

# METHODOLOGIE DE RECHERCHE

Lorsque l'on a besoin de rechercher quelque chose, il vaut mieux **mettre en place une méthodologie** afin d'être efficace et de trouver l'objet de la recherche.

Tout d'abord il faut choisir un outil nous permettant d'effectuer la recherche : **téléphone portable avec internet, ordinateur, application / Réseaux Sociaux, livre / bibliothèque ...**

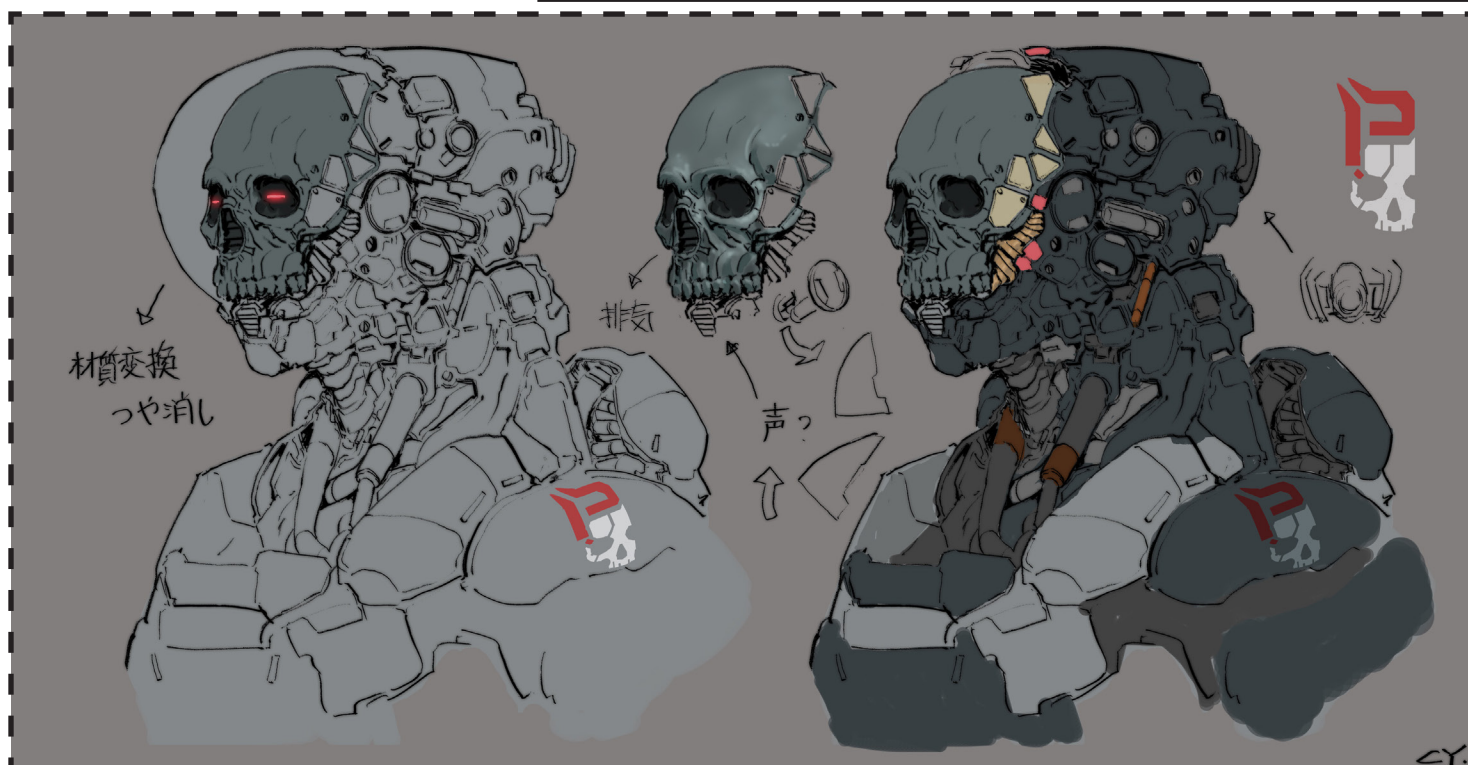
Il faut ensuite **définir l'objet de la recherche avec des termes spécifiques** si c'est une recherche **via une base de données ou internet**. Il faut être le plus précis possible. Dans notre domaine, on va **privilégier une recherche de termes majoritairement en Anglais**, nous obtiendrons beaucoup **plus de résultats qu'avec le Français**.

