

Textures and Materials for Game Development

CS-330: Introduction to Game Programming

Example textures: A chrome teapot



Example textures: A crystal teapot



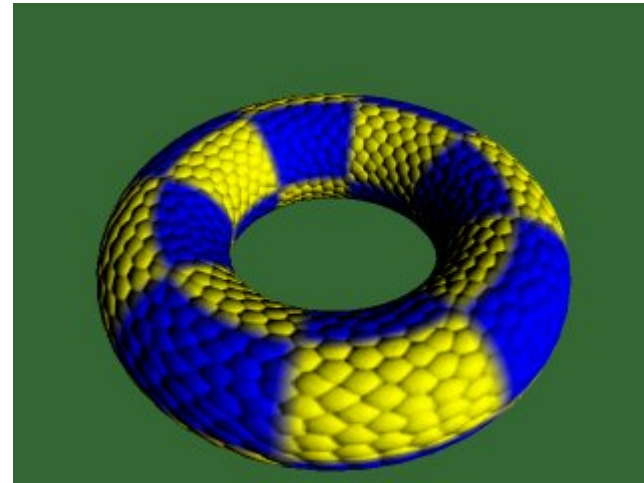
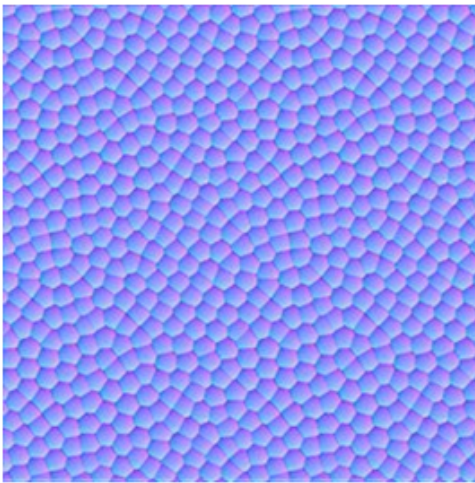
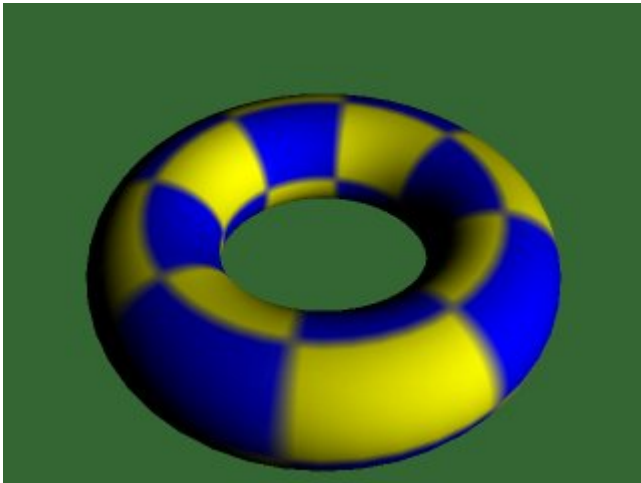
Example textures: A wooden teapot



