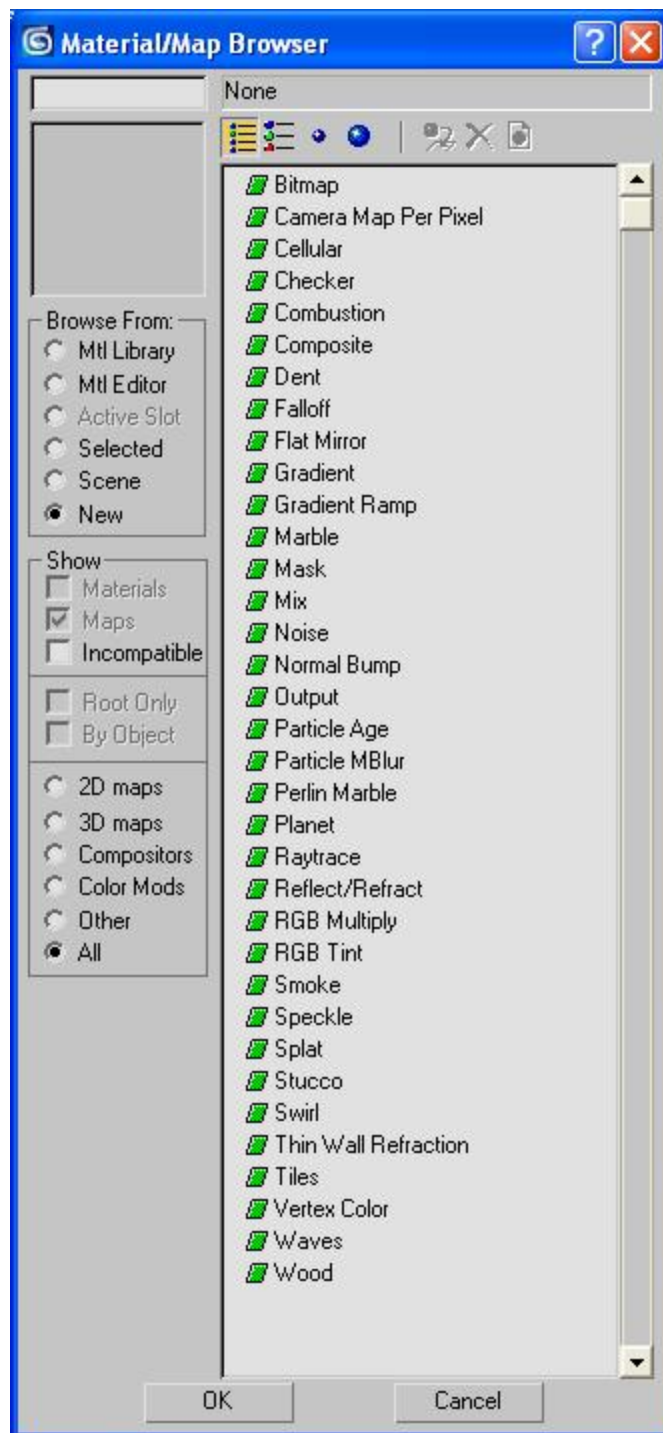


70.) Now, this is the part that is different than +sky. Since we do not want our floors to be a solid color, we are going to assign it a .TIF texture. These textures, if you remember, are already in our box\bitmaps folder. We put them in before we started texturing. A reminder: all textures must have a .TIF extension. So, now, we are going to click on the circled box in the image below.

