

- Today I'm going to cover:
 - Materials (the appearance of surfaces, such as color and shininess)
 - Modeling (creating the shape of a surface)

Preferences

- Saving preferences!

Materials

- Switch to Cycles (important!)
- Recap: add plane, add monkey head
- “Set smooth” on monkey head

Materials are an independent piece of data in Blender, which can be hooked up to objects to give them different appearance.

- Material properties
- When you first add an object, it has no material, and defaults to gray matte
- “New material” to create a new material and assign it to the object
- You can name the material
- Select material from drop-down menu
- Multiple material slots, I won't cover this

- “Surface” is the surface type. This determines whether it is shiny, matte, transparent, glowing, etc.
- Let's experiment with the surface type (meshes can be light sources!)

- Below “surface” are the surface parameters
- Let's experiment with the parameters
- Color is the most basic parameter
- Many parameters are specific to surface-type
- Roughness (diffuse, glossy)
- IOR (glass)

- All parameters can be given a texture
- Color is the most common to texture
- Built-in procedural textures:

- Noise
- Checker
- Brick
- Blender is garbage-collecting
- To keep materials saved even when not hooked up to an object, you have to give it a fake user

Modeling

- Mesh edit mode (both through the menu and the hotkey)
- Vertex, edge, and face sub-modes (both through buttons and the hotkey)
- Most hotkeys still apply:
 - gsr
 - selecting
 - deleting
- Modifiers:
 - Subdivision surface

Wine glass

- Screw modifier (like a lathe)
- Put the 3D cursor at the center of the world
- Switch to front view, orthographic
- Delete all the existing geo
- Make sure you're in vertex mode
- Ctrl-RMB to start adding vertices (connects to last selected vert)
- Create the cross-section of your wine glass
- Add the screw modifier
- For further editing, switch to wireframe, or toggle off the eye icon

Humanoid

- “Box modeling”
- Start with box, will be the body
- Lengthen body

- Edge-loop cuts to make faces for arms, legs, head
- Extrude to create arms, legs head
- Extrude to create hands, feet
- Knife to create faces for fingers
- Extrude fingers
- Connect/join to clean topology
- Dissolve to clean topology
- Add subdivision surface modifier

Appending models from other blend files

- Blendswap:
 - blendswap.com
 - sign-up
- Download model

- Appending the model to the scene (menu)