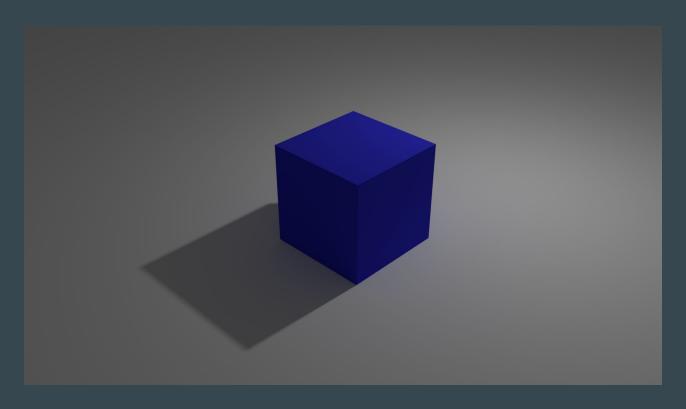
Introduction to 3D

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ElectronicArmory.com
3D Game Development Course

Hello World



3D Concepts

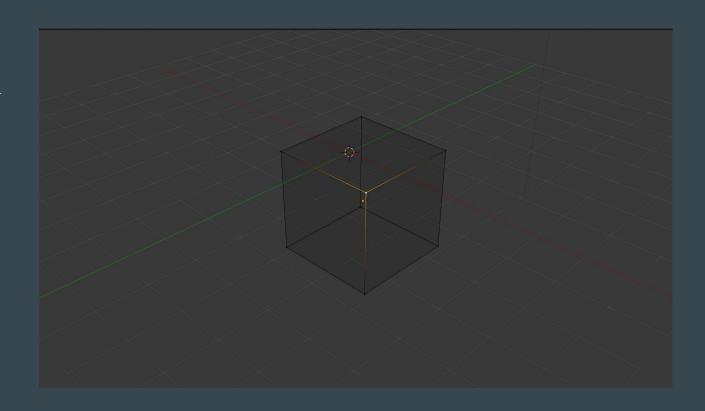
- Modeling Geometry (Meshes)
 - <u>Vertices</u>
 - o <u>Edges</u>
 - o <u>Faces</u>
- <u>Lighting</u>
- <u>Texture/Material</u>

Vertices

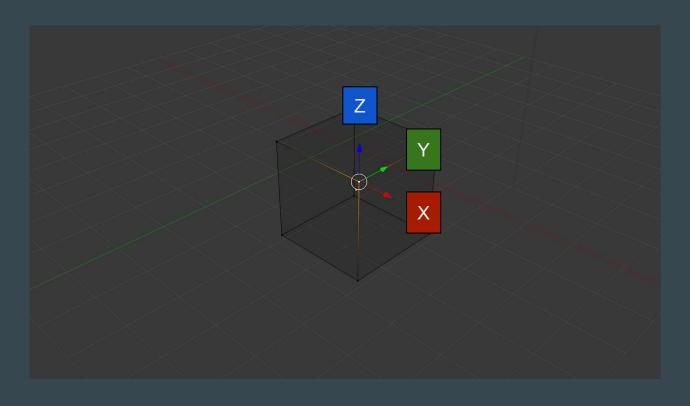
Points that occupy a specific coordinate in space.

In 3D space, vertices have an X, Y and Z coordinate:

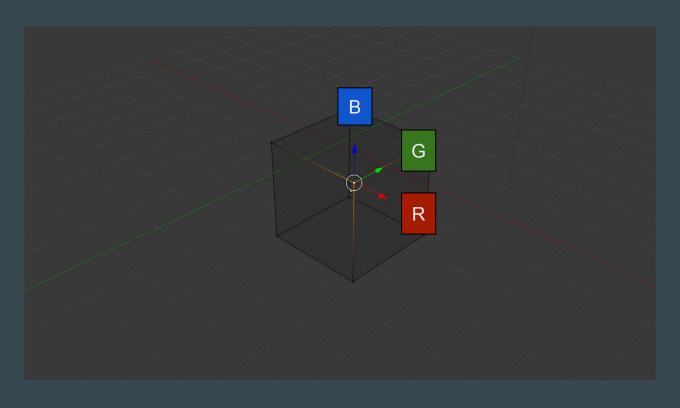
(3, 4, 19)



