



Ae

PRODUCING MOTION GRAPHICS
WITH ADOBE AFTER EFFECTS

WORKSHOP 1: THE FUNDAMENTALS



WORKSHOP CONTENT OVERVIEW

1) Animation Intro and Getting Started with AE

- Introduction
- Traditional Animation
- AE 101
- Setting Up a Composition
- Linking Time and Space
- S.T.R.A.P. Five Layer Transformations

2) Rows of Layers

- Layer Basics
- Layer Trimming
- Stretching, Reversing and Frame Blending Layers
- Motion Blur

3) Transfer Modes, Masks and Mattes

- Transfer Modes
- Masks and Masking
- Track Mattes

4) Lights, Cameras and 3D Space Intro

- 3D Space
- Cameras
- Lighting in 3D

5) Building and Managing Hierarchies

- Parenting, Follow the Leader
- Nesting Compositions
- Pre-Composing
- Collapsing Transformations

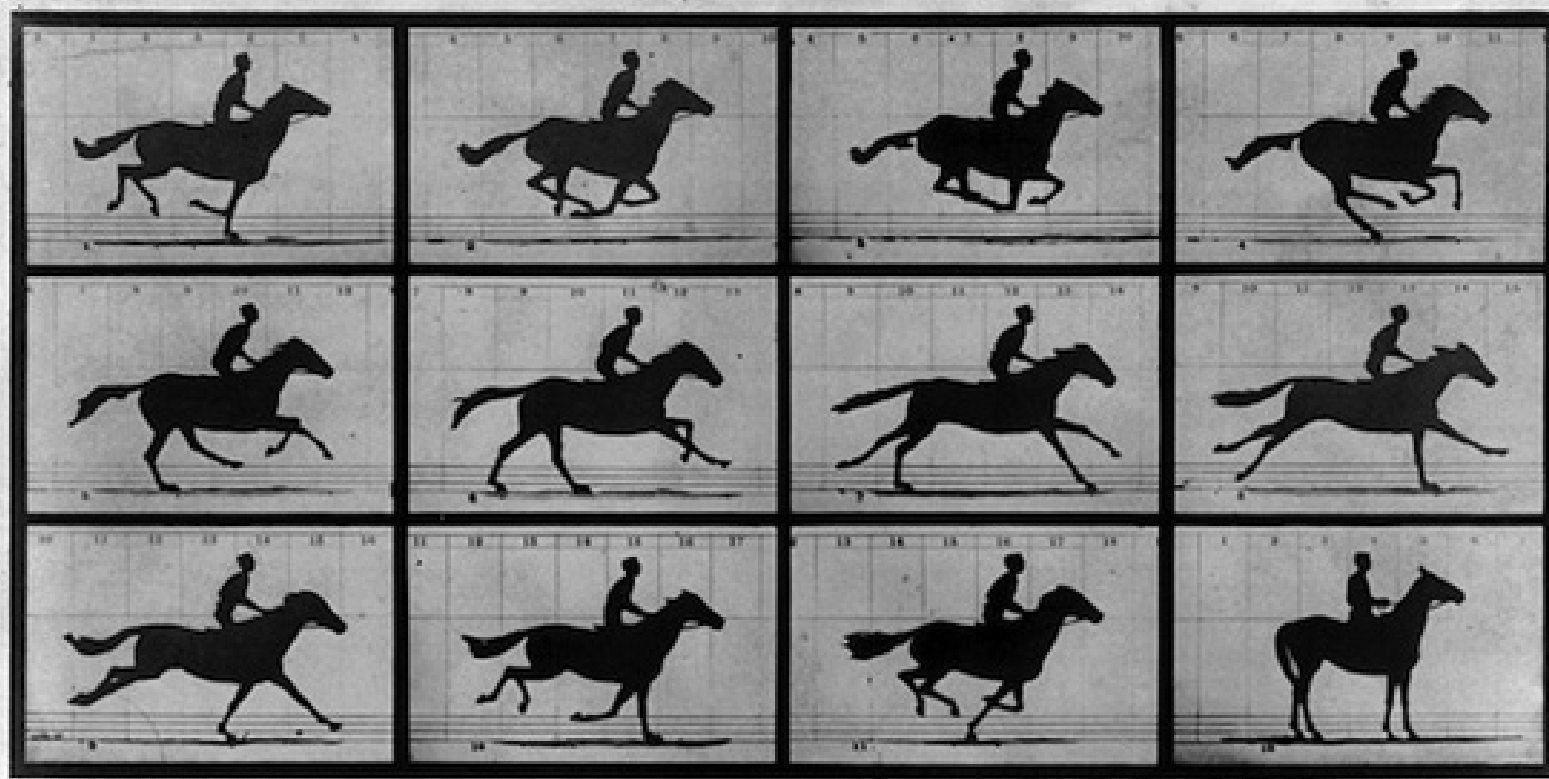
6) Integral Effects

- Applying Effects
- Adjustment Layers
- Black Solid Flexibility
- Favorite Integral Effects

7) Importing and Rendering

- Import and Interpret
- Render Queue, Settings, Output and Templates

INTRODUCTION TO WORKSHOP 1 – “*Knowledge is the currency of the universe*”