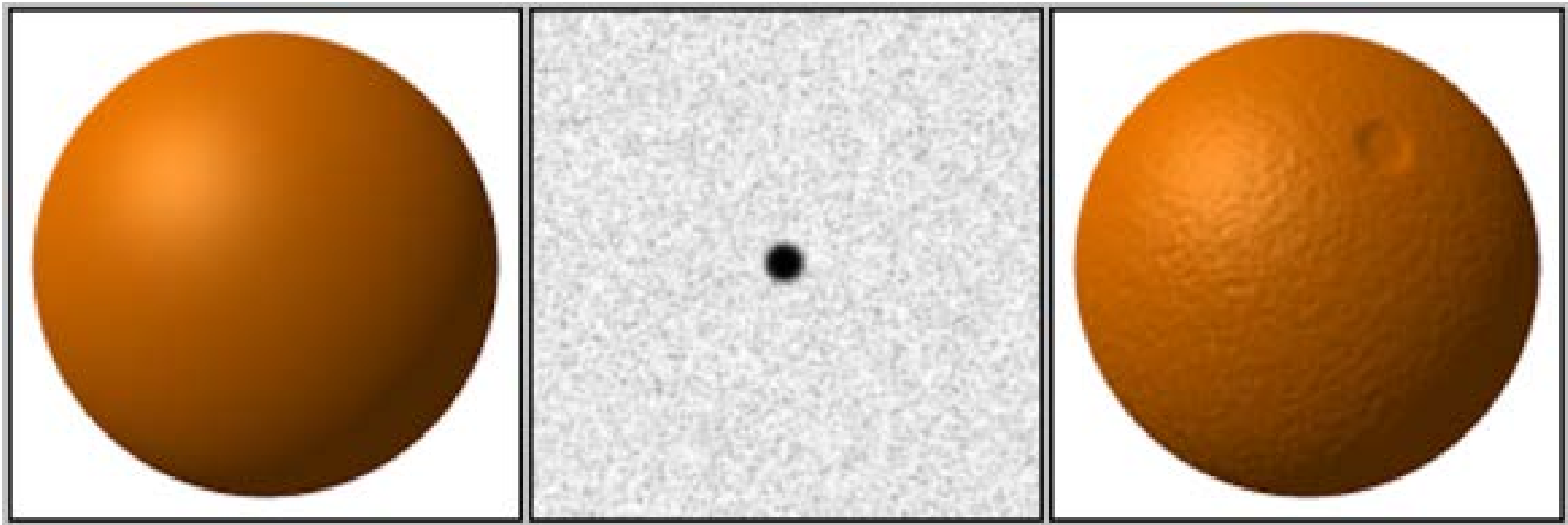
Example textures: A porcelain teapot



Example textures: a bump map



Example textures: a bump map

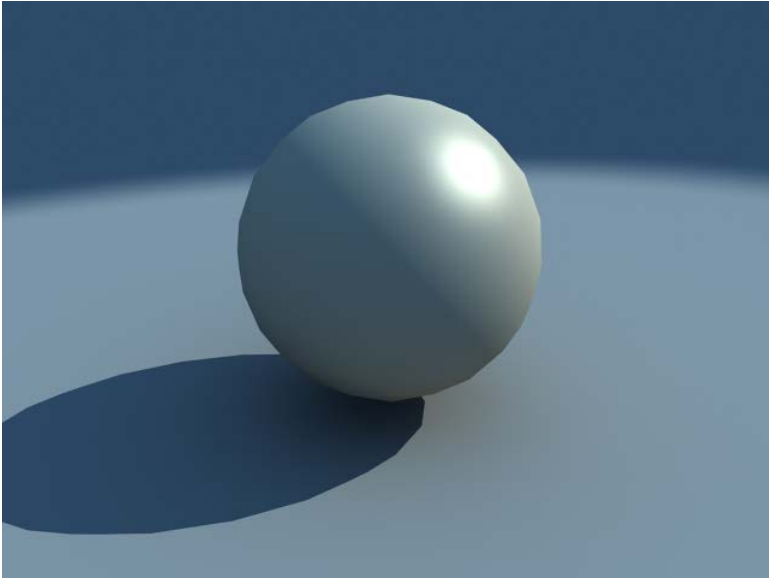


Original (smooth)

Bump map

Bump map applied to surface

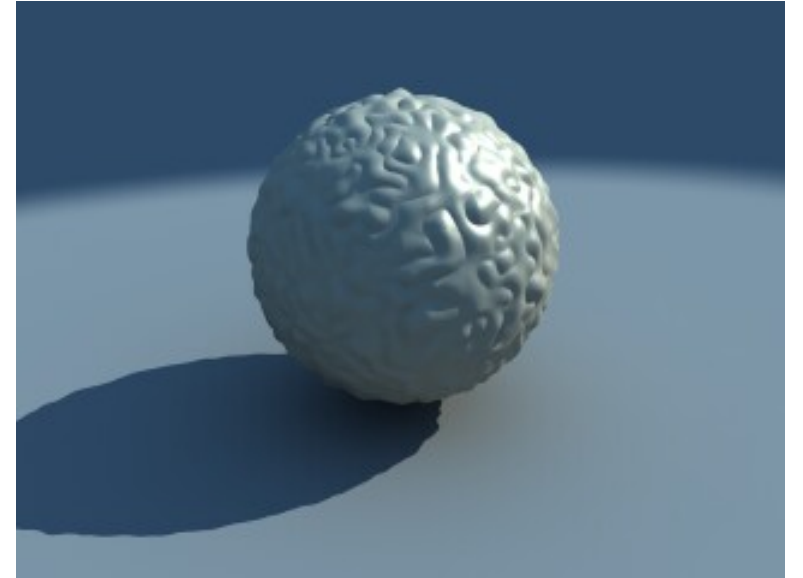
Example textures: Original (smooth) vs. Bump map vs. Displacement map



Original (smooth)



Bump map



Displacement map

Example textures: Material opacity and refraction



YouTube tutorial on materials creation in Godot

<https://www.youtube.com/watch?v=K7a4hDRxYu8>

Resources for textures and materials

- Godot Marketplace

<https://godotmarketplace.com/product-category/2d/textures-materials/>

- Godot Asset Store

<https://godotassetstore.org/assets/materials/browse>

- Polliigon:

<https://www.poliigon.com/search/free%2Bassets%2Bgodot>

Open-source software for creating textures

- Materials Maker:

<https://www.materialmaker.org/>

- GIMP (GNU Image Manipulation Program)

<https://www.gimp.org/downloads/>

- TextureLab

<https://www.texturelab.io/>