

## Materials Lab

- Picture Library
- Deep Texture Editor
- Sky Lab
- Motion Lab
- Object Editor
- Show Selected Path as Ribbon
- Play or Pause
- Next Key Frame
- Previous Key Frame
- Move to Start of Animation
- Move to End of Animation
- Next Ticker Mark in Timeline
- Previous Ticker Mark in timeline
- Delete All Animation Frames at once
- Move Palette
- Reset Palettes
- Marker
- Turn Anti-aliased Wireframes and Depth Cueing On or Off
- Reset Pan Tool
- Floating Nano-Editor
- Zoom In
- Zoom Out
- Zoom Into a Specific Area
- Zoom In Using the Mouse
- Zoom Out Using the Mouse
- Director's View
- Camera View
- Top
- Right
- Front
- Saved Views #1 through #5
- Reset Views
- Delete Saved Camera Views
- Reset Camera Banking
- Reset Field of View

## Action

- Reset Camera Origin Point
- Reset Views
- Start Fly-around
- Zoom In in Fly-around View
- Zoom Out in Fly-around View
- Slow Down Fly-around View
- Pause/Unpause Fly-around
- Stop Fly-around
- Constrain Trackball to Y-axis
- Constrain Trackball to X-axis
- Turn Off Anti-Aliasing for an object
- Turn On Anti-Aliasing for an object
- Volume Water Plane
- Volume Ground Plane
- Volume Cloud Plane
- Load Preset Tree
- Save Preset Tree

Export Rocks/Imported Meshes	Select mesh, Ctrl+E or click on E button, then Ctrl+D
<b>Terrain Editor</b>	
Access Deep Texture Editor from Terrain Editor	Shift+Click on Picture button or Ctrl+M
Access Picture Library from Terrain Editor	Ctrl+P
New Blank Terrain	Ctrl+N
Revert to Terrain active when TE was opened	Ctrl+Shift+W or Ctrl+Shift+N
Erode Terrain	Ctrl+Shift+E
Raise Terrain	Ctrl+Shift+R
Lower Terrain	Ctrl+Shift+L
Max Brush Level (white)	Ctrl+W
Min Brush Level (black)	Ctrl+B
Reset Clipping Bracket	Ctrl+Shift+C
Flip/Invert Terrain	Ctrl+I
Reset Gradient Bar	Ctrl+Shift+G
Flip Gradient Colors	Ctrl+F
Copy Terrain Grayscale to Clipboard	Ctrl+C
Paste Terrain Grayscale to Terrain Canvas	Ctrl+V
Undo one step	Ctrl+Z

## Negative Metaball

- Sphere with X=20.48, Y=10.24, Z=20.48
- Sphere with X=20.48, Y=40.96, Z=20.48
- Cylinder with X=20.48, Y=5.12, Z=20.48
- Cylinder with X=20.48, Y=40.96, Z=10.24
- Cube with X=4.12, Y=5.12, Z=20.48
- Cube with X=10.24, Y=40.96, Z=20.48
- Pyramid with X=20.48, Y=5.12, Z=20.48
- Pyramid with X=10.24, Y=40.96, Z=20.48
- Cone with X=10.24, Y=10.24, Z=40.96, horizontal
- 2D Disk Horizontal
- 2D Face Horizontal
- Set current object to Positive

## Ctrl+M

- Ctrl+Alt+M or Ctrl+Alt+ minus key on numpad
- Alt+M or Set NumLock, then Alt+ minus key on numpad
- Ctrl+K or Set NumLock, then Ctrl+ plus key on numpad
- Ctrl+T
- Ctrl+E
- Alt+P
- Shift+Period (.)
- Shift+Comma (,)
- [ (left bracket)
- ] (right bracket)
- Period (.)
- Comma (,)
- Ctrl+Shift+Alt+click on Remove Keyframe button
- Spacebar+drag palette
- Alt+Spacebar+click on a palette
- M
- Ctrl+Alt+click Depth Cue Tool
- Alt+click on Pan Tool
- Alt+Spacebar+drag in window
- Plus (+)
- Minus (-) or Shift+0 (on numpad)
- Ctrl+Spacebar + drag a marquee around an area of your scene
- Ctrl+Alt+Spacebar + drag the mouse left in your scene
- Ctrl+Alt+Spacebar + drag the mouse right in your scene
- 1
- 2
- 3
- 4
- 5 through 9
- Alt+click on the Select Views control
- Alt+click on a filled Memory Dot
- Alt+click on Banking control
- Alt+click on Field of View control

## Keys

- Shift+click on Camera Origin Point
- Alt+click on Select Views control
- Ctrl+Y
- Ctrl + drag mouse up
- Ctrl + drag mouse down
- Shift
- Spacebar
- Enter
- Alt+drag on Trackball
- Ctrl+drag on Trackball
- Select Object, click on the A button, press Ctrl+Shift+click on checkmark
- Select Object, click on the A button, press Shift+click on checkmark
- Ctrl+Click Water Plane
- Ctrl+Click Ground Plane
- Ctrl+Click Cloud Plane
- Alt+Click Tree
- Ctrl+Click Tree

## Deep Texture Editor

Clear Texture

## Terrain Exporter

- Preview Pan
- Preview Zoom
- Preview Adjust Contrast
- Preview Adjust Brightness

## Advanced Motion Lab

- Toggle Hierarchy for Object
- Animation Options Dialog for Object
- Toggle Hierarchy for all Animated Objects
- Toggle Hierarchy for Selected Object (if object contains a sub-hierarchy)
- Show All/Show Animated
- Top of List
- Bottom of List