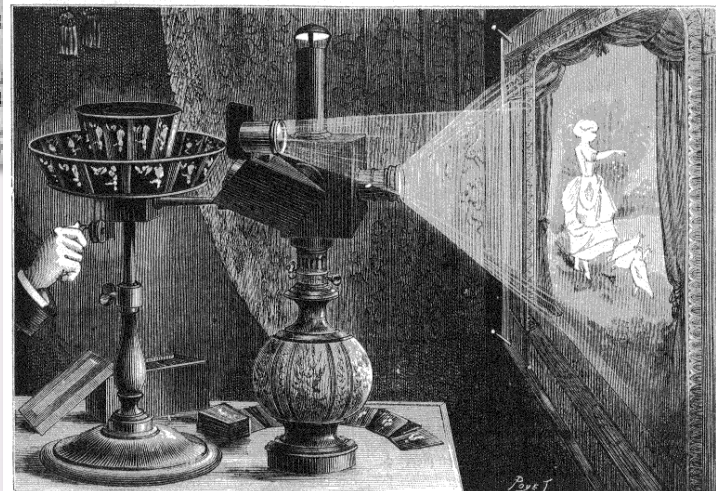
Copyright, 1878, by MUYBRIDGE.

MORSE'S Gallery, 417 Montgomery St., San Francisco.

French inventor Charles-Emile Reynaud improved on the Zoetrope idea by placing mirrors at the center of the drum. He called his invention the Praxinoscope.



THE HORSE
M. L.
LAND STANFORD
of twenty-seven inches
of progress during a single
of four inches each. The eye



Nouveau praxinoscope à projection de M. Reynaud.



TRADITIONAL ANIMATION – “Study the past if you would define the future...”

Stretch and squish

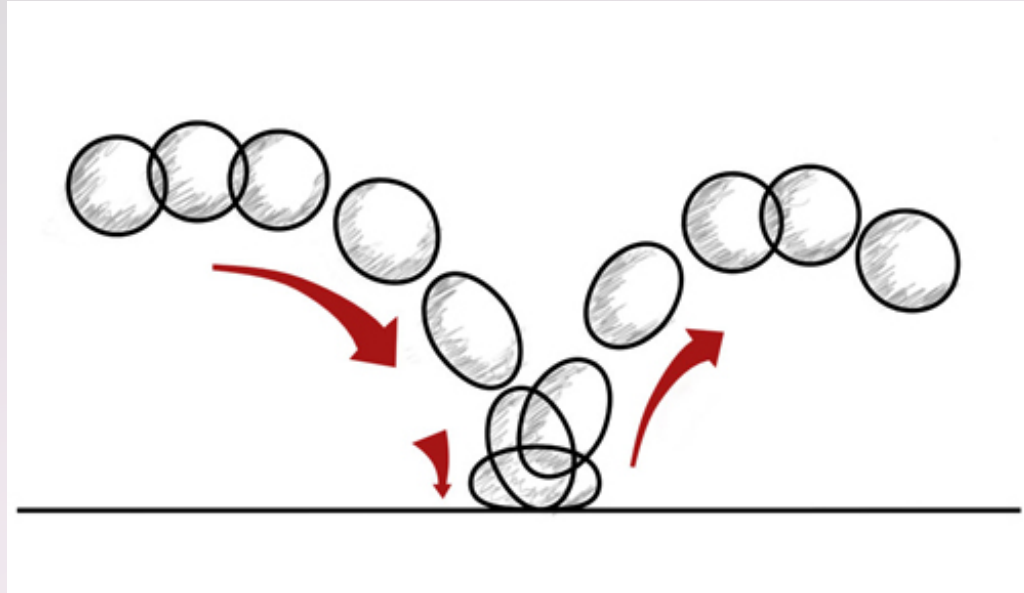
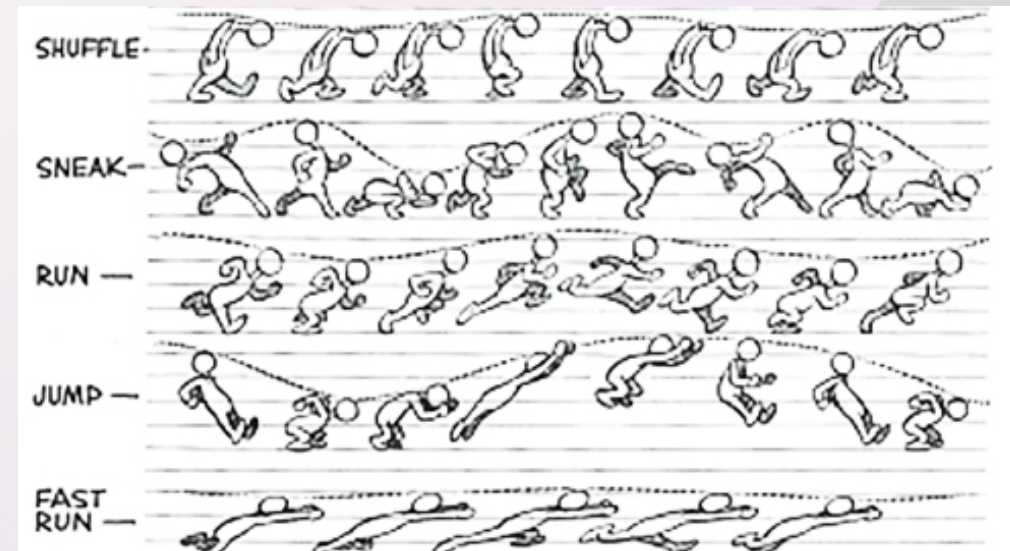


Illustration and frame based sequencing



Adobe After Effects 101 – “Some like to study, some like to jump in...”

