

Blender Lab 1

(Written for blender 2.42a and wikiversity by v2os)

General Blender Information

(quick info: LMB=left mouse button, MMB=Middle Mouse Button, and so on; Mesh can be defined as a model of an object)

The 3D View Window UI:

When you first open Blender it will have the default window open, that consists of: a cube, a camera, and a lamp. Blender has a heavy keyboard interface, almost every key on the keyboard has a specific function so it's not hard to get lost in the middle of your work. Here's a little information intended to stop some initial confusion from accidental key strikes. This lab is assuming you're using a desktop setup and not a laptop (standard keyboard and 3 button wheel mouse. It is possible to use a laptop, but takes longer).

Blender allows 20 “layers” of work, and accessing these can be done by striking the numbers on above the alphabet keys on the keyboard. If you accidentally strike these keys it will seem like you just lost all of your work. You didn't, you just moved to another layer, you were probably working in layer one so type 1.



Layers Buttons

(3D view window, object mode)

In the default scene you can see the layer buttons, however if you click on a mesh (the cube is a mesh) and press “tab” to go into edit mode the buttons will be replaced by buttons for selection mode (pressing tab switches between edit and object mode). Pressing the numbers above the alphabet keys will still change the layer you're looking at in edit mode as well. Try navigating through the different layers through the number keys for a while.

Navigating in the 3D View:

Keyboard:

For navigating in the 3d view you use the number pad with Num Lock on.

Num Pad 7: top view

3: Side View

1: Other Side View

Ctrl+1, 3, or 7 gives opposite view (top becomes bottom view)

0: Camera View

5: Switch between orthogonal or perspective view (try it out a few times)

Mouse:

Shift + Alt + LMB: Hold down keys and mouse and drag pointer to pan view.

MMB: Holding mouse wheel down and dragging rotates 3d view.

Scroll Up/Down: zooms 3d view in or out.

Selection in 3D View:

Right mouse click over an object selects the object.

*Holding shift while right clicking allows multiple objects to be selected.

“B” key once: Bounding Box select, Hold LMB and drag box over what you want to select.

“B” key twice in edit mode: Brush select tool, scrolling the mouse wheel changes it's size, LMB to select, RMB to stop.

Transformations in 3D View:

“G” key	Moves selected object
“S” key	Scales selected Object
“R” key	Rotates Selected Object

Alternatively you can also perform these functions clicking the red, green, and blue lines around the selected object. More info on this is in section 6 “mesh modeling” in the blender quickstart tutorial that usually accompanies the install More detail on this later.

Make sure to play around with the blender interface for a while before moving on.

Assignment:

Recover the default blender scene using Ctrl + X (this is followed by “OK?”, Erase All, click on it), and then Move, Rotate, and Scale the cube. Use num pad 0 to make sure the cube is still on camera, the dotted 90 degree corner rectangle is the default border, make sure it's in frame. then use the F12 key to render the scene. After it's rendered in the new window go to the main window and click File>Save Image, or hit F3.