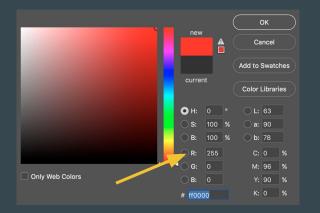
3D Axis

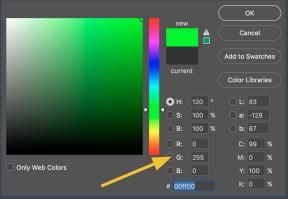


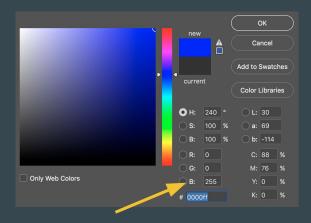
3D Axis - RGB



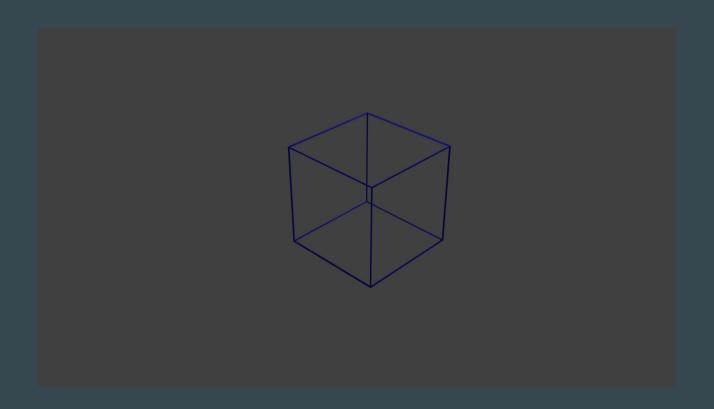
RGB in Color Pickers



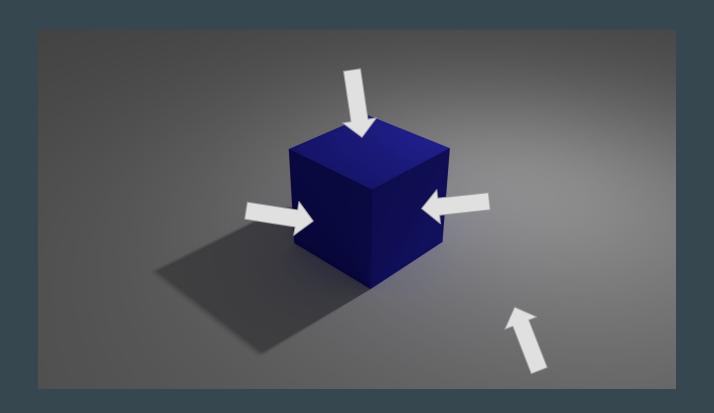




Edges

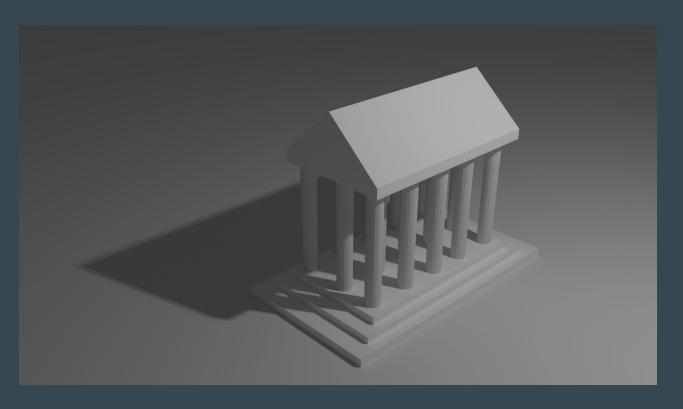


Faces

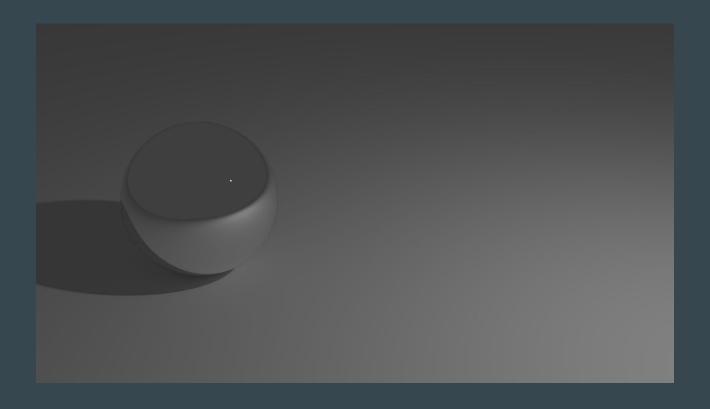


Materials and Textures

