

Multi-Sub-Object (MSO) Materials

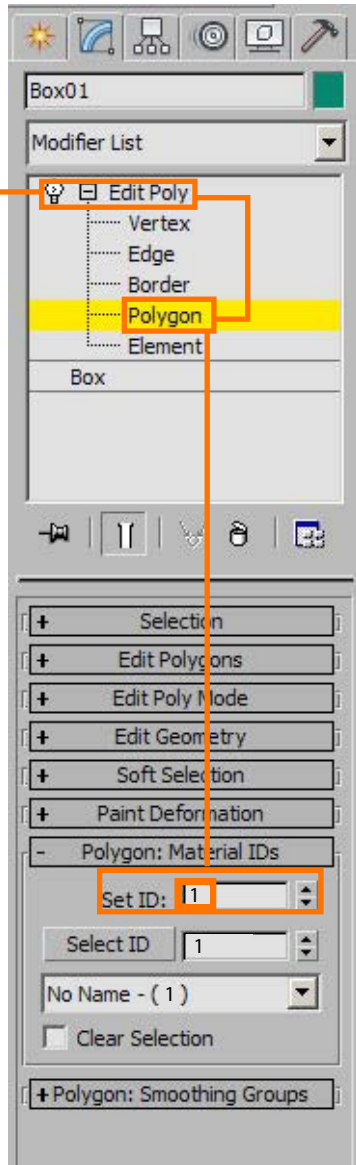
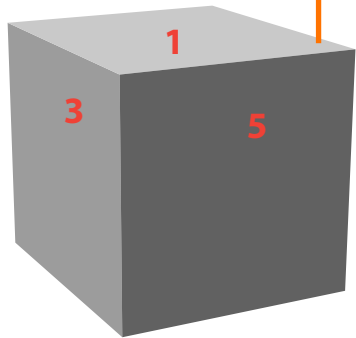
3D Character Design

The key to placing MSO's is making sure the Map Channels on the MSO, the Sub Materials and the UVWMap settings match the Material ID on the Model. This simple cube with MSO tutorial will show you the process.

The first step is to give each side of the cube a unique "ID" number.

1. Begin by giving the polygons on your mesh ID's.

These ID's are going to match the Map Channels you will set next.

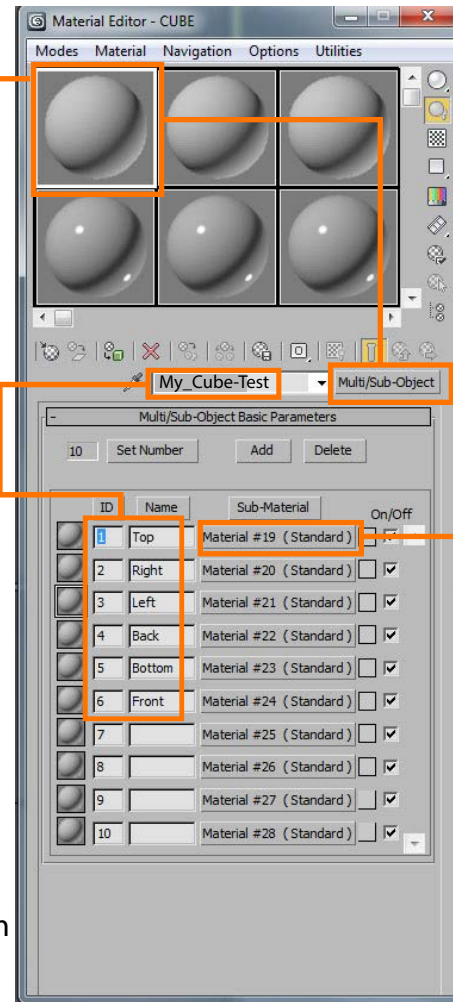


2. Set up a MSO

3. Make sure to name the materials & the slots to match the ID's on the cube (mesh).

Keeping these named properly will save you a lot trouble in the future.

Always name them a name you can identify. And, get into the habit of NOT leaving empty spaces between words. UDK will accept material named with empty spaces!