Ensuite il faut se **créer un espace pour stocker ces informations**. Si c'est une information textuelle, rien de mieux qu'un **cahier ou un outil de traitement de texte**. Si c'est une image on peut **créer un dossier et télécharger les images**. Certains sites / applications proposent de **créer des collections** (Pinterest, Artstation). On peut aussi s'abonner à des comptes sur les réseaux sociaux (Twitter, Instagram).

Vous pouvez aussi **réaliser une carte mentale** de vos idées et éléments de recherches (version papier ou avec Draw.io ou encore une application comme Mural mêlant image et texte par exemple). Avoir une **représentation visuelle** de vos recherches vous permettra d'avoir une **meilleure vision d'ensemble** de votre projet et **communiquer et de faire comprendre vos idées** à d'éventuels collaborateurs.trices. Vous pouvez aussi **créer des planches tendances** (Mood-Board) pour **rassembler et mettre en vis-à-vis les images** qui vous inspirent.

## CONCEPT ART

Les Concepts Art sont des **illustrations** créées pour **rendre compte d'une idée, une ambiance, d'un style graphique** ou pour montrer la **manière dont peut fonctionner un objet**. Les Concepts Art sont très utilisés dans les milieux du Cinéma, de l'Animation, du Jeu Vidéo ...  
Les Concepts Art servent souvent de **base avant de réaliser** une modélisation par exemple ou un décor physique pour le Cinéma.



## SESSION 2

- Méthologie de Recherche d'Images
- Création d'un Espace de Travail
- **INTRODUCTION** au ConceptArt
- **INTRODUCTION** à la 3D avec MagicaVoxel
- **INTRODUCTION** à la 3D avec Blender