Image 8



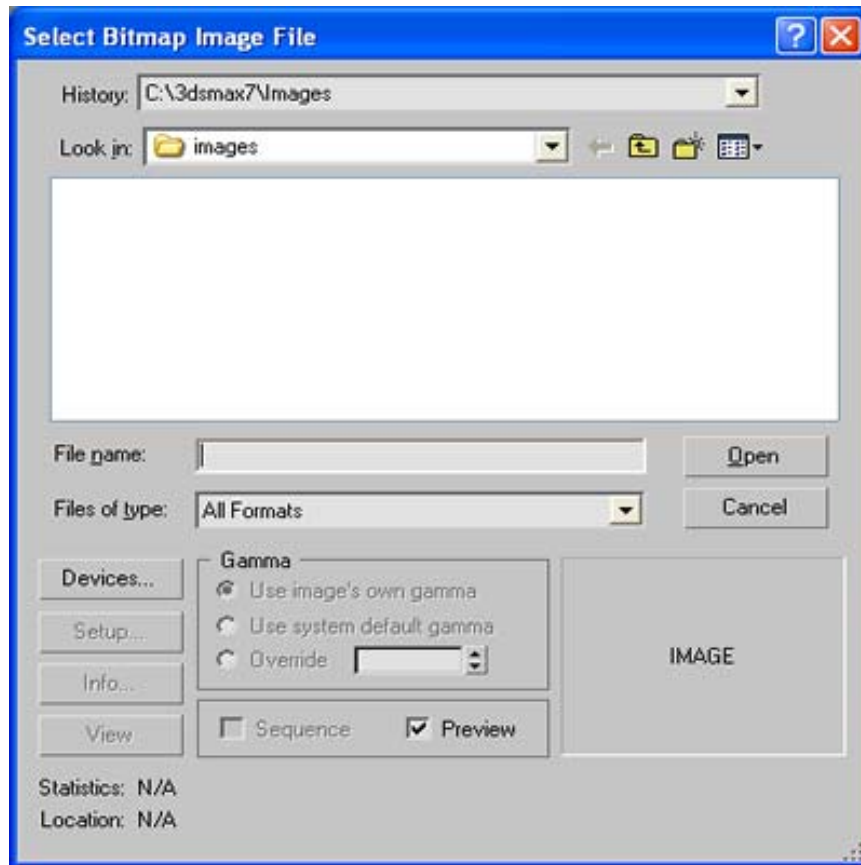
71.) Once you click on that box, this menu should show up.
Image 9



72.) Click at the very top, “Bitmap”, because we are using bitmaps to texture our maps. Double click it.

73.) The following window will appear.