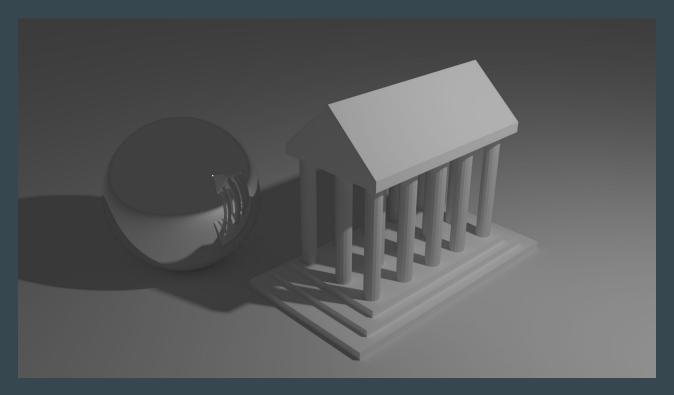
Diffuse Material



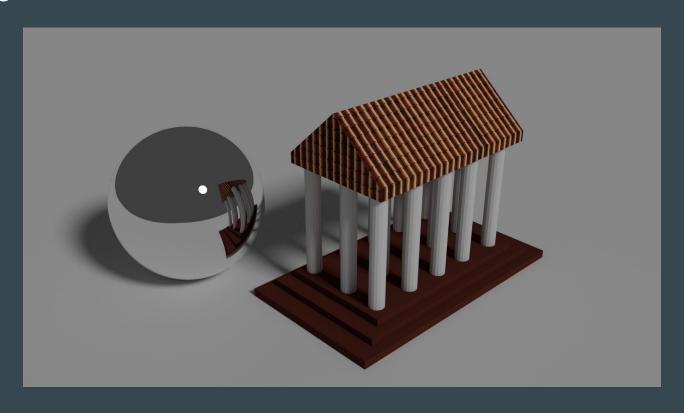
Gloss



Gloss and Diffuse Shading

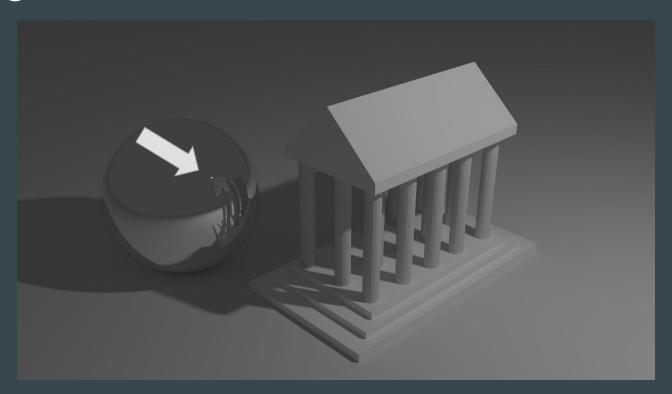


Texture

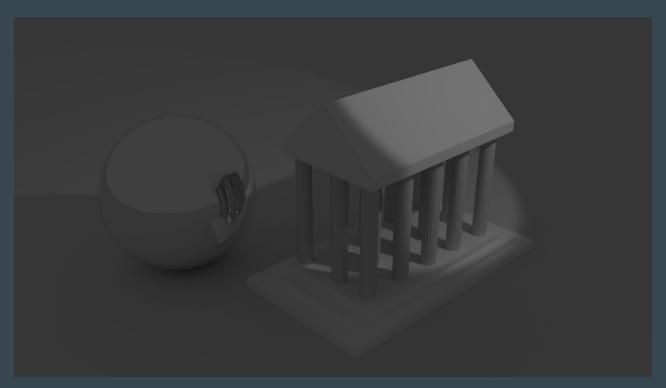


Lighting

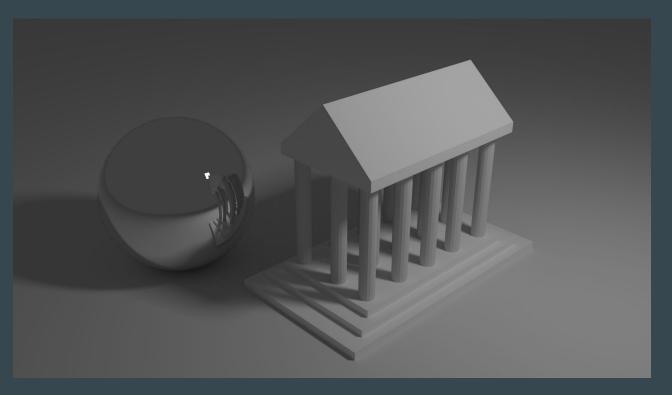
Point Light



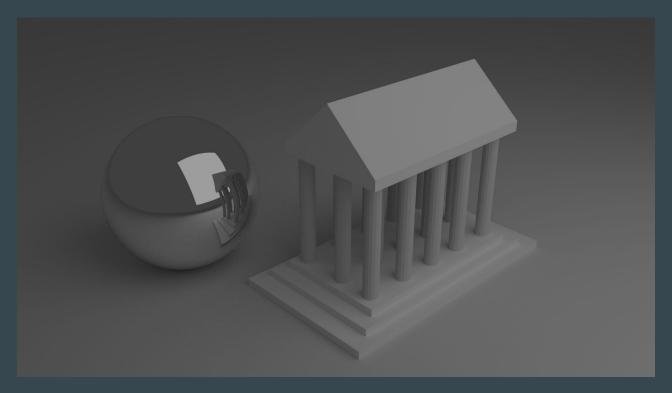
Spot Light



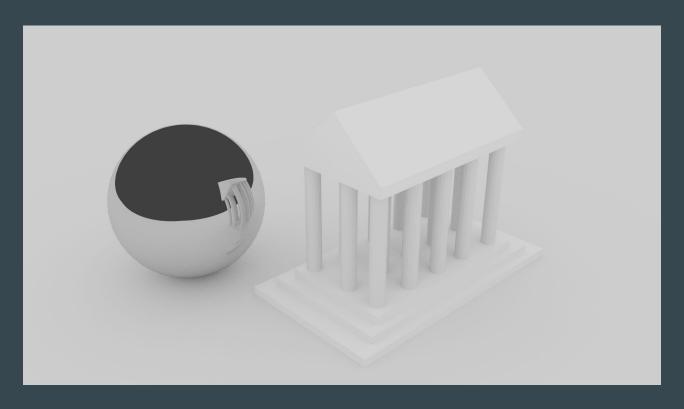