**EXERCICE PARTIQUE** : Création d'un personnage en 3D

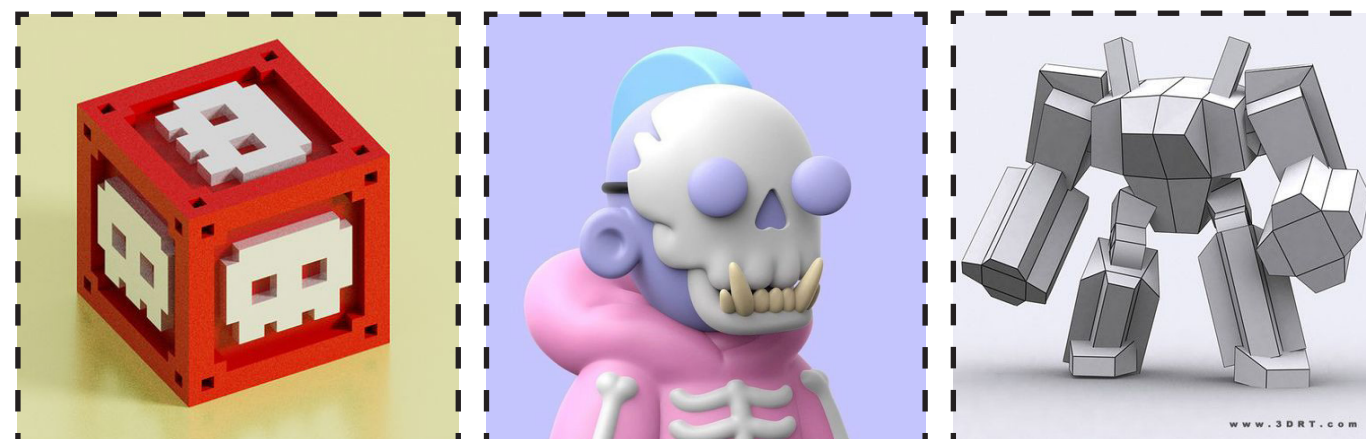
epsaa

## ATELIER FAB-GAME

# 21 septembre 2023

## MODÉLISATION 3D

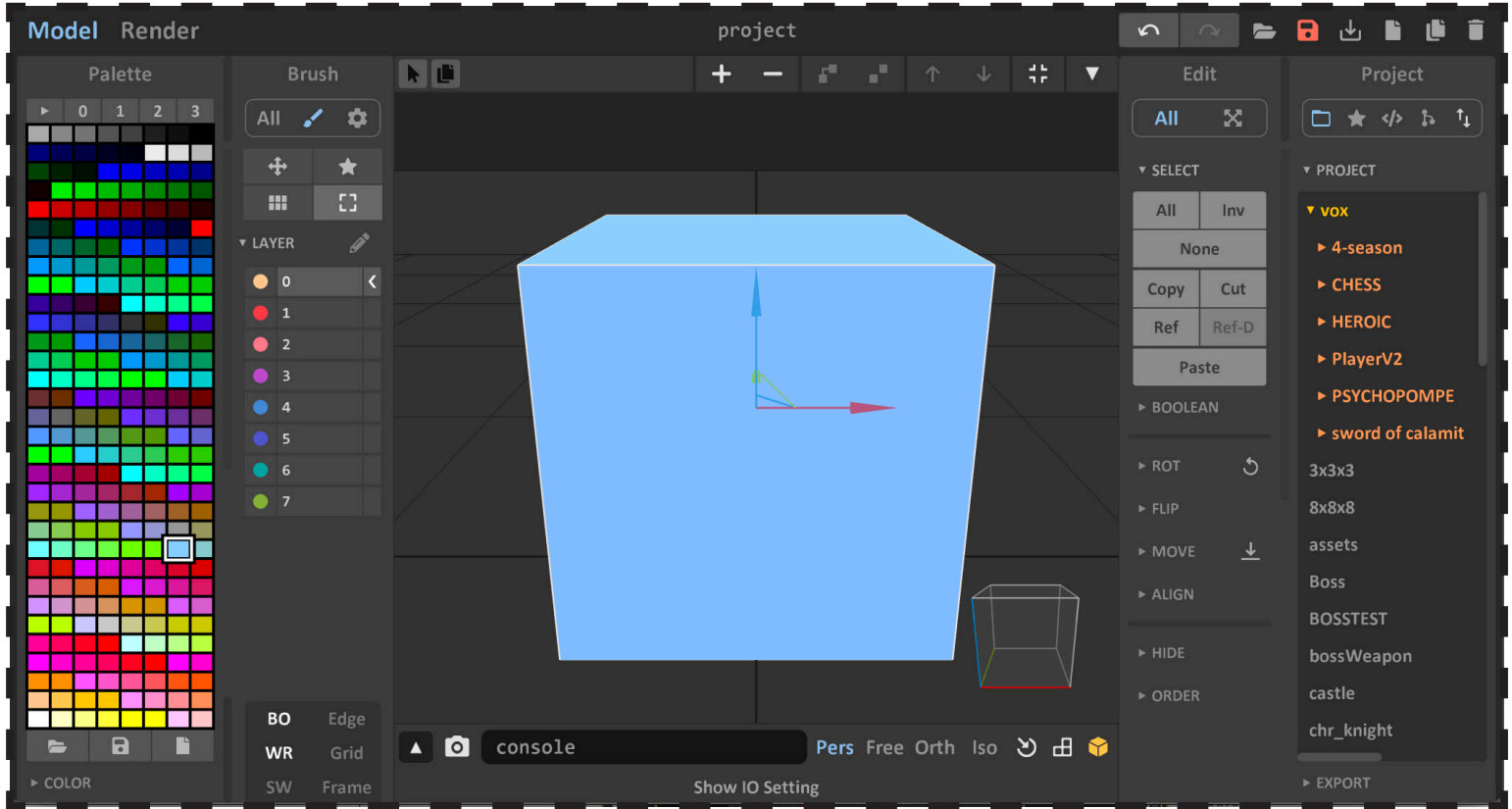
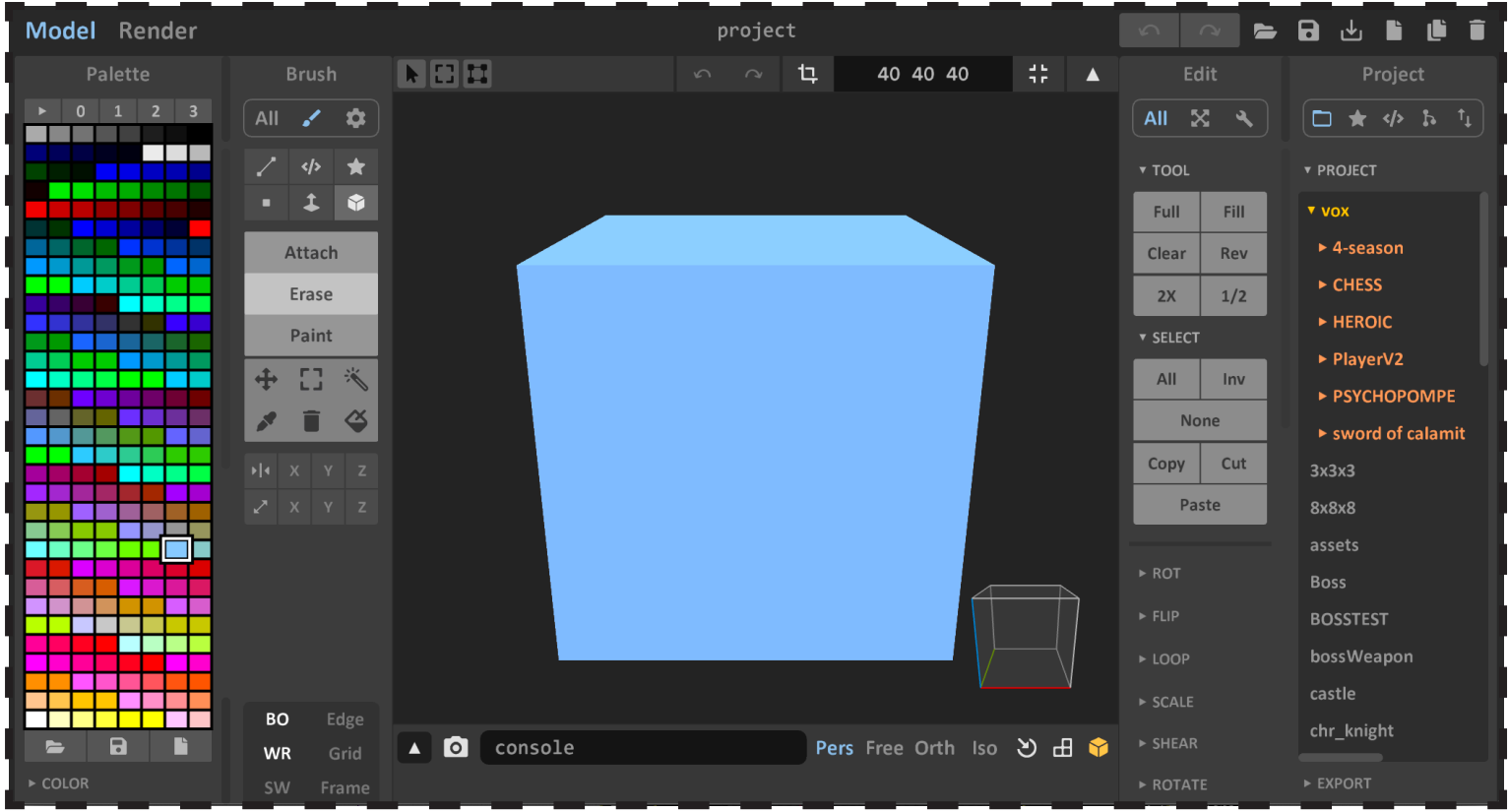
La Modélisation 3D est une **méthode de création d'objet en trois dimensions** via un logiciel numérique. Pour notre cours nous verrons deux manières de faire de la modélisation : le **VoxelArt avec MagicaVoxel** («empilement» de cube dont l'ensemble crée un modèle 3D) et la **modélisation «classique» avec Blender**.



