Learn with a poster
blender infographic map

Size and **thickness** define **IMPORTANCE**

17/05/2020 FOR BLENDER 2.82 This map reflect my personal mind map and experience in using Blender 3d.
I will improve and update in time, following development and ideas. Made by giudansky.com follow me for updates.

● Object Mode or mult. modes   ● Edit Mode   ● Plugins   2.8 New feature

Cursor, origin, orientation

FIRST THING YOU NEED TO LEARN. ADD A MONKEY HEAD ON TOP OF THAT WONDERFUL CUBE!

shift + A **Add** object — OBJECT VIEW, EDIT VIEW, NODE EDITOR

X delete
ctrl + X dissolve

Cursor place — THE ORIGIN OF EVERYTHING.
shift + S Snap selection/cursor
shift + C reset 3d cursor to origin

SELECTED · ACTIVE · ORIGIN
2.81 Affect only — origins / TRANSFORM ORIGIN

select

Select object
shift add to selection

A Select all
alt + A deselect
ctrl + I invert select
ctrl + L select linked
shift + G select grouped
ctrl + L interval select
W switch select mode
shift + L select menù — LIST AND SELECT OBJECTS BEHIND.

border select
C brush select — brush size
ctrl lasso select
expand / reduce selection
select similar

mesh select mode — face, edge or vertex
1 / 2 / 3
alt loop select
ring select

Transform

CREASE / BEVEL WEIGHT

alt reset transform
G Grab (move)
×2 slide along vertex or edges
C slide over
Rotate ×2 free rotation
Scale Shrink - fatten — Scales along selected normals
on axis **x/y/z** ×2 orientation switch
shift + x/y/z lock axis
HOLD **shift** precision mode
HOLD **ctrl** snap to units

I transform orientation — Transform relative to GLOBAL, LOCAL, NORMAL, GIMBAL, VIEW, CURSOR. SELECT AND + FOR CUSTOM
F9 adjust last — REFINE PARAMETERS OF THE LAST OPERATION.

shift + D Duplicate — DIFFERENT OBJECT DIFFERENT DATA
alt + D Duplicate linked — DIFFERENT OBJECT SAME DATA
U unlink instances
ctrl + L make links from active to selected — TRANSFER PROPERTIES (MATERIALS, UV MAPS, GROUPS, ANIM DATA, ETC.)

extend vertices — ADD VERTICES ALONG THE EDGE, IN THE DIRECTION OF THE MOUSE CURSOR.
ctrl + P Parent element
alt + P Clear Parent

ctrl + A Apply transform

Shaders

F Connect selected nodes
shift delete material
M mute node
ctrl + G Group selected nodes
ctrl + alt + G Ungroup
ctrl + tab Edit group
shift Add reroute
ctrl + Q Material utils — assign, select, merge, override
shift preview selected node — NODE WRANGLER
ctrl + shift
shift + W node wrangler menu
ctrl + T add texture setup

Basic material setting
TEXTURE COORD. · MAPPING · IMAGE TEXTURE · RGB MIXES · SHADER MANIPULATION
INPUT OUTPUT COLORS — ● color ● vector ● factor ● shader
MIX RGB · RGB · COLOR RAMP · MIX SHADER · MATERIAL OUTPUT
GLOSSY BSDF · DIFFUSE BSDF or PRINCIPLED SHADER
SHADER TO RGB

Light and material properties
Specular · Roughness/bump · Fresnel · Anisotropy · Dicroic · Multy layer
Reflection · Refraction · Caustics
Diffuse · Ambient · Scattering · Diffraction · Emission
Transparency · Dispersion · Translucency

3d Viewport

Z Viewport shading — ○ wire ● solid ○ lookdev ○ render

I Zoom view
shift + B crop zoom

shift + MMB Pan view

Rotate view — X / Y / Z

SHARP · UV SEAM · FREE STYLE
Edge data
SUSANNE WITH HER FAVOURITE TRENDING BREATHING MASK

O proportional edit
alt reset transform
shift FALLOFF CURVE

Views
7 top · 8 · 9 opposite
4 · ortho 5 · 6
1 front · 2 · 3 right
ctrl opposite view
camera 0 user · align to active **shift**
view unselected

alt + Z X-ray view · **/** Isolation mode on selected · **alt + B** isolation crop
shift + H Hide unselected
H Hide selected · **alt + H** unHide

ctrl + 0 active Camera — SET VIEW ON SELECTED CAMERA.
Track to Camera follow — TARGET: TO OBJECT TO -Z UP: Y
ctrl + alt + 0 set view on current view
shift + ` fly/walk mode · **tab** gravity

Search
f3 Search — CAN'T FIND SOMETHING? SEARCH IT!