Area Light - Small



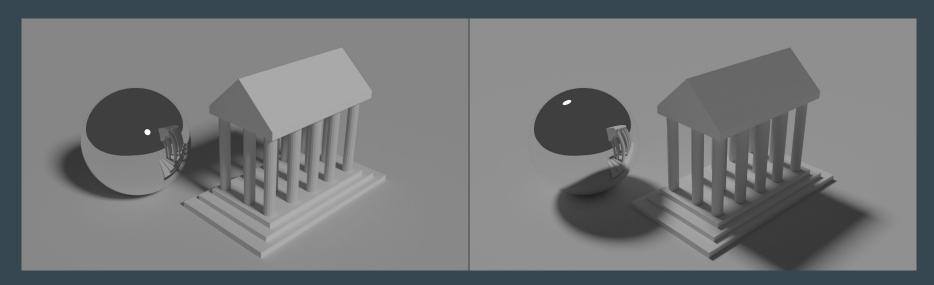
Area Light - Large



Global Illumination

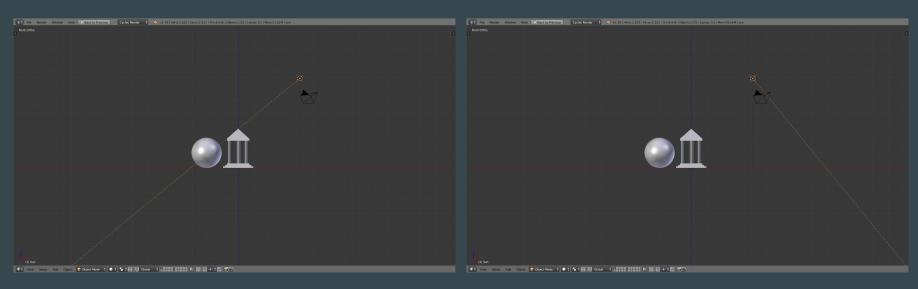


Sun



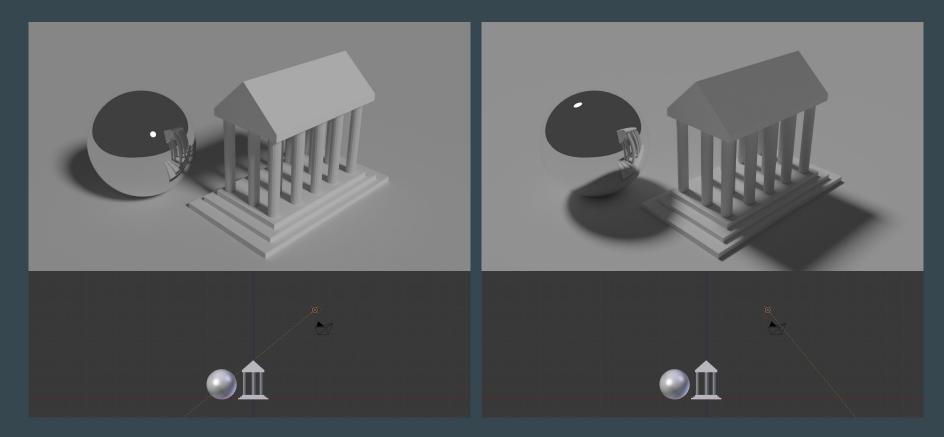
Sun lamps shine from all points in the same direction, independent of where the sun lamp is physically located. Image on the left is shining towards the left, while the image on the right is rotated 90s and shining to the right.

Sun



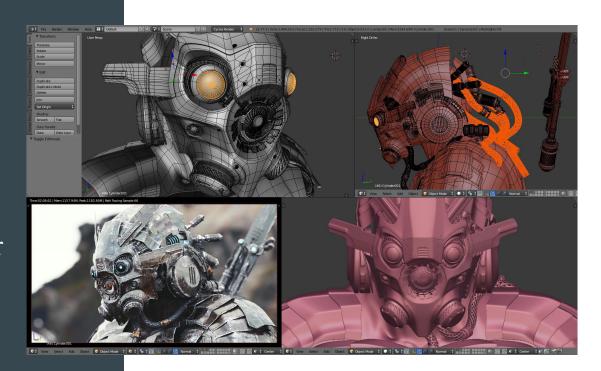
Sun lamps shine from all points in the same direction, independent of where the sun lamp is physically located. Image on the left is shining towards the left, while the image on the right is rotated 90s and shining to the right.

Sun



Demo

Introducing Blender



https://www.blender.org