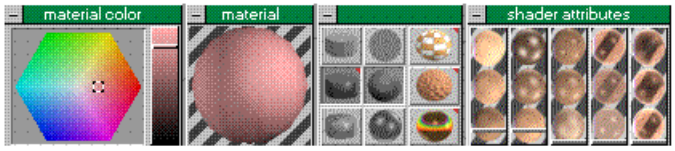
# Creating Materials from Texture files

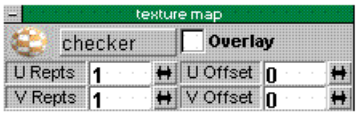
NOTE! IF A TEXTURED MATERIAL DOES NOT APPLY TO AN OBJECT, THE OBJECT NEEDS UV PROJECTION INFORMATION TO RENDER PROPERLY. PLEASE SEE THE FOLLOWING SECTION FOR INFORMATION ON UV SPACE.

Once a texture map has been decided upon and copied to the proper location on your hard drive, there are a few simple steps needed in order to create a material:

*With an object highlighted, click on any of the "Paint tool" group icons (pg. 219 in the manual) to bring up the "Color Property", "Sample Sphere", "Attributes", and the "Shader Attribute" panels.




*The last column in the "Attributes" panel contains three rendered spheres; a checkered sphere, a bumpy sphere, and a rainbow sphere. These three spheres deal with using texture files for desired rendering effects, respectively; texture mapping, bump mapping, and environment mapping. Clicking on any of these icons will activate their respective functions with the default texture files; checker, orange, and rainbow. A right click on any of the mentioned icons results in opening the individual map panels for each attribute.

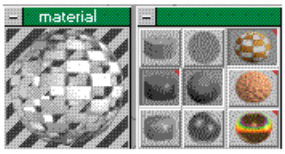


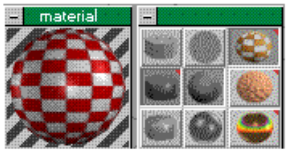

At the top left of the panel, the name of the texture file used is shown. To load a different a file, click on the name of the existing texture and trueSpace will then prompt you for the name and location of the new file. Be sure that the desired attribute is enabled, otherwise you will not see the results on the "Sample Sphere" panel. The same procedure applies in all cases regarding texture, bump, and environment map files.

*Warning! If you delete texture maps from your directory, or move them to a different place on your hard drive, an error message will appear while rendering objects whose materials require the deleted or moved files.

## Related Vocabulary:

**Overlay** If the Targa or Texture image contains transparency information, this can be used either to cause the material to become transparent in those areas (Overlay on) to reveal the local attributes of the material , or it can be used to make the underlying surface transparent.




**U Repts** Sets the number of times the image is repeated in the horizontal dimension.

**V Repts** Sets the number of times the image is repeated in the vertical direction.

**U Offset** Sets the amount by which the image is offset horizontally from the start of the UV mapping space.

**V Offset** Sets the amount by which the image is offset vertically from the start of the UV mapping space.

## How to Assign UV Projection Space to an Object

1. Select an object, then click on the UV tool in the Render Tools group.

2. The UV Map type panel appears with buttons for the three mapping types: Planar, Cylindrical, Spherical, plus the Apply button. Select the mapping type that most closely resembles your object shape, using the onscreen wireframe representation of the UV space as a guide. At this time you can *rotate* this space with the Object Rotate tool, and when using the Cylindrical and Spherical spaces, you can also *move* the space. Rotation is particularly important, because it lets you place the "seam," indicated by a brown line or polygon, over which images cannot be mapped.

This step determines the shape and positioning of the UV space in which the image is to mapped. The choices are:

 **Planar**

Specifies a rectangular image space, which is squashed and stretched to match the object's cross-section as it is rotated about the object. The image is projected "through" the object, and appears on the "front" and "back" sides.

 **Cylindrical**

The image is mapped onto a cylindrical space, much like the label on a can of food. This space can be moved as well as rotated.

 **Spherical**

The image is mapped onto a spherical space. This space can be moved as well as rotated. Spherical mapping is best for objects like planets.

3. Adjust the mapping space if necessary as described above.

4. Click on Apply. The UV mapping wireframe and panel both go away.

5. Now a material may be properly applied to the object.