MODE EDIT

TAB

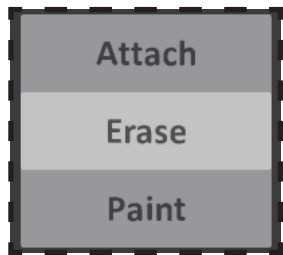
MODE OBJET



BRUSH TYPE



ACTION TYPE



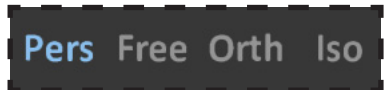
MOVE / SELECT /  
SELECT COLOR /  
PAINT



SAVE / NEW / DUPLICATE



VIEW MODE



OBJECT SETTINGS



EXPORT



MAGICA VOXEL

<https://github.com/ephtracy/ephtracy.github.io/releases/tag/0.99.6>



# blender

## LEARN WITH A POSTER

EVERYTHING YOU NEED IN A SINGLE MAP

22/09/2022 FOR BLENDER 3.3 This map reflects my personal mind map and experience in using Blender 3D. I will improve and update following development and ideas. Made by giudansky.com follow me for updates.

MODEL SELECT MANIPULATE UI ORGANIZE PAINT TEXTURE POST PROD PLUGINS MISC

Size and thickness define IMPORTANCE!

Cursor, origin, orientation

**Shift+A** Add object  
FIRST THING YOU NEED TO LEARN. ADD A MONKEY HEAD ON TOP OF THAT WONDERFUL CUBE!

**Shift+O** Cursor place  
THE ORIGIN OF EVERYTHING

**Shift+S** relocate  
selection/cursor  
**Shift+C** reset 3d cursor to origin

**X** delete  
**Ctrl+X** dissolve  
**select** object  
**Shift+O** add to selection

**A** Select all  
**Alt+A** deselect  
**Ctrl+H** invert select  
**Ctrl+L** select linked

**border** select  
**Ctrl+C** brush select  
**Ctrl+O** brush size  
**lasso** select  
**Ctrl+G** expand reduce selection

**Alt+O** loop select  
**Alt+Q** ring select  
**Ctrl+Alt+Q** select object  
**Alt+Q** select object  
**Ctrl+Alt+Q** select object

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**Ctrl+Alt+Q** select object  
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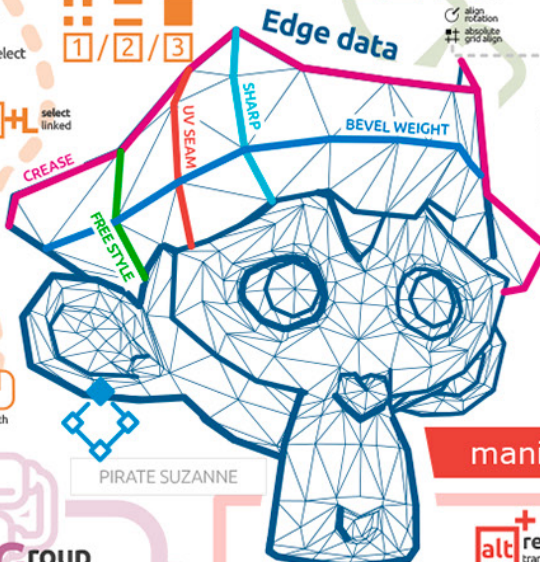
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**Ctrl+Alt+Q** select object  
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**Ctrl+Alt+Q** select object