The screenshot shows the Adobe After Effects CC 2014 interface. The main composition window displays a blue background with a white person icon in a circle, labeled "SAP TRIAGE TEAM". A speech bubble next to it says "2 DAYS ESTIMATED RESOLUTION TIME". To the left, a box says "STATUS UPDATE REQUEST". Below the icon, it says "NEW WAY".

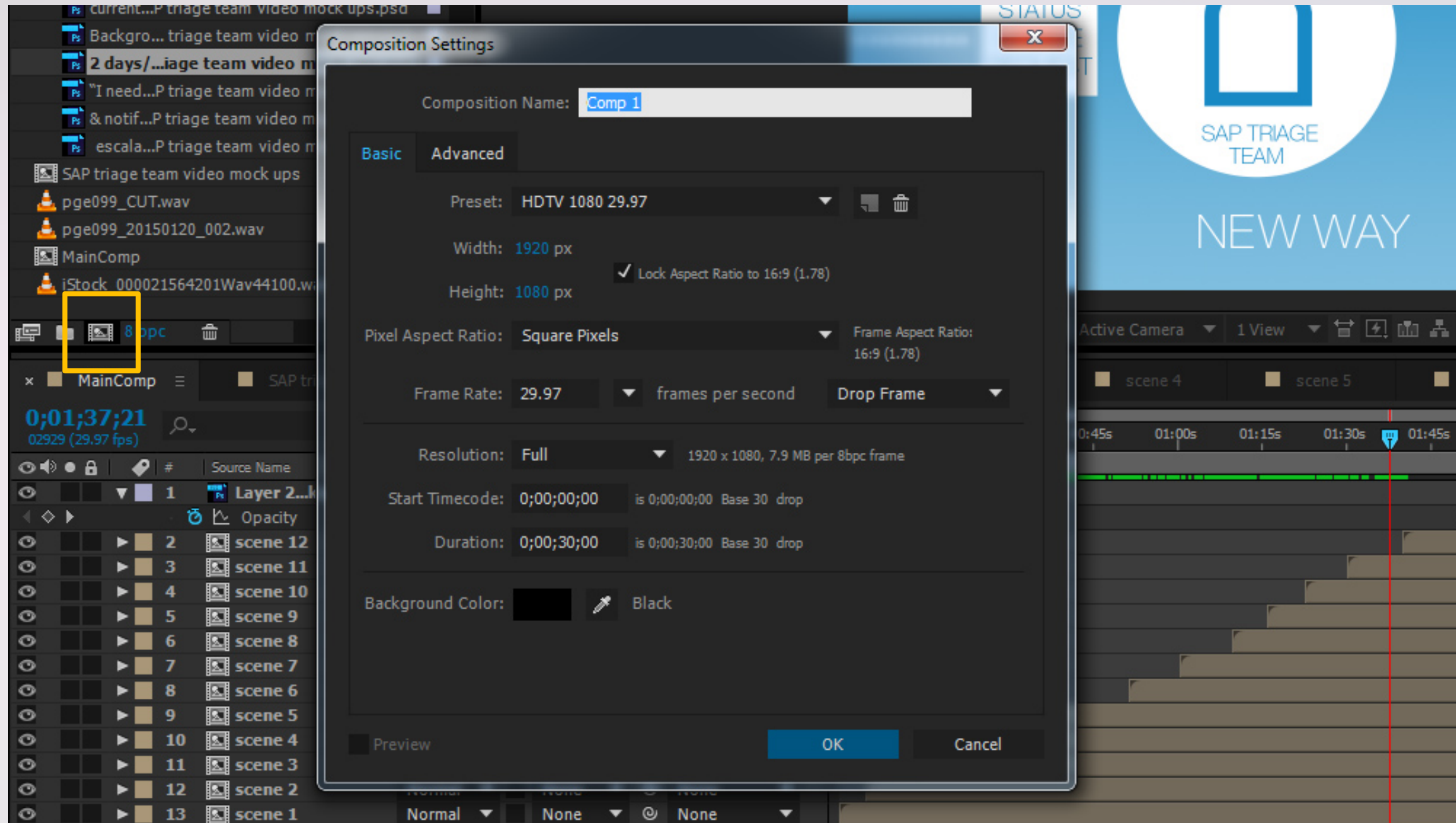
Annotations in yellow text are placed over the interface:

- Menus/tools**: Points to the top menu bar.
- Media Assets**: Points to the Project panel on the left.
- Comp Window**: Points to the main composition preview window.
- AE ver 13**: Points to the version information in the bottom left of the composition window.
- Info Audio Playback**: Points to the Info panel on the right.
- Layers**: Points to the Layer panel at the bottom.
- Timeline**: Points to the timeline at the bottom.

The interface includes a Project panel on the left with a list of assets, a main composition window, an Info panel on the right, and a timeline at the bottom with a layer panel. The timeline shows a sequence of scenes from 00:00 to 04:30.

