**Shortcouts & Tips for MAYA**

**Move around**

ALT + LMB → Rotate scene

ALT + MMB → Move around

ALT + RMB → Zoom IN / Zoom OUT

F → Focus object

**View / Display**

SPACE → Different points view / Disable this to only one view

→ Holding Space → Right Click → Select different views

General or Modeling – Standard are the workspace to use.

- Display → Grid → Size = 100 units

Lines = 10 units

Subdivisions = 1

(1 cm = 1 unit)

Display → Heads up Display → Poly count → Polygon counter

Put objects in 0- 0 -, 0 for symmetry

ALT +5 → Disable / Enable Wireframe mode (you can see the object properly disabling it).

CTRL + G → Group objects

**Modelling objects**

F8 → Object mode / Disable object mode

Create → Poly param → Interactive creation → Allow to create objects in a more interactive way (instead of the default objects).

Q → Select objects

W → Move objects

Shift + Move → Extrude

If we rotate and object and we want to extrude in the same direction

→ Left Mouse → Component

E → Rotate objects

To rotate a group of objects you can Group then first and then rotate them.

R → Scale objects

Shift + Scaling → Create an insight

X (while creation object) --> Snap object along the grid

B → Turn on/off soft selection.

Outliner Menu→ To see all your objects created, lights, cameras etc

1, 2 or 3 → Smoth the model. Rounds the model and subdivided it. (is a preview)

4 → Wireframe mode

5 → Shaded mode (Solid mode)

6 → Shaded moded but with texture maps

7 → View Scene with lights

HOLD SHIFT → Multiple selection

→ Double click After selecting the first edge / vertex→ Select loop of vertices, edges etc

→ While Selecting a face and Move option→ Extrude

and Scaling → Extrude

+ D → Duplicate object

If we want special duplicates (like duplicate multiple objects following and order and the same separation) We go Edit → Duplicate Special Options

HOLD RMB → Change between Object mode, edge, vertex, face etc.

→ While selecting a vertex, you can connect vertices with Connect components. If we select the next vertices and press G is going to repeat the operation

→ While selecting edges → Connect tool → Press middle button → Move right and left to connect vertices. Press enter to accept

Select the edges and then Bevel to make it rounded.

→ Soften/ Harden edges → Soften edges → Soften the edges

→ Harden edges → Hard the edges

→ Multicut → To make deform objects

CTRL + H → Hide object

CTRL + SUP → Delete vertex

SHIFT + H → Show object

Double click (With edges) → Select the loop → Shift + RMB → Bevel option to get a nice curve.

Live surface → Makes the object magnetic, so you can creates objects on this with the same direction.

SHIFT + RMB

- Multi -Cut option → Can be used to cut the obejct into quads or triangles.

Click RMB to start a new cut and Q to exit the tool.

- Bevel edge → To make nice curves with the edges

- Combine → Combine different objects into one

Isolate things → Menu top view

Create → Curve Tools → Create curves lines

This can create things faster than just modelling (With Revolve or Loft)

When Create an object with this:

Convert it to a polygon → Modify → Convert → Nurbs to Polygons (Less amount polygons in Count)

Select the faces of the object → Face normals → Reverse normals

Loft → You can unite two same curves (Create curtains)

Create an EP Curve → Create → Sweep Mesh → Cable model

→ With this you can select the curve → Curves → Lock Length → Right Click → Control Vertex → You can move the vertex and modify the line

**Optimization**

Mesh --> Cleanup --> See if you object have endgones and delete them.

Always better use different models than extrude. Less polygons.

Squads and triangles > Objects with more than 4 sides

We are working with low poly. So try to avoid the more detail possible.

If the edges don’t contribute to the model delete them or make them useful.

**Render**

Render View (Below Cache option, right to the symmetry) → Render the current frame.

When file saving choose Color Manage Image so it is not too dark

**Unwrapping**

Workspace → UV Editing.

CTRL + 1 → Isolate object

Inside this view we see the normal space (We have to keep the object inside this space).

1º Select faces/object → Right click → Create → Camera Based → You see faces in 3D oriented

Use UV Shells to select the objects

2º Now we can makes cuts to the edges → Shift → Right Click → Cut the vertices selected. / Other way is just select the faces and create UV Shells

3ºNow we can Unfold → Shift → Right Click → Unfold → Unfold

4ºNow we need to orient the object to the UV axis → Shift → Right Click → Orient Shells or Straigthen UV’s

You can stich to pieces together after unfolding (Right → Shift → Stich together) If they overlaap, just flip it

5ºNow we have to fit all in the normal space → Shift → Right Click → Layout → Along U.

6º In the UV Editor select the Checker map

7º In the UV Tool Kit → Go to Transform → Texel Density → This should be the same for all

Uv Snapshots (Camera object) → Save it on your sourceImages → UVLayout.png

→ Sizes 1024 for both (Select faces first)