

## Lesson 1 : Maya Interface and Viewport Operating

Download Maya Student Version from this Link

<https://www.autodesk.com/education/edu-software/overview?sorting=featured&page=1>

### Interface

- Main Menu Bar - Context Sensitive
- Input Line / Status Line
- Shelf
- Toolbar
- Viewport
  - Viewport Specific Menu
  - Viewport Specific Toolbar
- Channel Box
- Attribute Editor (Ctrl+A)
- Modeling Toolkit
- Layer Editor
- TimeLine
- Range Editor
- Range Slider
- Command Line
  - Python, MEL - Maya Embedded Language
- Help Line

## Views

- Perspective Views
- Orthographic View ( Top, Bottom, Left, Right, Front, Back )

## Viewport Operating

- Zoom In - Mouse Wheel Up
- Zoom Out - Mouse Wheel Down
- Smooth Zoom In - Alt + Right Click → Drag Right Side
- Smooth Zoom Out - Alt + Right Click → Drag Left Side
- Rotate / Tumble - Alt + Left Click → Drag
- Move / Pan - Alt + Middle Mouse Button → Drag

Press Space → Change Viewport Layout

Press & Hold Space → Open Hot Box

## Lesson 2 : Create Polygon Primitives

- Create → Polygon Primitive

- Sphere
- Cube
- Cylinder
- Cone
- Torus
- Plane
- Disc
- Platonic Solid
- Pyramid
- Prism
- Pipe
- Helix
- Gear
- Soccer Ball

Play with Subdivision property from Channel Box

## Lesson 3 : Move, Rotate And Scale Tool

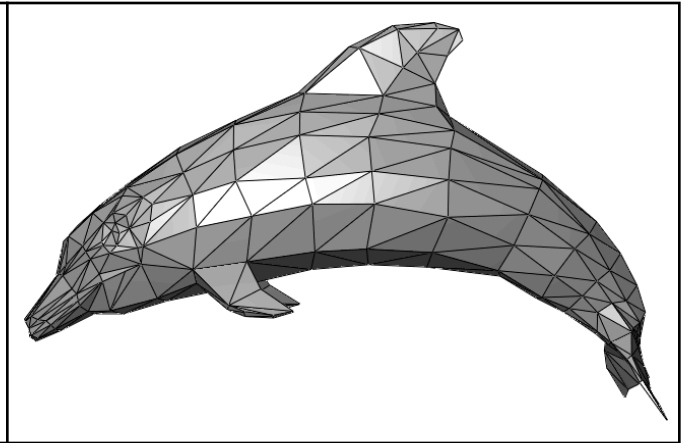
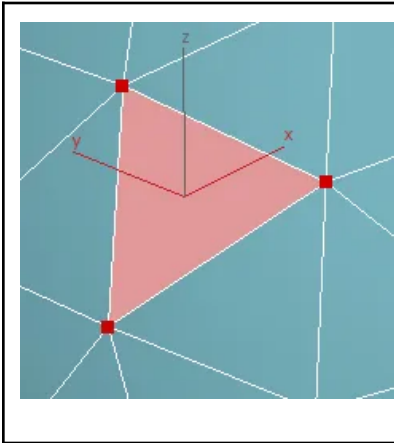
- Move Tool ( W )
  - It is used to Move Object
- Rotate ( E )
  - It is used to Rotate object on axis
- Scale ( R )
  - It is used to Scale object

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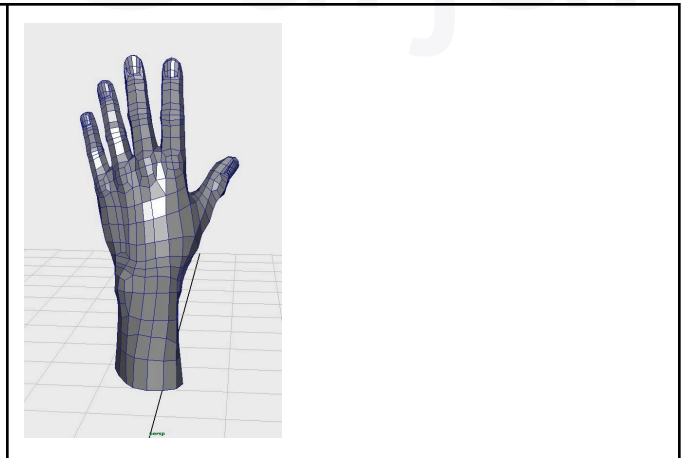
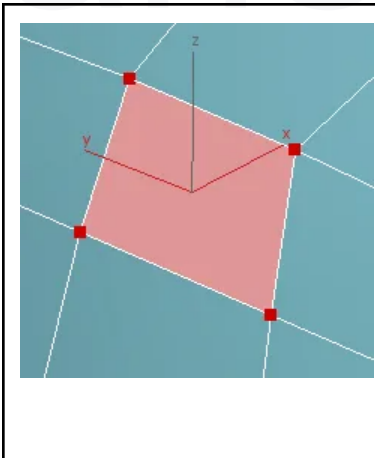
## Lesson 4 & 5 : What is Mesh ?