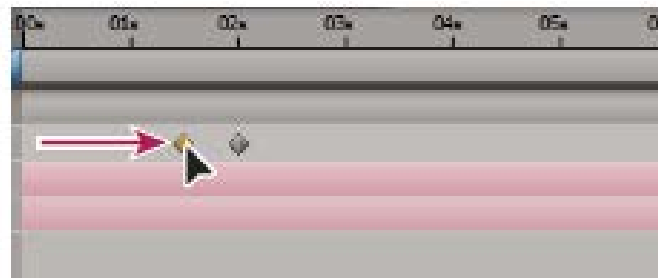
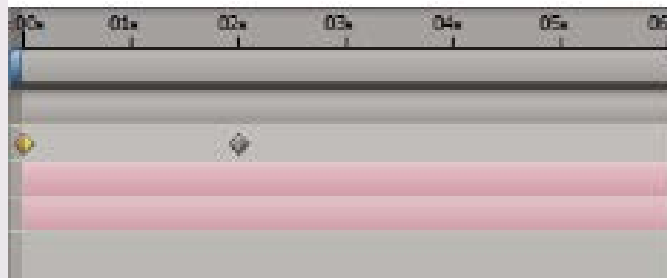
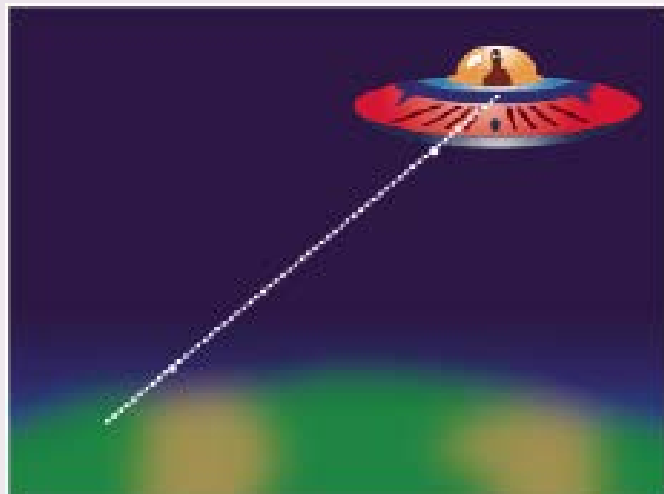
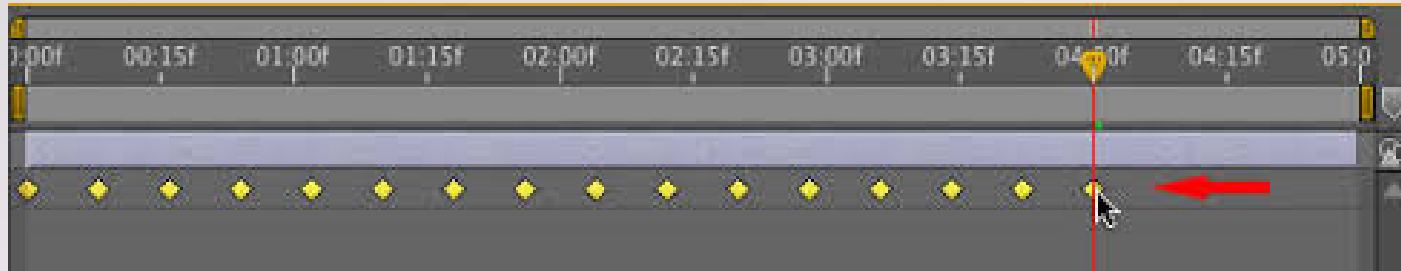
SETTING UP A COMPOSITION – The first step to every new project


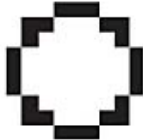





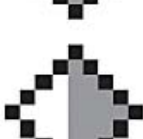
At the bottom of the “Project Media Assets” window click the new comp icon



LINKING TIME AND SPACE – How to wrap your head around this concept

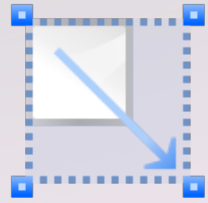
Keyframes and interpolation



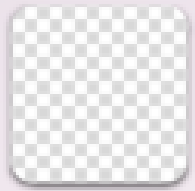
-  *Linear*
-  *Auto Bézier*
-  *Bézier*
-  *Bézier/Linear*
-  *Linear/Hold*
-  *Bézier/Hold*
-  *No interpolation before*
-  *No interpolation after*

S.T.R.A.P. FIVE LAYER TRANSFORMATIONS – Remember this acronym

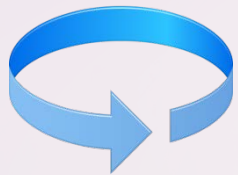
These are hotkeys too!



S - Scale



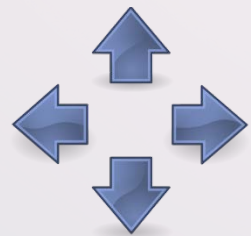
T – Transparency



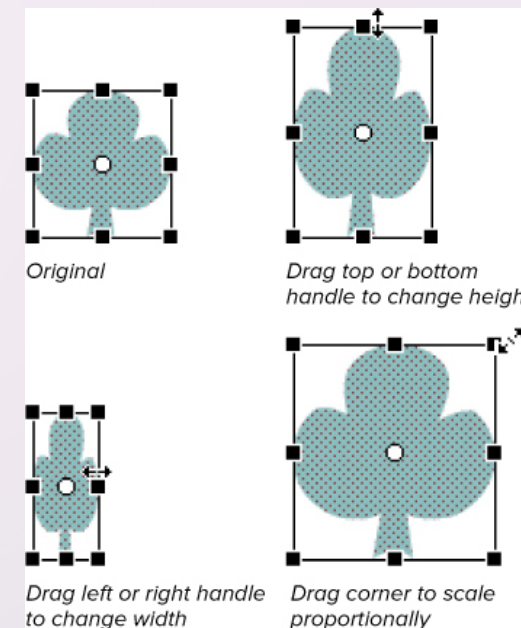
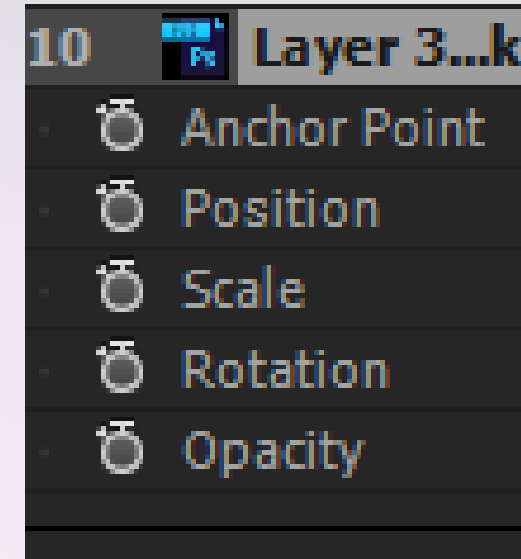
R – Rotation



