O.K you lot. This is part one in a three part tut on creating a character from scratch. It will involve using meshsmooth as a method of construction, and then unwrapping the mesh so you can map it with on bit texture. The last part of the tut will be putting in bones and setting up bones pro so you can animate it.

You don't have to build the same character as in the tut, in fact it's better if you don't. You will learn more if you design your own. But I will explain how I went about building my character, so you can see the basics.
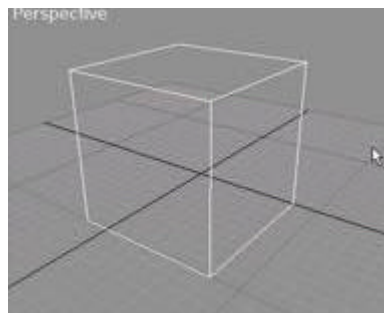

The first thing you should do is a few sketches of you character, so you know what the hell your building.

Is this familiar?

As with all good tuts, this one starts with a cube. Drag out a medium size cube, this will be the basis for the head.

Slap an edit mesh modifier on it and go to the face sub-object level. Now this character has an elongated nose, so we need to drag that front end out. Select the front face and click on extrude.

NOTE: You can either change the numbers on the box on the modifier panel, or you can drag it out in the window. The cursor changes into a small obelisk type shape. Extrude only works along the length of the face normal, you can't constrain an extrude along any other axis.

Pull out the face twice, once a fair distance, second a shorter distance. Do a non-uniform scale in the local X/Y axis on the first extrusion. The second extrude we will push back in to the head to make a mouth shape.
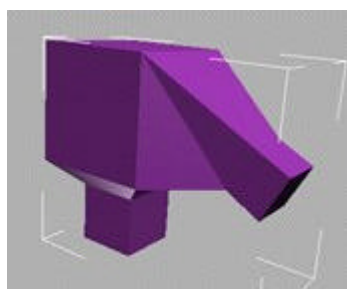
After that I did the same sort of thing on the bottom of the box to pull out a neck shape. By now it should look a bit like this. Don't worry if it doesn't, in between most of these screen shots I pulled the odd vert around while I was working on the shape.

Tweak for your life - you'll not get another.

Right, I've pushed the verts from the end of his nose back up into his head to make a small mouth. I've also extruded both sides of his head and scaled the faces to create a more rounded shape. But at this point I decide that I don't quite like the shape of his nose, so I need to insert a couple of verts.
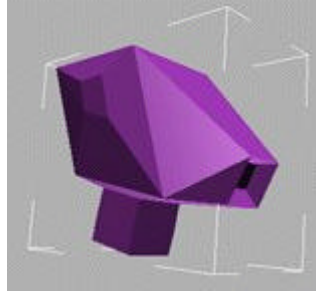

I'm going to introduce you to two very useful tools - edge divide and edge turn. Go to the edge sub-menu and select the edge that runs from the top of his head down to his nose. Then select edge divide.
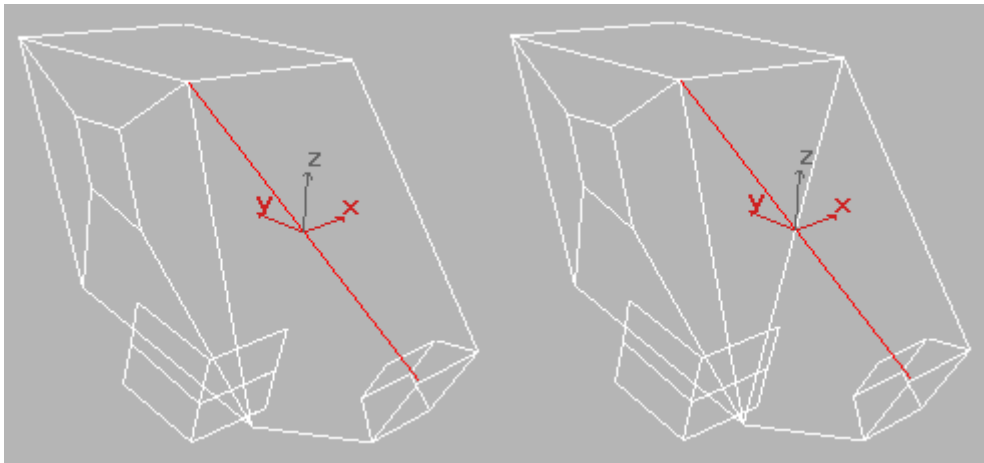