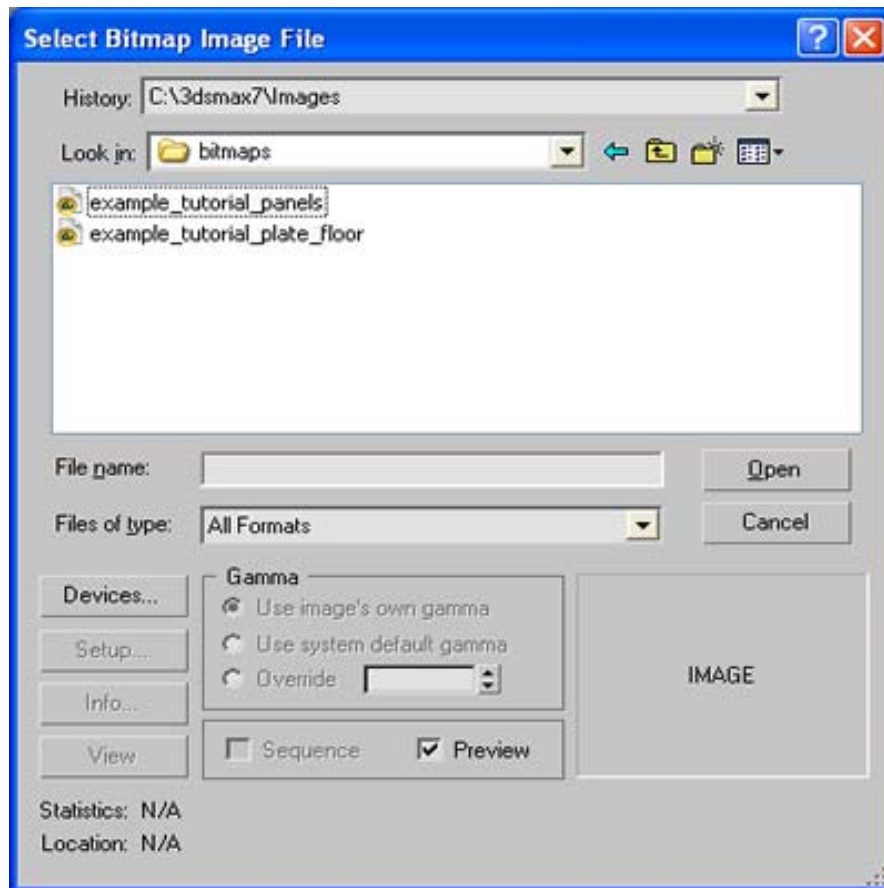
Image 10



At the very top, in the “Look in” text box, (circled) you need to make that folder your Halo CE\data\levels\box\bitmaps folder.

When you get there, it should appear like this:

Image 11



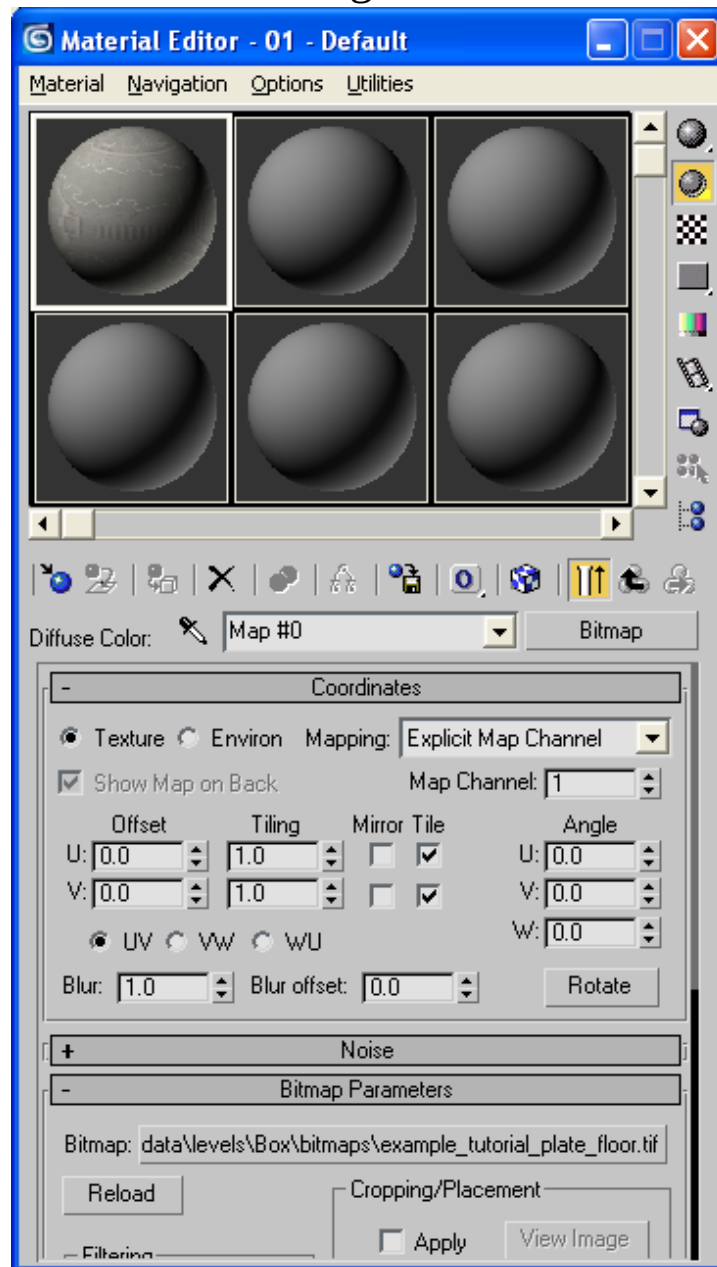
74.) Double click on...