**Zoom**  
**Shift+B** crop zoom

**Pan**  
**Shift+O** cursor place

**Rotate**  
**Shift+S** relocate  
**Shift+C** reset 3d cursor to origin

**object**  
**Ctrl+tab** Pie menu

**weight** paint  
**Ctrl+tab** Pie menu

**texture** paint  
**Ctrl+tab** Pie menu

**tools**  
**Ctrl+tab** Pie menu

**draw**  
**Ctrl+tab** Pie menu

**manipulate**  
**Ctrl+tab** Pie menu

**Grab** (move)  
**Shift+G** group  
**Ctrl+G** group  
**Ctrl+U** ungroup

**Rotate**  
**Shift+R** repeat  
**Ctrl+R** repeat

**Scale**  
**Shift+S** scale  
**Ctrl+S** scale

**Brush**  
**Shift+B** brush  
**Ctrl+B** brush

**Size**  
**Shift+Z** size  
**Ctrl+Z** size

**Add**  
**Shift+A** add  
**Ctrl+A** add

**Stroke**  
**Shift+S** stroke  
**Ctrl+S** stroke

**Mask**  
**Shift+M** mask  
**Ctrl+M** mask

3d viewport

**Z** Viewport shading  
wire solid  
lookdev render

**Views**  
7 top  
8 ortho  
9 opposite  
4 front  
5 right  
6 left  
1 camera  
2 user  
3 view  
Ctrl+0 set camera on current view

**Hide** selected  
**alt+H** unhide  
**Ctrl+H** hide  
**Ctrl+U** unhide

**Camera**  
**Ctrl+0** active camera  
**Ctrl+alt+0** set camera on current view  
**Shift+0** fly/walk mode  
**space** gravity

**Search**  
**F3** Search  
**alt+F3** Search  
**Ctrl+F3** Search

**Isolation** mode  
**alt+B** Isolation crop  
**Ctrl+B** Isolation crop  
**Ctrl+I** Isolation crop

**Workspaces**  
**Ctrl+space** maximize window  
**Ctrl+alt+space** maximize window  
**Ctrl+alt+space** maximize window

**UI**  
**Ctrl+T** toolbar panel  
**Ctrl+N** sidebar panel  
**Ctrl+I** scroll tabs  
**Ctrl+V** values +/-  
**Ctrl+R** copy \* to selected  
**Ctrl+V** copy \* to selected

**organize**  
**F2** Rename object  
**Ctrl+F2** batch rename  
**Ctrl+G** Vertex groups  
**Ctrl+P** Parent element  
**Alt+P** Parent

**Quick** favourites  
**F5** ... **F10** empty keys  
**add/change** shortcut  
**add to quick** favourites

**Add to Asset browser**  
**Ctrl+M** Mark as asset  
**Ctrl+M** Mark as asset  
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**Extrude**  
**E** Extrude  
**alt+E** Extrude  
**Ctrl+E** Extrude

**Face** or edge  
**F** Face or edge  
**alt+F** Face or edge  
**Ctrl+F** Face or edge

**Connect** vertices path  
**J** Connect  
**alt+J** Connect  
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**K** Knife  
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**M** Merge  
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**P** Separate  
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**U** unwrap  
**Ctrl+U** unwrap  
**alt+U** unwrap  
**Ctrl+U** unwrap

**Render** **f12**  
**Ctrl+f12** Render animation  
**f11** show last render  
**Shift+S** Save image

**animation**  
**space** PLAY  
**alt+I** Insert keyframe  
**alt+R** Remove keyframe  
**prev.** frame  
**next** frame

**Free hand** draw  
**Ctrl+O** Erase  
**Shift+alt+O** Polygon draw  
**alt+O** stroke select

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**alt+O** stroke select



## blender

short  
cuts

## infographicmap

Tips and keys for blender

An infographic tribute to blender made by giudansky.com

Learn Blender 3d in a single sheet poster.