Click on the edge you need to divide, a vert is inserted at the mid-point along the edge. You can see above on the right two extra edges have also been created. This is because Max can't use true quads - all of it's shapes are built from triangles.

NOTE: Sometimes the new edges that are created don't show up, they will need to be made visible. But trust me they're there.

Do the same to the other side so it's symmetrical. You are then left with the head looking like this.
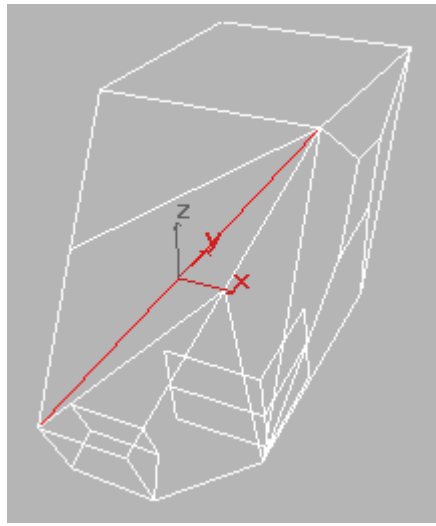
As you can see, if we were to pull out the two new verts, the face would be left with an ugly diagonal line running across it. This is because the edge that has been newly created lies in the wrong direction. what we need to do is turn i If you select edge - Turn from the edit mesh modifier, then click on the dodgy diagonal edge it will be rotated so that i lies horizontally. What edge turn does is to take an edge that lies across the centre of a quad and connects it to the two pen verts. This explanation is not very good! (I'm thinking this as I write) but it will make more sense when you do i : only really works with quads, if you do it to a triangular set of faces you end up rotating an edge so that it lies on top of another edge - and then your in a whole heap of trouble.
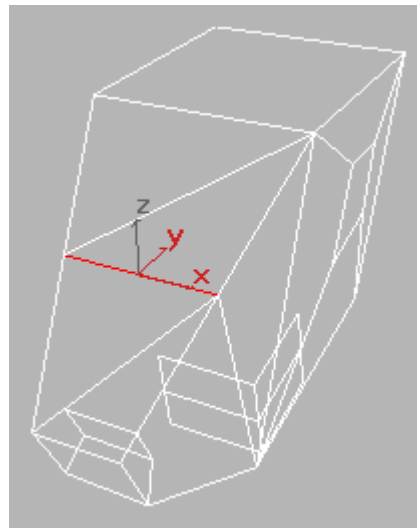
It should look just like this now.