“Example_tutorial_plate_floor”

This is going to be our FLOOR texture.

75.) Once you double click that bitmap, this window will appear.

Image 12



76.) Click the “Show Map in View-port” button, remember, that’s the button that looks like a blue and white checkered cube. It is right above the Bitmap button next to the Map #0 textbox.

77.) Hit the “Back to Parent”, then the “Show map in View-port” button again, the “Back to Parent” button again.

78.) Now, we need to name texture 3. Go to this row in the table, and in the circled part, type in box_walls.

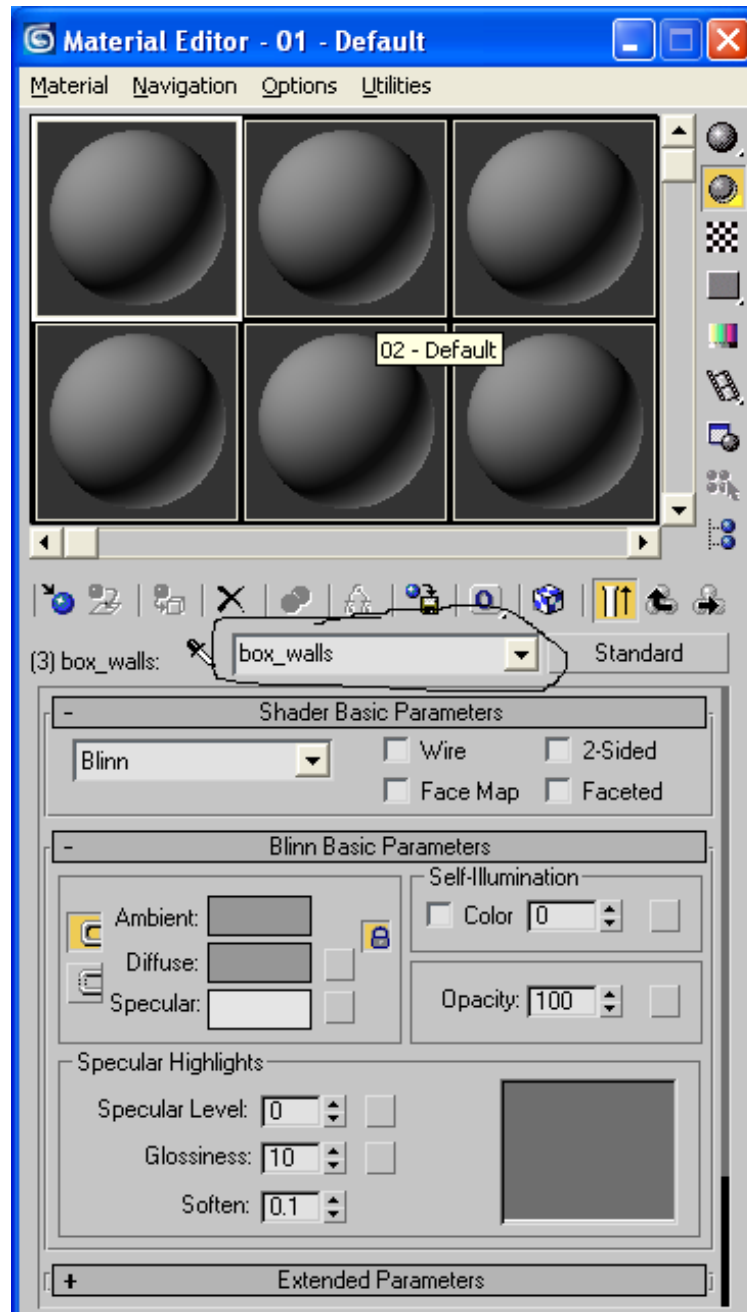
[3]	[]	Material #4 (Standard)
-----	----------------	------------------------

79.) When you finish naming it, press this button.