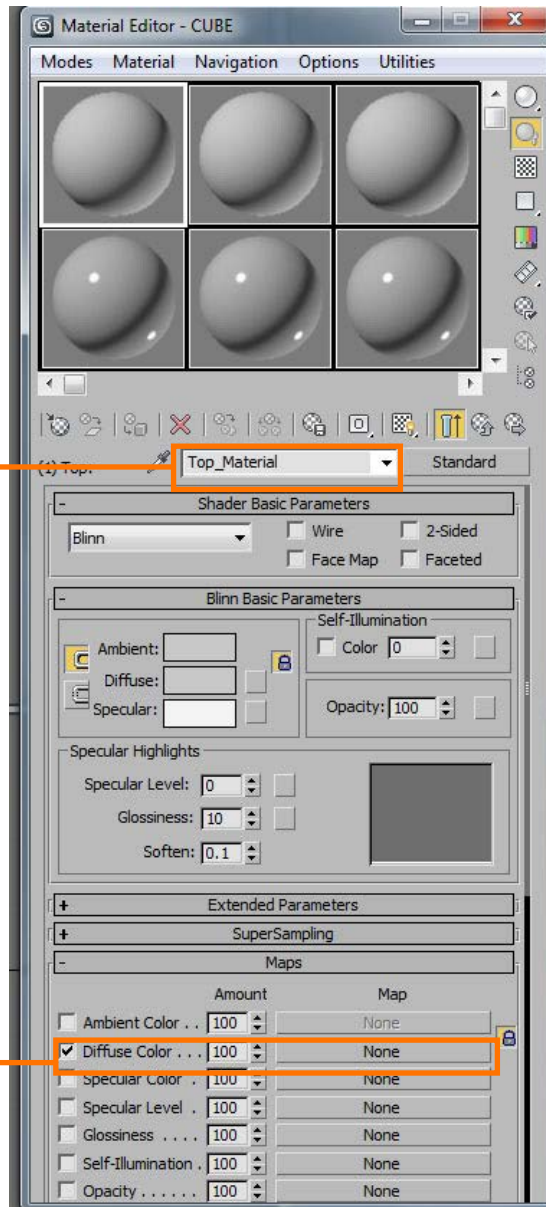
In each slot of the MSO, you will place a separate material.

5. Click on the first slot.

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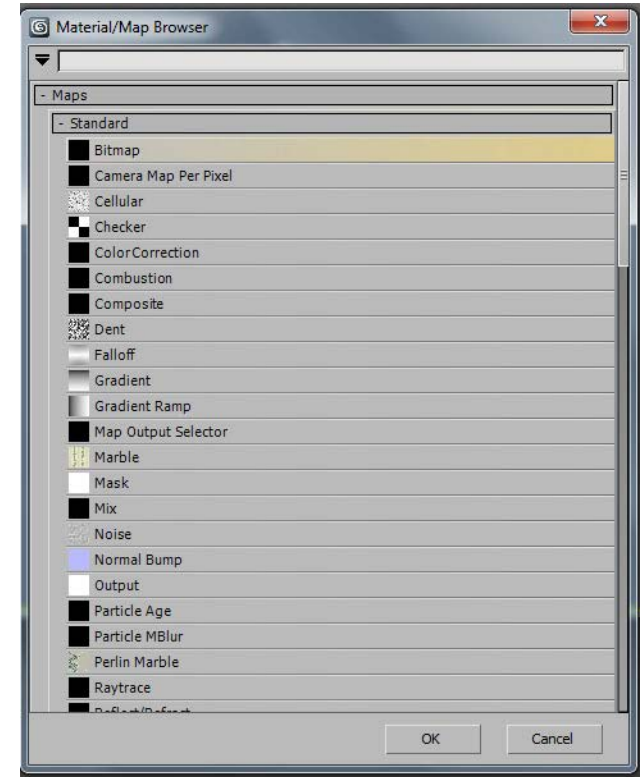
Next you will apply a UVWMap to all 6 sides of the cube.

6. A new "material" panel will pop open.
Name the new material



7. Click on the
"Diffuse Color"
slot.

8. The Material Browser will pop open. Select "Bitmap"
and find the texture you are going to use to build the material.
It should be in your folder on the "H" drive.



