

Commonly used polygonal modeling tools

TIP: When modeling in polygons, be sure to have “Polygons” selected in the drop down menu in the upper left hand corner of your Maya GUI.

NOTE: Most commonly used polygonal tools are located on your polygons shelf.

Creating Polygonal Primitives:

Create > Polygon Primitives > Sphere, Cube, Plane, etc (all located on your Polygons shelf)

Extrude: Extruding components to create new geometry.

Be sure the correct component is selected!! DO NOT hit “extrude” when you have the whole object selected or you will end up with hiding faces, vertices and edges that will mess with your modeling and texturing.

Select your components (faces, or edges). Edit Mesh > Extrude

Cut Faces Tool: Great for when you need to cut faces across an entire object. Very dependant on camera view though, so be careful to only use it in your orthographic views.

Select the object. Edit Mesh > Cut Faces Tool. Left click on one side of the object and click again on the other side when you have your line lined up where you want it. Hold on SHIFT to move that line in exact 45 degree steps.

Insert Edge Loop Tool: Inserts a continuous loop of edges on your object. Must be between two other continuous loops.

Select the object. Edit Mesh > Insert Edge Loop Tool. Left click and HOLD on the edge that you want to insert your loop through, drag the green vertice that appears until you are happy with the placement of your loop.

Split Polygon Tool: Best way to create the exact geometry you want in a very specific spot on the model.

Select the object. Edit Mesh > Split Polygon Tool: Left click and hold on the edge that you want to begin your cut, drag the vertice that gets created along that edge till you're happy with where your cut will begin. Then left click at each additional point where you want to create new geometry. It's best to cut across edges and faces.

Bridge Tool: Create a bridge of polygons across two holes in the polygon object.

Select the faces around the holes that you want to bridge between. Edit Mesh > Bridge. Increase the divisions in the tool Input to increase the amount of geometry spanning those holes.

Merge: Best way to get rid of floating vertices, edges or faces. Also indispensable when combining objects into one polygon to create a seamless surface.

Select the components of the same type that you want to merge. Edit Mesh > Merge > Options. Adjust the threshold to determine how far apart the components are before they start to snap together.

Bevel: To soften the edge of a polygon, you can split an edge into multiple parts with the Bevel tool.

Select the Edge or Edges you want to Bevel. Edit Mesh > Bevel > Options. Adjust the width and segments until you have the Bevel amount you want.