

## Tables listing material properties of several materials

## Glass

Property Name	Value	Reason
Diffuse	(0.0, 0.0, 0.0)	Glass materials should have diffuse level of 0 unless they are intended to have a layer of dust, or other diffuse coating. Giving any other color value will make glass of that color
Specular	(0.0,0.0,0.0)	Because we don't want to give specular reflection to glass ball
Glossiness	1	It does not matter , when specular component is 0
Reflection Weight	0.4	To give moderate amount of reflectivity to the surface of glass ball
Refractive Index	1.3	Standard property
Refraction Weight	1	To make the ball fully transparent

## Steel Mirror Surface

Property Name	Value	Reason
Diffuse	(0.0, 0.0, 0.0)	Mirror materials also should have diffuse level of 0 unless they are intended to have a layer of dust, or other diffuse coating.
Specular	(0.5,0.5,0.5)	This gives a gray color specular reflection on the surface of steel plane and gives it mirror effect. Specular component makes the surface shiny.
Glossiness	10	This decides the size of glow on mirror surface
Reflection Weight	0.6	In order to give it good amount of reflectivity
Refractive Index	2.93	Standard property
Refraction Weight	0	To make the plane fully opaque

## Paper

Property Name	Value	Reason
Diffuse	(0.3, 0.3, 0.3)	To give a light gray color to the surface
Specular	(0.0, 0.0, 0.0)	Don't want to give specular reflection to it
Glossiness	1	It does not matter , when specular component is 0
Reflection Weight	0	Because we don't expect paper to reflect any light.
Refractive Index	1.9	Standard property
Refraction Weight	0	To make the ball and cylinder fully opaque

## Plastic

Property Name	Value	Reason
Diffuse	(1.0, 0.0, 0.0)	Diffuse colour is the color that the surface absorbs and hence appears of that color. In this case , we wanted to make it appear red
Specular	(0.6, 0.6, 0.6)	This gives a gray color specular reflection on the surface of ball. Specular component makes the surface shiny.
Glossiness	20	This value decides the radius of circular glow that appears on surface of ball due to specular component. A high value gives very sharp glowing spots of small size and low value gives very big radius of shiny spots. 20 is a value to get glossiness of moderate size.
Reflection Weight	0.1	To give very less amount of reflectivity to the surface of plastic ball
Refractive Index	1.49	Standard property
Refraction Weight	0	To make the ball fully opaque

\*\* Refractive Index values have been referred from <http://www.refractiveindex.info/>