NOTE: UDK (the game engine we use here at SoCalROC) requires that materials/textures be made according to some specific rules. They are:

Names must not have any gaps. Example "Cube Material" will not work but "Cube_Material" will work.

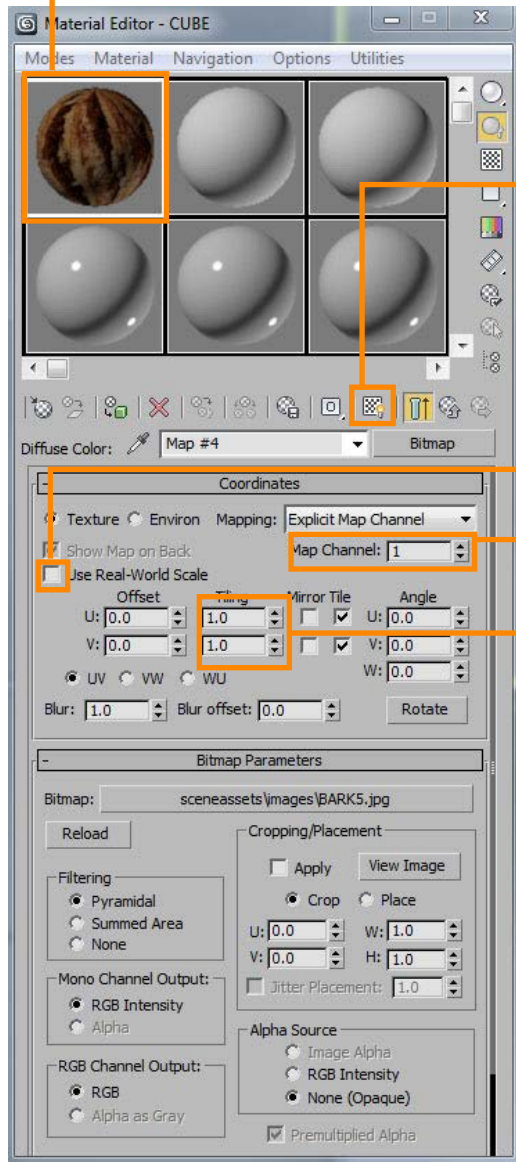
Materials must be in "Targa" file format. JPEG's will not work.

Materials and Textures must be sized in "Powers of Two". See the poster in our classroom.

Powers of Two are: 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048

3D Character Design

When you select the texture from your "H" drive it will appear in the window



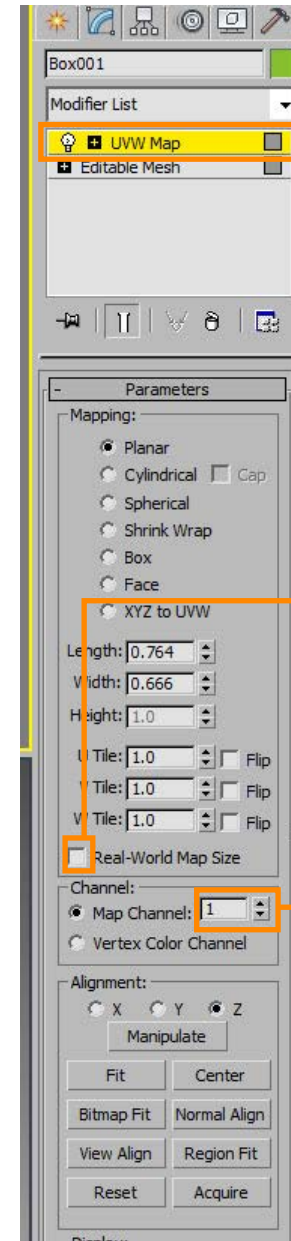
9. Make the following settings:

a. Turn on Viewport.

b. Turn off "Real World".

c. Set this number to match the Material ID number.

d. Make sure these are set to 1.



10. Select the polygons on your model (the polys that you want to apply the sub material to).

11. Apply a UVWMap

12. Turn off "Real World".

13. Set the UVWMap to match the ID of the Material ID

Follow the same process for all the materials on your model.