Chrome is a very nice effect to know how to do in 3DS MAX, and it only needs few settings to look really good. Chrome can be used in many different ways. You can use it for Rims, Mirrors, the Terminator 2 "Mimetic Polyalloy Compound" of the "T-1000" effect etc.

Open the material editor by pressing M or choosing the material editor icon in the toolbar.

You need a dark gray diffuse color.
Click the diffuse color, and set the color to a dark gray (first blue line in the image).
The reflective effect is controlled by how dark the diffuse color is. For example if you want a mirror, the color should be completely black, and for a chrome effect a dark grey color has a better effect.

Now we need to add some glossiness and specular level. Here there are no really fixed values, it depends how you set up your lighting.
In the "Specular Highlights" (First green box in the image) you can begin with the value 80 in "specular Level" and 30 in "Glossiness".

Go to the "Maps" rollout, click the "None" label, in the "Reflection" settings, and choose "Raytrace" (last blue line in the image). This will allow you to have reflections of other objects in the object with this material assigned. The value in the reflection slot should be between 85 and 100 (last green box in the image). A mirror for example must have a value of 100.

If you just want a normal chrome effect that reflects your scenes environment, we are actually already done. But if you only have one object, and want it to reflect something, so it seems like it is placed in a room or outside, you have to make a fake reflection.