- **Vertex**
  - It is simply a point in three-dimensional space.
- **Edge**
  - An edge is a straight line formed by joining two vertices.
- **Face**
  - Closed areas by connecting minimum 3 vertices are called face.
- **Polygon**
  - A polygon is made up of different closed planner shapes having straight sides.
  - The most commonly used shapes in 3d polygons are triangles and quadrilaterals (Quad)
- **Mesh**
  - A mesh model consists of vertices, edges and faces that use polygonal representation, including triangles and quad, to define a 3d shape.

- Examples of Tri Poly



- Example of Quad Poly



## Lesson 6 : Polygon Component

### Lesson 7

#### Wireframe Mode, Smooth Shaded Mode, Change Pivot Point, Snap

- Wireframe Mode
  - 4
- Smooth Shade All
  - 5
- Wireframe On Shaded Active/Deactivate
  - Alt + 5
- Snap to Grid
  - X
- Snap to Vertex
  - V
- Snap To Edge
  - C
- Activate/Deactivate Pivot Point Modification
  - D
- Center Pivot
  - Modify → Center Pivot or
  - Click on Center Pivot Icon in Poly Modeling Shelf

## **Lesson 8 : Simple Polygon Modeling**

- Simple Table Polygon Model
- Simple Chair Polygon Model

## **Lesson 9 : Simple Polygon Modeling**

- Cartoon Bird

## **Lesson 10 : World and Object Axis Orientation**

## **Lesson 11 : How to Color Object**

- Lambert is Default Material
- Blinn Material

## **Lesson 12 : Duplicate With Transform**

- Duplicate : Ctrl + D
- Duplicate With Transform : Shift + D



## Lesson 13 : Polygon Tomb Model

## Lesson 14 : Polygon Bicycle Model

## Lesson 15, 16, 17, 18, 19, 20, 21 : Mesh Menu

### Modeling Menu Set

- Mesh
  - Combine
  - Boolean
    - Union
    - Difference
    - Intersect
  - Separate
  - Conform
  - Fill Hole
  - Reduce
  - Retopologize
  - Smooth
  - Triangulate
  - Quadrangulate
  - Mirror

## Lesson 22, 23, : Edit Mesh Menu

- Edit Mesh
  - Add Divisions
  - Collapse
  - Connect
  - Detach
  - Merge
  - Merge To Center
  - Transform
  - Extrude
  - Bevel
  - Bridge
  - Circularize

## Lesson 24, 25 : Edit Mesh Menu Options

- Edit Mesh
  - Average & Chamfer Vertices
  - Duplicate
  - Extract
  - Poke
  - Wedge

## **Lesson 26, 27 : Mesh Tools Menu**

- **Mesh Tools**
  - **Append To Polygon**
  - **Connect**
  - **Crease Tool**
  - **Create Polygon**
  - **Insert Edge Loop**
  - **MultiCut**
  - **Offset Edge Loop**
  - **Slide Edge**
  - **Target Weld**
  - **Quad Draw**

## **Lesson 28 : Coffee Mug Model**

## **Lesson 29 : Pencil Model**

## **Lesson 30 : Well Model**

## **Lesson 31 : Skateboard Model**

## **Lesson 32 : Ice Cream Model**

**Lesson 33 : Rocket Game Asset**

**Lesson 34 : UV Editor**

**Lesson 35 : Dice Model**

**Lesson 36 : Barrel Model**

**Lesson 37 : Door Model**

**Lesson 38 : Topology In 3D**

**Lesson 39 : Key Model**