A – Anchor Point



P - Position



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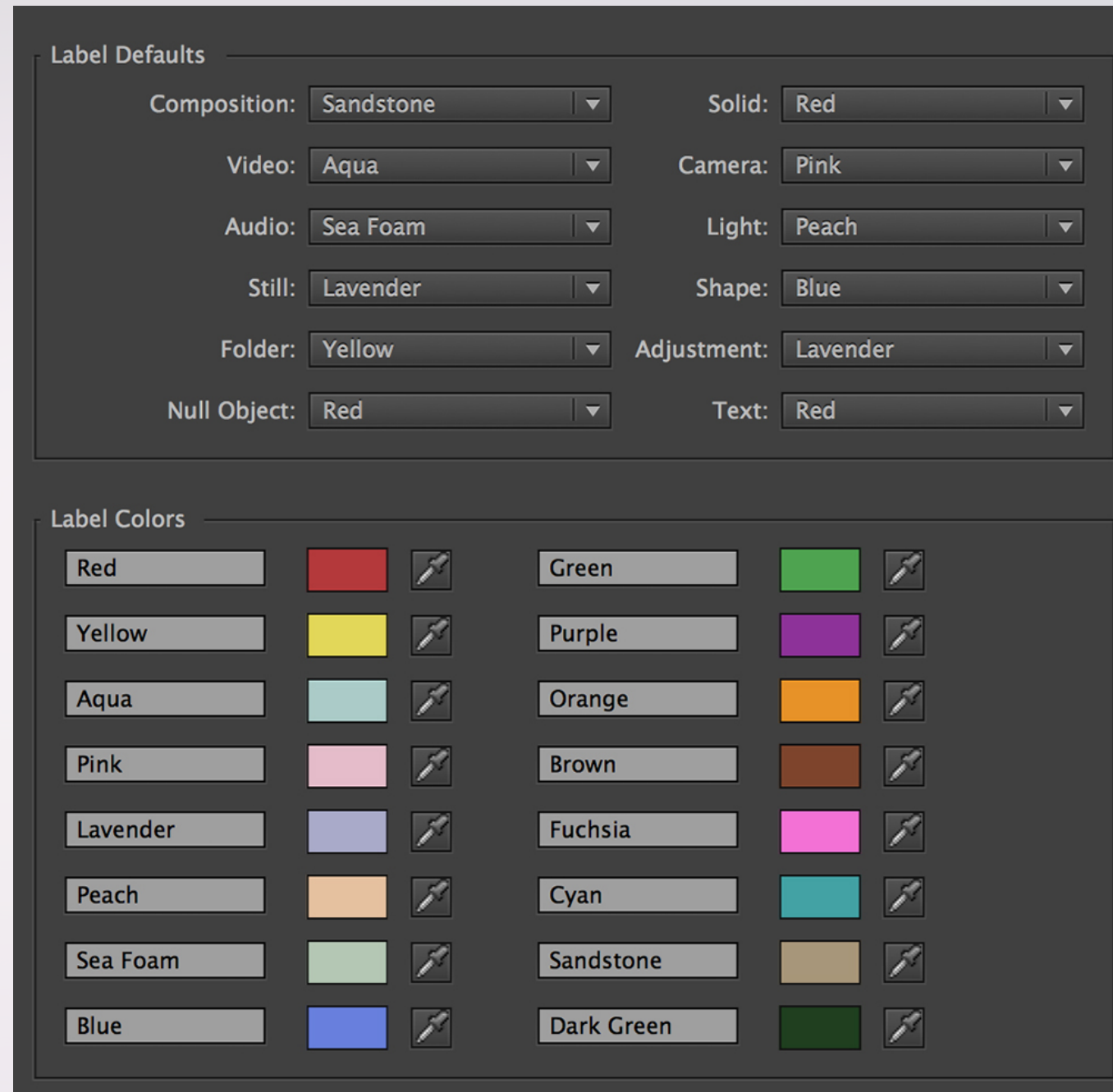
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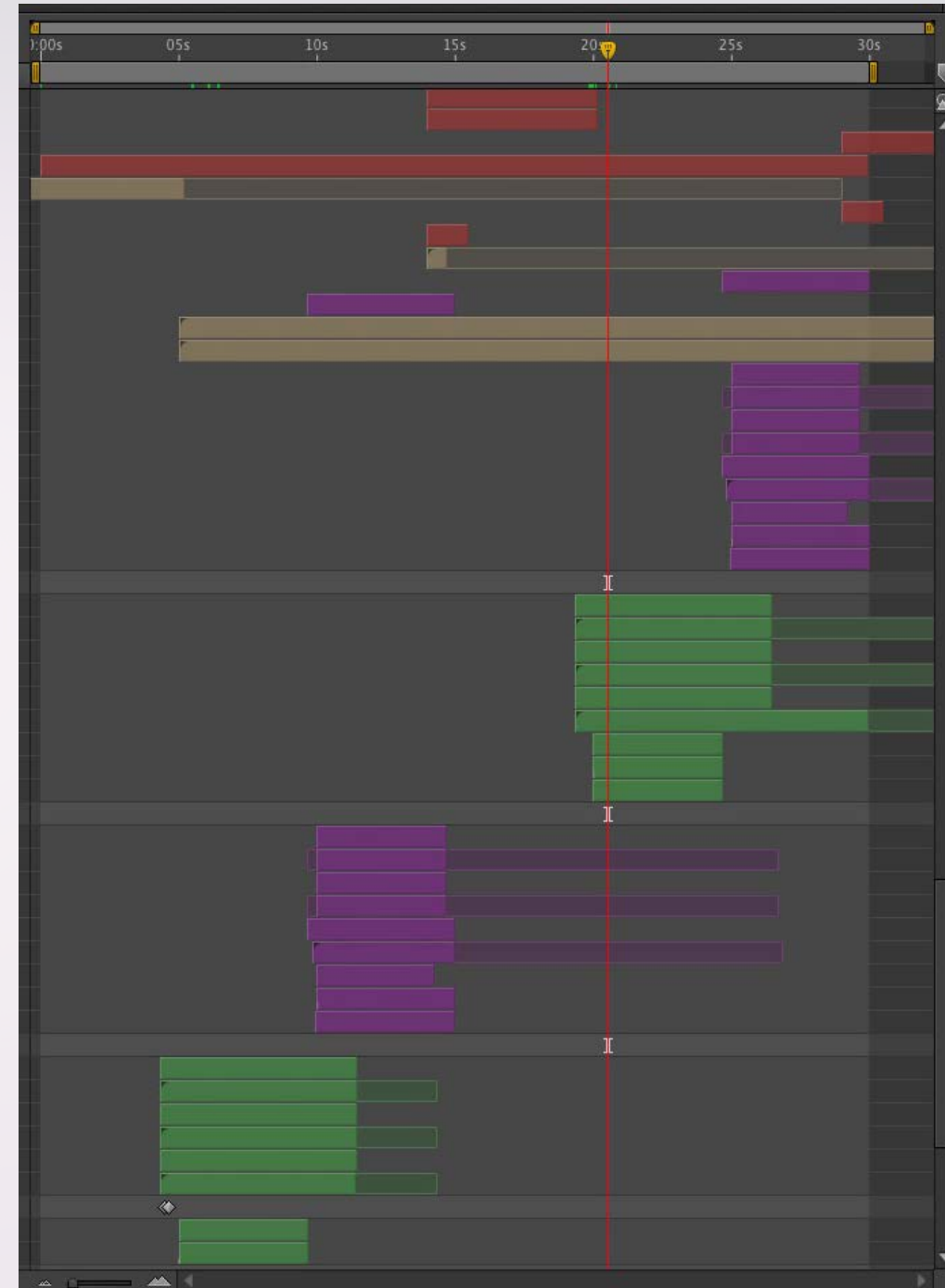
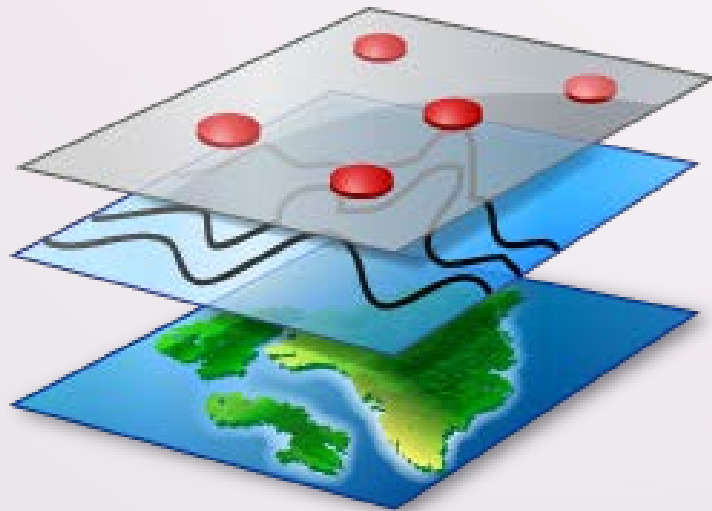
LAYER BASICS – Tips for managing and working more efficiently

- Selecting
- Moving in time
- Stacking hierarchy
- Duplicating
- Soloing
- Renaming
- Replacing source
- Replacing footage
- Marking and Markers
- Uber view U key
- Taking snapshots
- Align and distribute
- Color coding
- Switches overview



LAYER TRIMMING – Learn how to edit layers

- Nonlinear editing 101
- In and outs
- Trimming
- Moving
- Sequencing
- Sequence into new comp
- Splitting and no rejoin



STRETCHING, REVERSING AND FRAME BLENDING LAYERS

Time stretch

This feature can be used to speed up or slow down video, audio and comp layers. Based off of value = 100%.

