

.MTL File Cheatsheet

.MTL FILE EXAMPLE

```
# MTL File Of The Gods
# Material Count: 4
```

```
# Start First Material
```

```
newmtl MirrorMaterial
```

```
Ns 900.000000
```

```
Ka 1.000000 1.000000 1.000000
```

```
Kd 0.800000 0.800000 0.800000
```

```
Ks 0.500000 0.500000 0.500000
```

```
Ke 0.000000 0.000000 0.000000
```

```
Ni 1.450000
```

```
d 1.000000
```

```
illum 3
```



```
# Texture Paths for MirrorMaterial
```

```
map_Ka ambient_map.png
```

```
map_Kd diffuse_map.png
```

```
map_Ks specular_map.png
```

```
map_Ns optical_density_map.png
```

```
map_d dissolve_map.png
```

```
disp displacement_map.png
```

```
decal deform_map.png
```

```
bump bump_map.png
```

```
# Start Second Material
```

```
newmtl OrangeMaterial
```

```
Ns 517.562489
```

```
Ka 1.000000 1.000000 1.000000
```

```
Kd 0.800000 0.101572 0.005868
```

```
Ks 1.000000 1.000000 1.000000
```

```
Ke 0.000000 0.000000 0.000000
```

```
Ni 1.450000
```

```
d 1.000000
```

```
illum 2
```



```
# No textures for OrangeMaterial
```

TAG VALUES

#	Comment
newmtl	Material Group Name
Ns	Shininess Exponent (X)
Ka	Ambient (R G B)
Kd	Diffuse (R G B)
Ks	Specular (R G B)
Ke	Emission (R G B)
Ni	Optical Density. (X)
d	Dissolve (X)
illum	Illumination Model (X)

ILLUMINATION MODELS

- 0 ——— Color on and Ambient off
- 1 ——— Color on and Ambient on
- 2 ——— Highlight on
- 3 ——— Reflection on and Ray trace on
- 4 ——— Transparency: Glass on
Reflection: Ray trace on
- 5 ——— Reflection: Fresnel on and Ray trace on
- 6 ——— Transparency: Refraction on
Reflection: Fresnel off and Ray trace on
- 7 ——— Transparency: Refraction on
Reflection: Fresnel on and Ray trace on
- 8 ——— Reflection on and Ray trace off
- 9 ——— Transparency: Glass on
Reflection: Ray trace off
- 10 ——— Casts shadows onto invisible surfaces