[3]	[]	Material #4 (Standard)
-----	----------------	------------------------

80.) Replace what is in the circled textbox with box_walls, too.

Image 13



81.) Once the texture is renamed, we'll hit the little grey square button next to Diffuse. (You may refer to image 8 if you need a reminder of what button to hit.)

82.) Hit bitmap, then OK.

83.) Once again, make the "Look in" folder your:

HaloCE\data\levels\Box\bitmaps

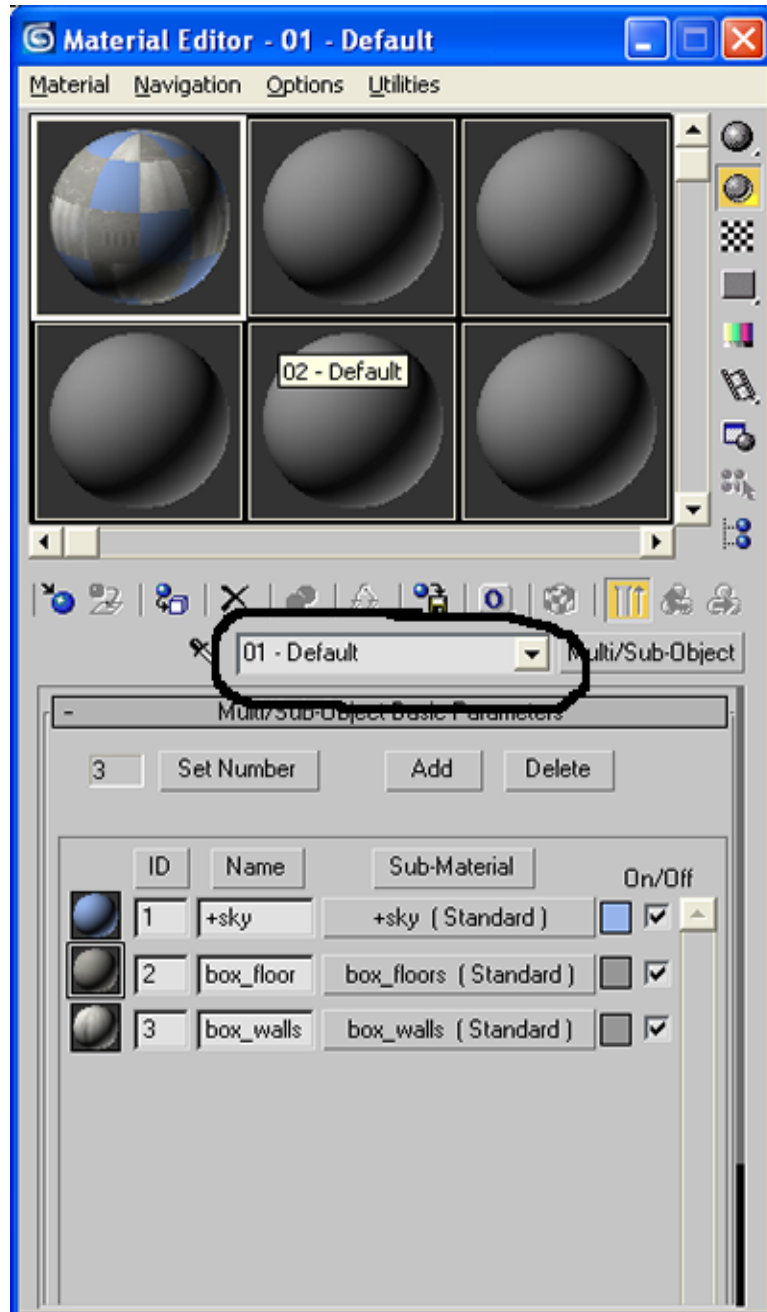
84.) This time, we are going to assign this texture the:

Example_tutorial_panels

85.) Hit, "Show map in View-port" button, then the "Back to Parent, then the "Show map in View-port" button again, the "Back to Parent" button again.