Reversing

This feature can be used on video, audio and comp layers to play from back to front

Frame blending

This feature can be used on video, audio and comp layers to play from back to front

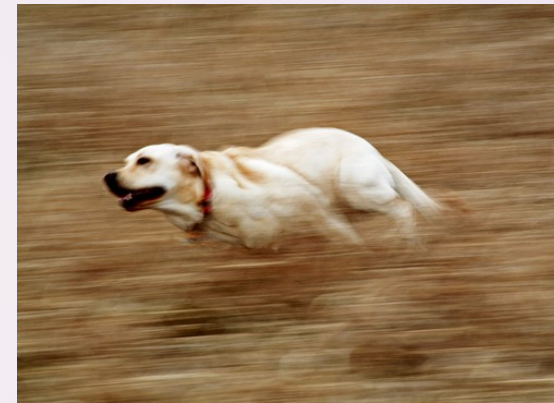


MOTION BLUR – It's created by your human brain

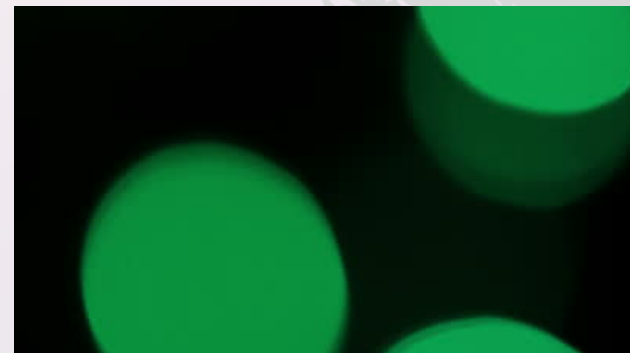
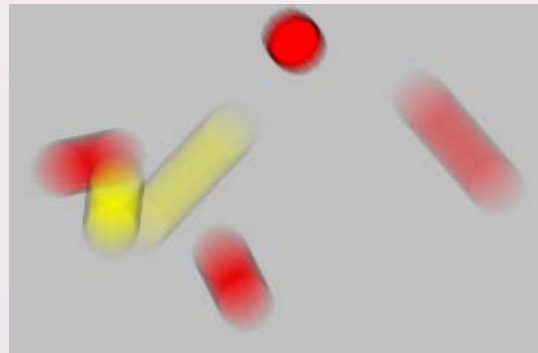
Applying motion blur

- This feature can be used to make motion look more natural.
- The illusion of motion blur is created by calculating motion between frames and blending them together.

In Nature



In AE



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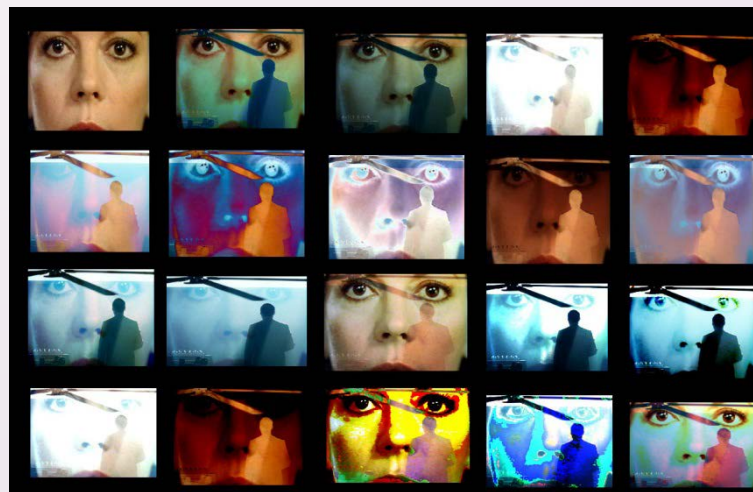
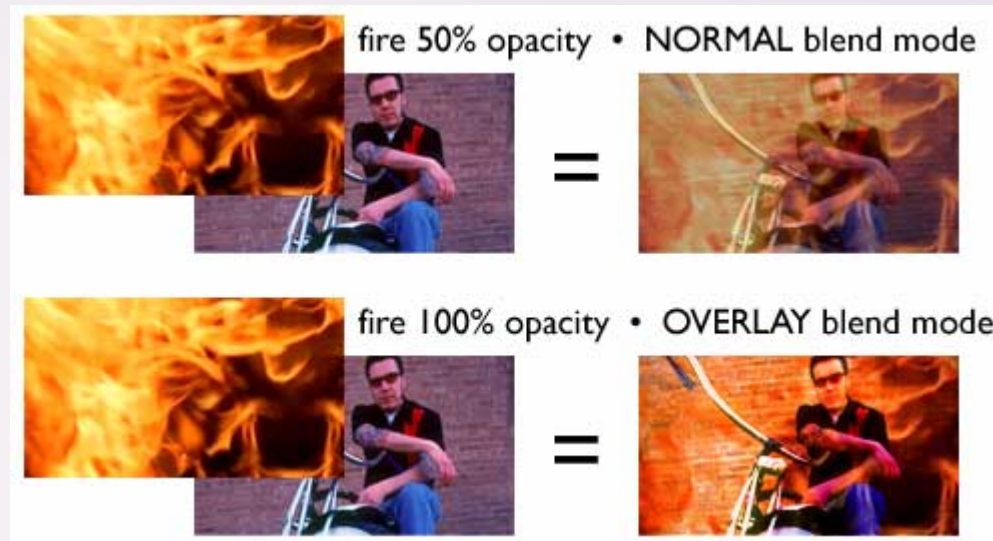
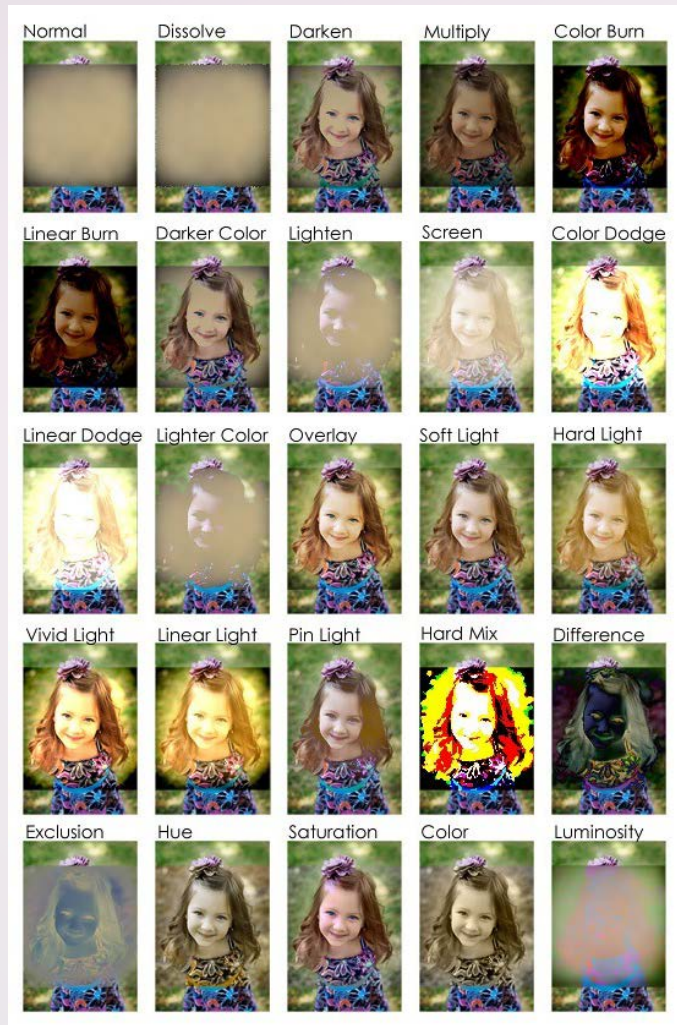
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TRANSFER MODES – AKA Blending modes

