



Interface & Navigation

Viewport Navigation

Orbit	Alt + Middle Mouse Button
Pan	Middle Mouse Button
Zoom	Alt + Ctrl + Middle Mouse Button (Vertical Drag)
Zoom Extents	Z
Zoom Extents All	Shift + Z
Perspective/Orthographic Toggle	P

UI Elements

Command Panel	Right side of the interface. Contains tools for creating, modifying, and animating objects.
Timeline	Located at the bottom of the interface. Used for animation playback and keyframe manipulation.
Main Toolbar	At the top, provides quick access to common functions like open, save, undo, and redo.
Viewport Controls	Top-left corner of each viewport, allows changing the viewport display and shading modes.
Status Bar	At the bottom, shows coordinate information, tool tips, and prompts.

Basic Hotkeys

Undo	Ctrl + Z
Redo	Ctrl + Y
Save	Ctrl + S
Open	Ctrl + O
New	Ctrl + N

Modeling Fundamentals

Primitive Objects

Box	Creates a rectangular prism. Define length, width, and height.
Sphere	Creates a spherical object. Define radius and segments.
Cylinder	Creates a cylindrical object. Define radius, height, and segments.
Cone	Creates a cone-shaped object. Define radii, height, and segments.
Tube	Creates a tube-shaped object. Define inner and outer radii, height, and segments.
Torus	Creates a donut-shaped object. Define radii and segments.

Modifier Stack

The Modifier Stack is a list of modifiers applied to an object, allowing non-destructive editing.	
•	Each modifier performs a specific operation (e.g., Bend, Twist, Taper).
•	Modifiers can be reordered, enabled/disabled, and their parameters adjusted.
•	Common modifiers include Edit Poly, Turbosmooth, and UVW Map.

Transformations

Move	W - Moves an object along the X, Y, or Z axis.
Rotate	E - Rotates an object around the X, Y, or Z axis.
Scale	R - Scales an object uniformly or non-uniformly along the X, Y, or Z axis.
Snapping	S - Toggles snapping to vertices, edges, faces, or grid points for precise placement.
Align	Alt + A - Aligns objects based on their pivot points or bounding boxes.

Texturing & Materials

Material Editor

The Material Editor is used to create and edit materials applied to objects.	
•	Compact Material Editor: A simplified interface for quick material assignments.
•	Slate Material Editor: A node-based interface for complex material creation.
•	Common material types include Standard, Physical Material, and Arnold Standard Surface.

Basic Material Parameters

Diffuse Color	The base color of the material.
Specular Color	The color of the highlights.
Glossiness	The size and sharpness of the highlights.
Opacity	The transparency of the material.
Bump/Normal Map	Adds surface detail using textures.

UVW Mapping

UVW Map Modifier	Applies texture coordinates to an object.
Mapping Types	Planar, Cylindrical, Spherical, Box
Real-World Map Size	Ensures textures are scaled correctly based on the object's real-world dimensions.
Channel	Specify UV channel to use for mapping.

Animation & Rendering

Keyframe Animation

Set Key	Creates a keyframe at the current time for selected objects.
Auto Key	Automatically creates keyframes when object properties are changed.
Timeline Navigation	Use the timeline to scrub through the animation and adjust keyframes.
Curve Editor	Fine-tune animation curves for smoother motion.
Dope Sheet	Edit and manage keyframes in a spreadsheet-like interface.

Rendering Setup

Render Setup Window	F10 - Opens the render setup window to configure rendering settings.
Renderer	Choose a renderer (e.g., Arnold, Scanline, V-Ray).
Output Size	Set the resolution and aspect ratio of the rendered image.
Render Elements	Output additional render passes (e.g., diffuse, specular, shadow) for compositing.
Environment	Set background color or image, add atmospheric effects.

Lighting

Standard Lights	Omni, Spot, Directional, Area
Arnold Lights	Skydome, Mesh Light, Photometric Light
Light Parameters	Intensity, Color, Shadows
Shadow Types	Ray Traced, Shadow Map