## Shift+Click Metaball

- Ctrl+Click Sphere
- Shift+Click Sphere
- Ctrl+Click Cylinder
- Shift+Click Cylinder
- Ctrl+Click Cube
- Shift+Click Cube
- Ctrl+Click Pyramid
- Shift+Click Pyramid
- Ctrl+Click Cone
- Ctrl+Click 2D Disk Vertical
- Ctrl+Click 2D Face Vertical

## Sun & Moon

Hold down Ctrl+8 and double-click the Sun Control. Continue holding down Ctrl+8 and, in the working window, click where you want to position the sun. A yellow asterisk will show up where you click indicating where you placed the sun.  
 Hold down Ctrl+Alt and double-click the Sun Control. Continue holding down Ctrl+Alt and, in the working window, click where you want to position the sun. A yellow asterisk will show up where you click indicating where you placed the sun.  
 Hold down Ctrl+8 and double-click the Sun Control. Continue holding down Ctrl+8, press X, and, in the working window, click where you want to position the sun. A blue asterisk will show up where you click indicating where you placed the moon.  
 Hold down Ctrl+Alt and double-click the Sun Control. Continue holding down Ctrl+Alt, press Shift, and, in the working window, click where you want to position the sun. A blue asterisk will show up where you click indicating where you placed the moon.

### Select object first ...

8+drag on Reposition control

X+Drag object or Left-click-hold on object, press Ctrl+8, then drag object

Select object first ... Alt+drag on Reposition control

X+Drag object or Left-click-hold on object, press Ctrl+Alt, then drag object

Y+Drag object or Left-click-hold on object, press 8, then drag object

Y+Drag object or Left-click-hold on object, press Alt, then drag object

Z+Drag object or Left-click-hold on object, press a, then drag object

Z+Drag object or Left-click-hold on object, press Ctrl, then drag object

Move positive on X-axis by 10.24 BU

Move negative on X-axis by 10.24 BU

Move positive on Y-axis by 10.24 BU

Move negative on Y-axis by 10.24 BU

Move positive on Z-axis by 10.24 BU

Move negative on Z-axis by 10.24 BU

Move positive on Y-axis by 5.12 BU

+Page Down or +apostrophe (')

Page Up

Shift+Right Arrow

Shift+Left Arrow

Shift+Page Up

Shift+Page Down or Shift+apostrophe (')

Shift+Up Arrow

Shift+Down Arrow

Page Up



## Object Attributes/Multi Replicate/Sky Lab - Text Field Modifiers

Add 1 to value	Up Arrow
Subtract 1 from value	Down Arrow
Add 0.1 to value	Ctrl+Alt+Up Arrow
Subtract 0.1 from value	Ctrl+Alt+Down Arrow
Add 10 to value	Shift+Up Arrow
Subtract 10 from value	Shift+Down Arrow
<b>Random Replicate - Text Field Modifiers</b>	
Add 1 to value	Up Arrow
Subtract 1 from value	Down Arrow

## Rendering

Render	Ctrl+R
Clear and Render	Ctrl+Alt+R
Render Animation	Alt+Shift+R
Resume Render	Ctrl+R
Turn off AA for single object or group	Select object or group, press A button, press Ctrl+Shift+Alt, and click on OK icon
Turn on AA for single object or group	Select object or group, press A button, press Shift, and click on OK icon

## Objects

Multi-selection, Add object to current selection

+Click on object(s)

Shift+Click on object(s)

Remove obscured object from selection

Ctrl+Click on object, when list comes up, Shift+Click on object in list to deselect

Ctrl+Click on object, when list comes up, Shift+Click on object in list to deselect

Select object then +Drag Marquee around area

Select object then Shift+Drag

Marquee around area

### Objects (continued)

Move negative on Y-axis by 5.12 BU	Page Down
Move positive on X-axis by 5.12 BU	Right Arrow or Apostrophe (')
Move negative on X-axis by 5.12 BU	Left Arrow
Move positive on Z-axis by 5.12 BU	Up Arrow
Move negative on Z-axis by 5.12 BU	Down Arrow
Move positive on X-axis by 2.56 BU	Shift+Alt+Up Arrow
Move negative on X-axis by 2.56 BU	Shift+Alt+Down Arrow or Shift+Alt+5
Move positive on Y-axis by 2.56 BU	Shift+Alt+Page Up
Move negative on Y-axis by 2.56 BU	Shift+Alt+Page Down
Move positive on Z-axis by 2.56 BU	Shift+Alt+Right Arrow
Move negative on Z-axis by 2.56 BU	Shift+Alt+Left Arrow
Move positive on X-axis by 0.08 BU	Alt+Right or Alt+Apostrophe (')
Move neTranslatinggative on X-axis by 0.08 BU	Alt+Left Arrow
Move positive on Y-axis by 0.08 BU	Alt+Page Up or Shift+Alt+1
Move negative on Y-axis by 0.08 BU	Alt+Page Down
Move positive on Z-axis by 0.08 BU	Alt+Up Arrow or Shift+Alt+7
Move negative on Z-axis by 0.08 BU	Alt+Down Arrow or Shift+Alt+9
<b>Scaling Objects Interactively</b>	
Increase by 50% on selected side	Select object first ...
Decrease by 50% on selected side	Shift+drag right on control point once for each increase
Increase by 50% from center	Shift+drag left on control point once for each increase
Decrease by 50% from center	Shift+Alt+drag right on control point once for each increase
Scale from center	Shift+Alt+drag left on control point once for each increase
Scale from opposite side	Alt+drag on control point
Scale from specific side	Click on control point then press Ctrl+Alt and drag