Interface
divide view
T tools panel — tool, view, plugins
N side panel — item, tool, view, plugins
ctrl + space maximize window
Workspaces — PREDEFINED WORKING LAYOUTS
ctrl + ↑↓
ctrl + alt + Q 4 sides view
ctrl scroll tabs · **alt** change num value to multi objects
alt copy * to selected — COPY INPUT VALUES BETWEEN MULTIPLE OBJECTS.
default value reset — MESSED UP WITH OPTIONS AND VALUES? RESET TO DEFAULT.

organize
mask out indirect only
scenes · render layers · collections · compositor · object · data — POST PRODUCTION
Rename object · **ctrl + f2** batch rename · **f2**

camera
Quick favourites — add/change shortcut · add to quick favourites

Move to collection
shift M Link to collection
1…0 collection switch · collection visibility
shift + A COLLECTION INSTANCE — INSERT MULTI OBJECT COLLECTION INSTANCES.
ctrl + G Vertex groups — CREATE, ASSIGN, REMOVE, SET.

Modes
tab — EDIT / OBJECT MODE INTERACTION MODE
object · edit · vertex paint · sculpt · texture paint · weight paint · draw · tools
Pie menù
shift + space tools
ctrl + tab

edit mesh
K Knife — **z** cut through · **C** angle constrain · **ctrl** snap on mid
shift LIMIT TO SELECTED FACES
f3 Mesh Bisect — **Bisect** with a plane
mesh context menù — **ctrl + F** Face · **ctrl + E** Edge · **ctrl + V** Vertex
ctrl + R Loopcut and slide — HIDE FACES TO LIMIT LOOPCUT
ctrl + R Offset edge slide

ctrl + shift + X Carver cutting ops. — **space** cutting tool
alt Fill with tri faces
shift + ctrl + B Bool tool — BOOLEAN OPS MADE EASY. · **ctrl** union differ.

F Face or edge between selected vertices
E Extrude — **alt** Extrude region or individual faces · **ctrl** click extrude
J Connect vertices path
ctrl + B Bevel faces or edges · **V** bevel vertex · segments
I Inset — Mesh cleanup: Limited dissolve / Quadriflow / Mesh > Clean up

Intersect (knife) / Intersect (boolean)
2.8 alt + M Merge — Remove double vertices / Options > automerge

V Rip vertices or edges
Y Split selected geometry
alt + R Spin — SPIN WORKS PERPENDICULAR TO THE VIEW. STEPS, ANGLE.
N Normals menù — **shift + N** Recalc normals
Remesh — Voxel 2.81 / Quadriflow
P Separate selected from mesh
ctrl + Copy attributes — COPY TRANSFORMATIONS, UV AND MODIFIERS, FROM ACTIVE TO SELECTED

most used modifiers
○ **Subdivision surface**: Increase mesh detail. Use together with smooth shading and edge crease to obtain perfect detailed objects. Auto Smooth — ACTIVATE SMOOTH SHADING AND FIX BLACK EDGES PROBLEM, ALSO IN RENDERING.
Array: duplicate a series of objects dynamically. IN ADDITION WITH THE CURVE DEFORM IT CAN BEND AND FOLLOW A PATH.
Skin: create an armature around the edge. Perfect for branches-like objects. **ctrl + A** radius of the selected vertices
Shrinkwrap: shrink the mesh to the target object. CAN RETOPOLOGIZE A MESH.
Bevel: bevel edges dynamically.
Solidify: adds depth to a flat surface.
Decimate: optimize a mesh and reduce polygons.
Multiresolution: Increase mesh detail dynamically for detail sculpting.

mustload Addons
Node wrangler Material node previews and more.
Looptools: Bridge faces, flatten faces, convert faces to circle shape, distribute vertex, etc.
Bool tool: Manage non destructive boolean modifier ops.
Material utilities: Context menù, assign and manage materials; selections, slots, overrides.
Copy attributes menù. Copy from active to selected
Import images as plane Hang a painting in a click.
Extra objects (mesh and curves) Add gears, diamonds, pipes, single vert or the old dear teapot (SHIFT+A).
Add curve sapling Tree generator.
Bsurface Create surfaces with grease pencil.
Carver Cuts and holes made easy.
Measure it Add labels and measure every distance or angles between elements.
Archimesh Generate architecture dynamical elements: rooms, doors, windows, columns, stairs, tile roofs.

texture paint
S Color picker · add color swatch
move stencil · **shift** scale stencil

Brush
size F
shift strength
ctrl rotation
X flip colors

sculpt
Add · **ctrl** Subtract · **shift** Soft · **E Stroke** method

2D
File > New > 2d anim — White board and 2d friendly workspace

grease pencil
Free hand draw
HOLD · **ctrl** Erase
alt stroke select
shift + alt Polygon draw
stroke depth order · Depth hierarchy

animation
space PLAY
M Mask paint · **alt + M Mask remove** · **alt** Select object — WITHOUT LEAVING SCULPT MODE
I Insert keyframe · **alt + I Remove keyframe** · **alt** Select object
f11 show last render
prev. frame ◄ ► next frame
RENDER ANY VIEWPORT WITHOUT SETTING CAMERA. VERY USEFUL, ESPECIALLY IN EEVEE!

Render
f12 — view > viewport Render
ctrl + B Border render · **ctrl + alt + B** reset border
shift + S Save image

render

LEARN WITH A POSTER
everything you need in a single map

FREE FOR PERSONAL USE. THIS MAP IS THE RESULT OF A LONG WORK. IF YOU LIKE IT BUY ME A BEER AND GET THE VECTOR ON giudansky.com