86.) Minimize your MATERIAL EDITOR so that you can move the camera around in your 3d Model. Then, select your box by clicking on it.

87.) Bring up your MATERIAL EDITOR again, and then, as your final task in the material editor, you need to hit the “Assign material to selection” button. It is circled in the button below.



88.) Close out of the material editor completely.

*89.) Now for an observation. If you view your box, you will see that all the textures you assigned in the material editor are placed in the proper spots. To explain...

When we selected the polygons on the top of the box, and assigned them an ID of one, we really were making them the sky.

When we selected the polygons on the bottom of the box and assigned them an ID of two, we were really assigning them the floor texture we made later on.

When we selected the polygons on the sides of the box and assigned them an ID of three, we really were assigning them the walls texture we made later on as well.

If you still don't understand this, look in the modifier tab, under the SURFACE PROPERTIES menu.

Remember this place? There is the Set ID, and Select ID. Enter select ID: 1 and all the polygons that are now blue, the texture we made the sky, are selected. Enter select ID: 2. all the polygons we added the floor texture to are now selected. Of course, if you enter select ID: 3, the polygons we added the wall texture to are now selected.

If you ever need to select one polygon and assign a texture to it, you can. Just select it, go into material editor, click the button that has the texture's name on it, and click the "assign material to selection" button.

NOW FOR THE UVW COORDINATES!

This is very easy to follow, but I cannot use pictures. Sorry.

Let's begin here...

- 1.) Go to your Select ID button under Surface Properties.
- 2.) Enter "1" (one).
- 3.) All of your sky, or top of the box map, should be highlighted.
- 4.) In your Main menu bar, you are going to see several menus you've probably never seen before. WE want to go up to the main menu and click:
 - Modifiers
 - UVW Coordinates
 - UVW Map
- 5.) You will see a new item above Editable Mesh in the list box underneath the textbox with "Modifier List" in it in the top right corner under all the tabs.
- 6.) Observe the Parameters menu. This is where you will stretch or scrunch your textures to make them look cool. There are several radio-buttons you can select and each one is for different types of maps.
 - Planar
 - Cylindrical
 - Spherical
 - Shrink Wrap
 - Box
 - Face
 - XYZ to UVW

The only two you need to worry about for this tutorial is planar, which is for floors and/or ceilings, and box, which

is for polygons that need to be modified by width, height, and length.

7.) Leave the Planar radio button under Parameters checked. Since it's the sky, we don't need to worry about stretching or scrunching the texture because we're going to add the sky later in another program.

8.) In the list box, it will look like this.

- +UVW Mapping

- + Editable Mesh

9.) Right click on UVW Mapping, and drag down to collapse all.

10.) Now, you're going to have to go back into your Polygon Selection tool, (red square) and in the Select ID box, you're going to type in 2.

11.) Go back to the Modifiers, UVW Coordinates, UVW Map.

12.) Leave the "Planar" button checked, and scroll down a bit until you get to where the Length and Width textboxes are. This is where you are going to decide how scrunched or stretched your texture will be.

13.) In the length box, enter in 300.

14.) Enter 300 in the width box as well.

15.) If you want to play around with it, do so. It doesn't have to be any certain number, but 300 X 300 is going to look good to Master Chief in Halo CE.

16.) Collapse All when you're ready by right clicking UVW Mapping and hitting Collapse All.

17.) Polygon Selection Tool, go to Select ID, Enter 3.

18.) Modifiers\UVW Coordinates\UVW Map.

19.) Select "Box" under parameters.

20.) Enter these dimensions or at least something close.

Length: 300

Width: 300

Height: 300

21.) Right click on UVW Map in the list box under the Modifier List Textbox, and Collapse All.

22.) Done texturing.