Now coming up is a whole series of images, I didn't want to bore you with an explanation of each one. Suffice to say hat they all use the same technique of extruding, dividing and turning of edges and faces. You should be able to trace the flow of work throw the pics. See you after the download.........
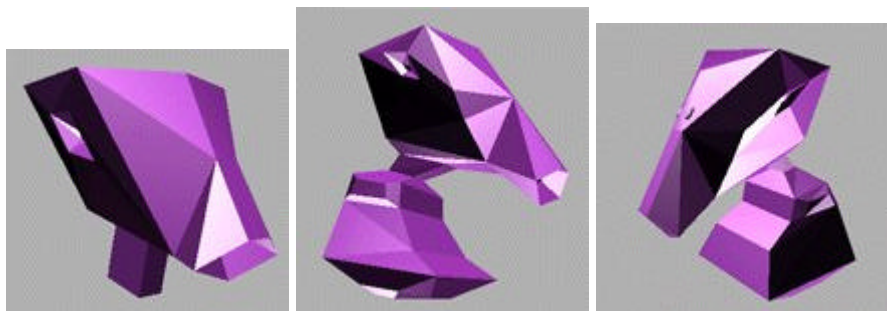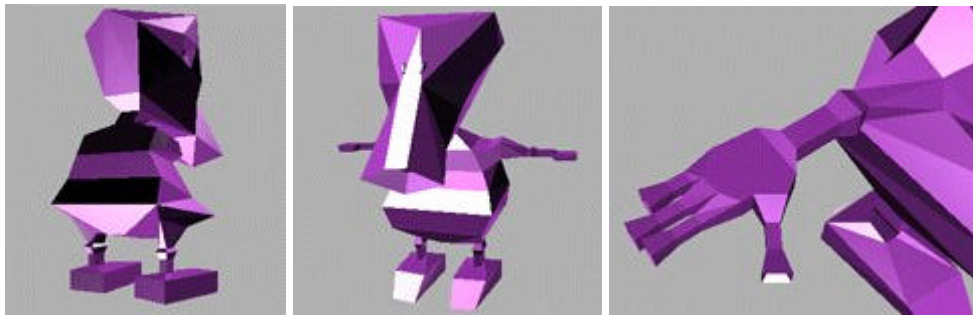
O.K, now nothing too difficult is this lot. Just knowing what extruding etc. can do and knowing the shape that your aiming for is all there is to it. It is a quick and simple way of building a shape.

### And now for a secret ingredient...

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o, now we have a chunky, bloky looking alien. "That doesn't look too hot now does it!", thats what your thinking isn it?
Well, isn't it?
nd your right, but we're not finished yet. Now we need to smooth the whole fella off and make it look spanky. Luckil here is a tool for this very purpose. It is call meshsmooth. You will only have this tool if you have upgraded to ver 1.2 and if you hadn't - WHAT THE HELL ARE YOU PLAYING AT!
All you need to do is add the modifier - wait a while for it to do it's magic and then sit back and bask in your glory! :)
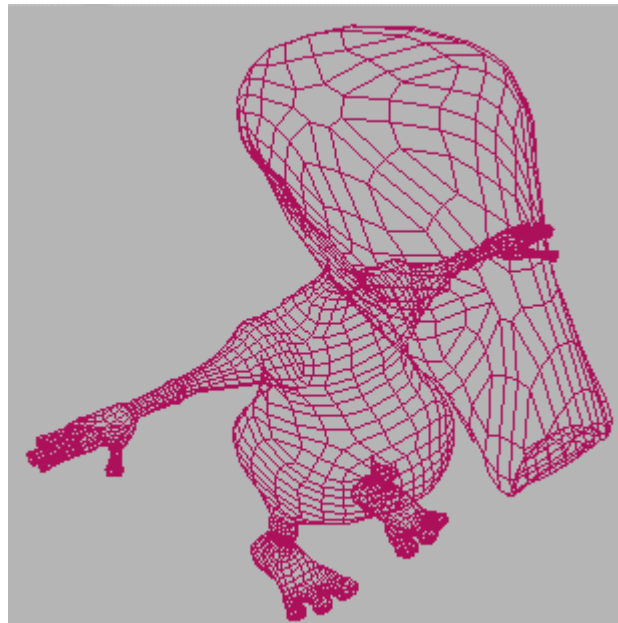
You can see that the mesh created is quite ordered and neat. This helps with putting in bones because its easier to predict how it will deform.

A couple more pics of the smooth fella. Sorry for the mass of pics this time round but There is no other way to show you what I mean :o)

Next month on cooking with steve...

Next time round I'll deal with, unwrapping the lil' fella and applying a texture to him/her (this is a non sexist site ya know).