A fake reflection is a technique that simulates the illusion of having an environment. What we have to do is actually just to choose an image that we want to reflect, and place it into the "Raytrace" map in the "Reflection" setting.
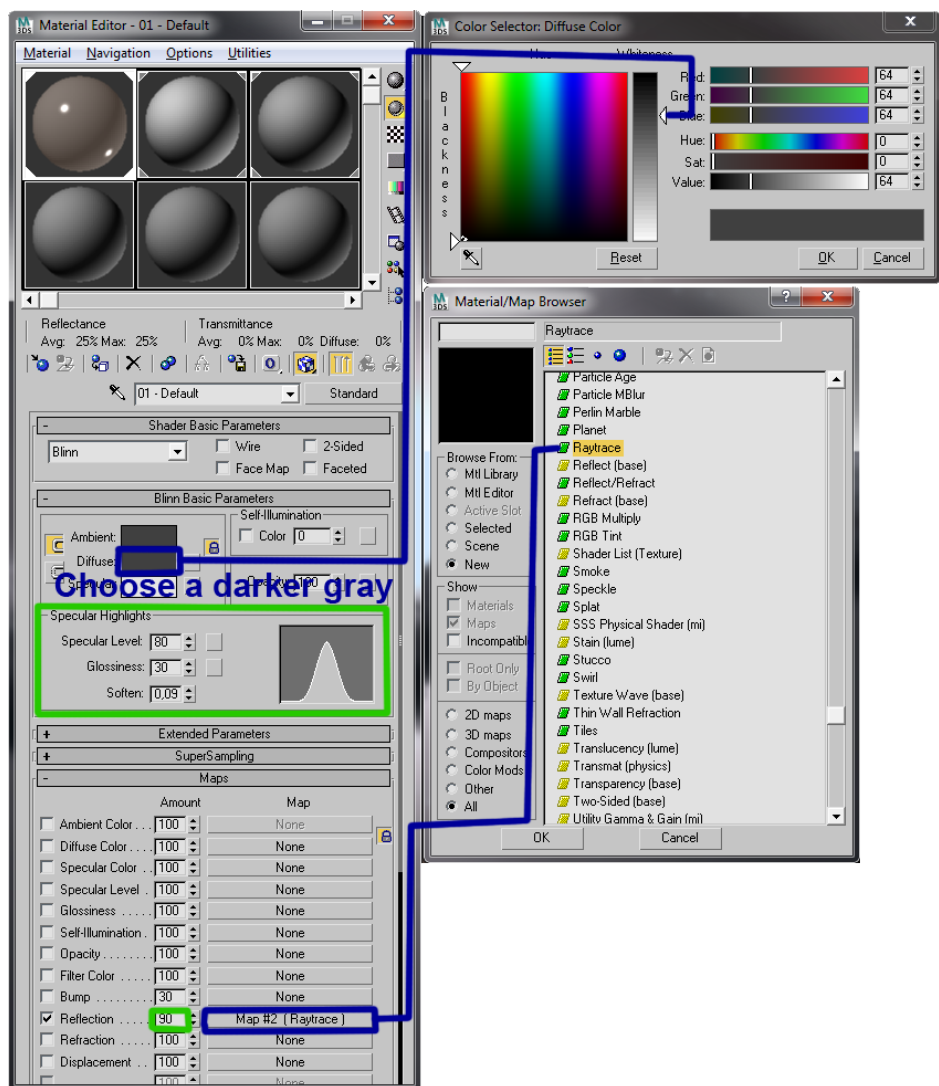
Right after you have inserted the "Raytrace" map in the "Reflection" settings, the material editors layout is showing new settings. These are the settings of the "Raytrace" map.
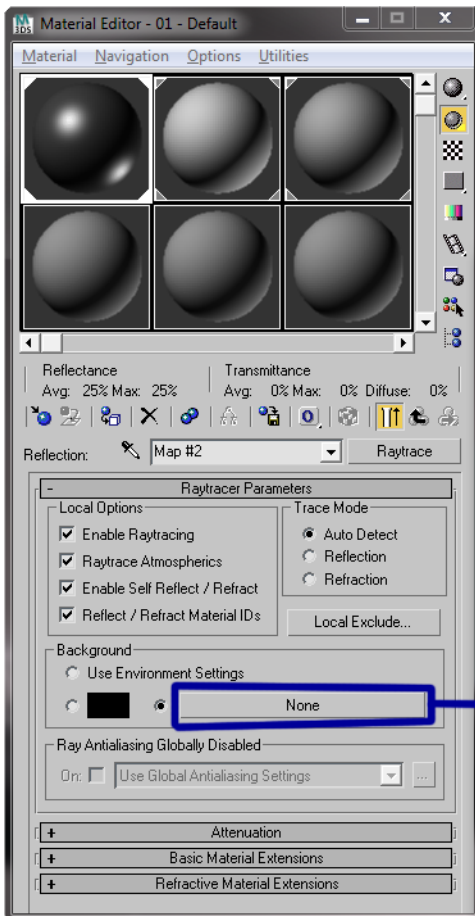
In the "Background" panel, click the "None" label. Choose "Bitmap" (blue line in the image), and browse to and choose the image you want to be displayed in your fake reflection.
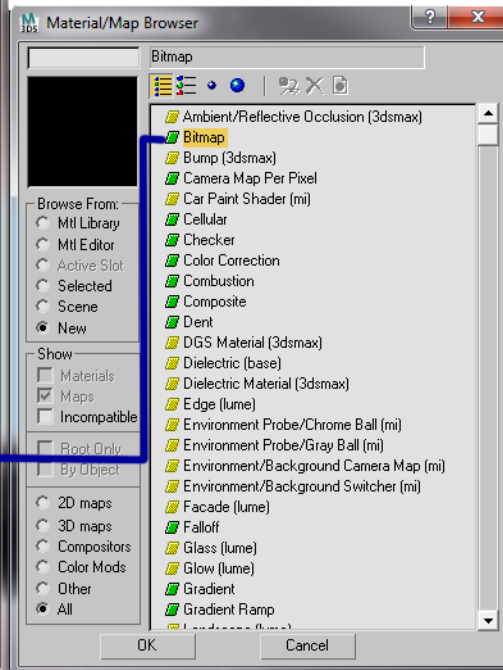
Right after this, the material editor is showing you the settings of the Bitmap. Sometimes it can be a good idea to reduce the output amount of the fake reflection. This will make your fake reflection more or less visible, and to make it look more realistic the output can be reduced.

The image I used was this one (included in the tutorial folder):

To reduce the bitmaps output, you have to go to "Output", where you then in the "output amount" set a lower value (For Example, 0.65). The Default number 1 is too high a value.

Another image, that would give you a chrome look, without having a environment around your object, is this (also included in the tutorial folder):
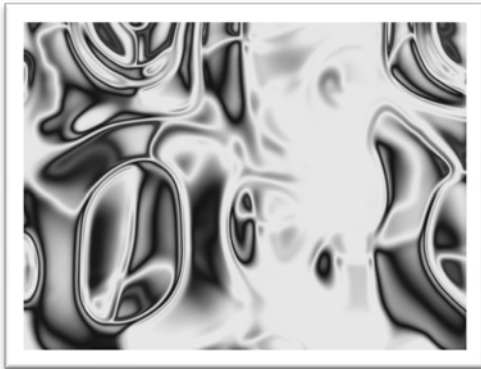
This image creates the illusion of light bouncing of different objects, but this is only a makeshift solution.

Note: If you are using the "Mental ray" renderer, the fake reflection isn't visible in the material slot, which you can see in my screenshots. You have to make a test rendering to see the result.