**shift + A = Add object**  
object view, edit view, node editordrag on top right  
angles in view**Rotate**  
view**shift + move = Pan**  
view**Zoom**  
view

cursor, origin, orientation

**Cursor move****shift + S = cursor align****shift + C = reset 3d cursor****space = Search**  
functions**shift + R = repeat last action**

The easiest way for repetitive actions

**ctrl + L = make links**  
from active to select**ctrl + C = Copy**  
attributes

modeling (edit mode)

**F = Create face**  
or edge between selected**I = inset**  
face**E = Extrude****ctrl + click** = click extrude**ctrl + B = Bevel**  
faces or edges**shift + ctrl + B = bevel vertex**

segments

**ctrl + R = Loopcut**  
and slide**shift + K = Knife**  
cut a face**ctrl** = snap on midpoint**Z** = cut through**+ C** = angle constrain**alt + R = Spin**  
selected**alt + M = Merge**  
selected**P = Separate**  
selected

mustload - addons

The addons you should activate at first blender load

**LoopTools**: bridge faces, flatten faces, convert faces to circle shape, distribute vertex, etc.**Import Images as plane**: hang a painting in a click.**Copy attributes menu**: add functionality to inset face creation.**Material utils**: add material menu.**Extra objects**: add gears, diamonds, pipes or the old dear teapot (SHIFT+A).**Add curve sapling**: bonsai or sequoias, tree generator.**Node wrangler**: material node previews and more.**Surface**: create surfaces with

materials

**ctrl + Q = Material utils**  
menu - assign or select by material**ctrl + space** = node w. menu**ctrl + shift** = preview selected node

sculpt (sculpt mode)

**F = Brush**  
size**shift + F** = brush strength**ctrl** = add / subtract**shift** = soft**Render = f12****f11** = show last render**f3** = Save image**ctrl + B** = border render view**ctrl + alt + B** = reset border render**D + click** = Draw stroke  
free hand**ctrl + D + click** = draw stroke  
line**+ click** = draw stroke  
poly line**D + click** = Erase**ctrl + alt + C = set origin**  
view

orientation set

view, gimbal, normal, global, local

**Cursor move****shift + S = cursor align****shift + C = reset 3d cursor****space = Search**  
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mustload - addons

The addons you should activate at first blender load

**LoopTools**: bridge faces, flatten faces, convert faces to circle shape, distribute vertex, etc.**Import Images as plane**: hang a painting in a click.**Copy attributes menu**: add functionality to inset face creation.**Material utils**: add material menu.**Extra objects**: add gears, diamonds, pipes or the old dear teapot (SHIFT+A).**Add curve sapling**: bonsai or sequoias, tree generator.**Node wrangler**: material node previews and more.**Surface**: create surfaces with

materials

**ctrl + Q = Material utils**  
menu - assign or select by material**ctrl + space** = node w. menu**ctrl + shift** = preview selected node

sculpt (sculpt mode)

**F = Brush**  
size**shift + F** = brush strength**ctrl** = add / subtract**shift** = soft**Render = f12****f11** = show last render**f3** = Save image**ctrl + B** = border render view**ctrl + alt + B** = reset border render**D + click** = Draw stroke  
free hand**ctrl + D + click** = draw stroke  
line**+ click** = draw stroke  
poly line**D + click** = Erase**ctrl + alt + C = set origin**  
view

orientation set

view, gimbal, normal, global, local

**Cursor move****shift + S = cursor align****shift + C = reset 3d cursor****space = Search**  
functions**shift + R = repeat last action**

The easiest way for repetitive actions

**ctrl + L = make links**  
from active to select**ctrl + C = Copy**  
attributes

modeling (edit mode)

**F = Create face**  
or edge between selected**I = inset**  
face**E = Extrude****ctrl + click** = click extrude**ctrl + B = Bevel**  
faces or edges**shift + ctrl + B = bevel vertex**

segments

**ctrl + R = Loopcut**  
and slide**shift + K = Knife**  
cut a face**ctrl** = snap on midpoint**Z** = cut through**+ C** = angle constrain**alt + R = Spin**  
selected**alt + M = Merge**  
selected**P = Separate**  
selected

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