Switching transfer modes

- AE only calculates 2 layers. The current layer and the combo of everything underneath
- They only alter the layer colors in the final effect, doesn't replace masks, effects or transform

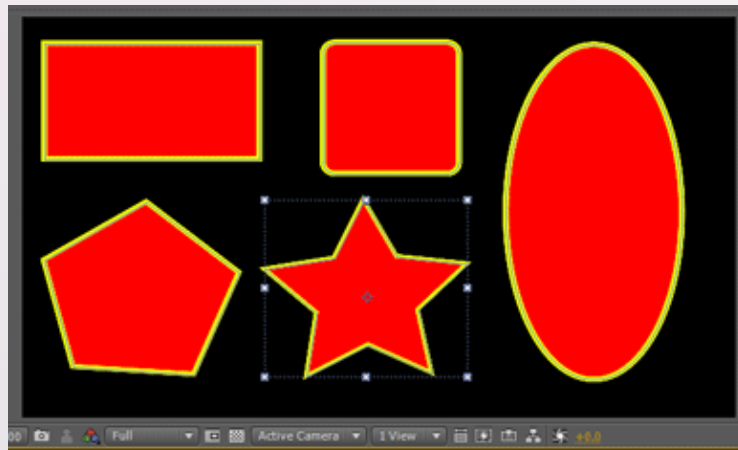
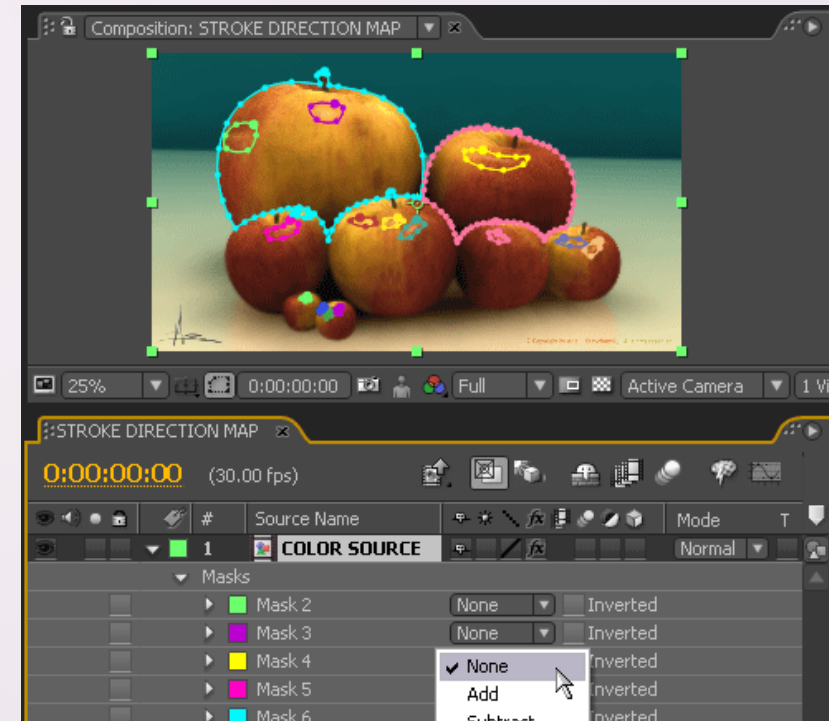
In AE



MASKS AND MASKING LAYERS – Vector based

Mask basics

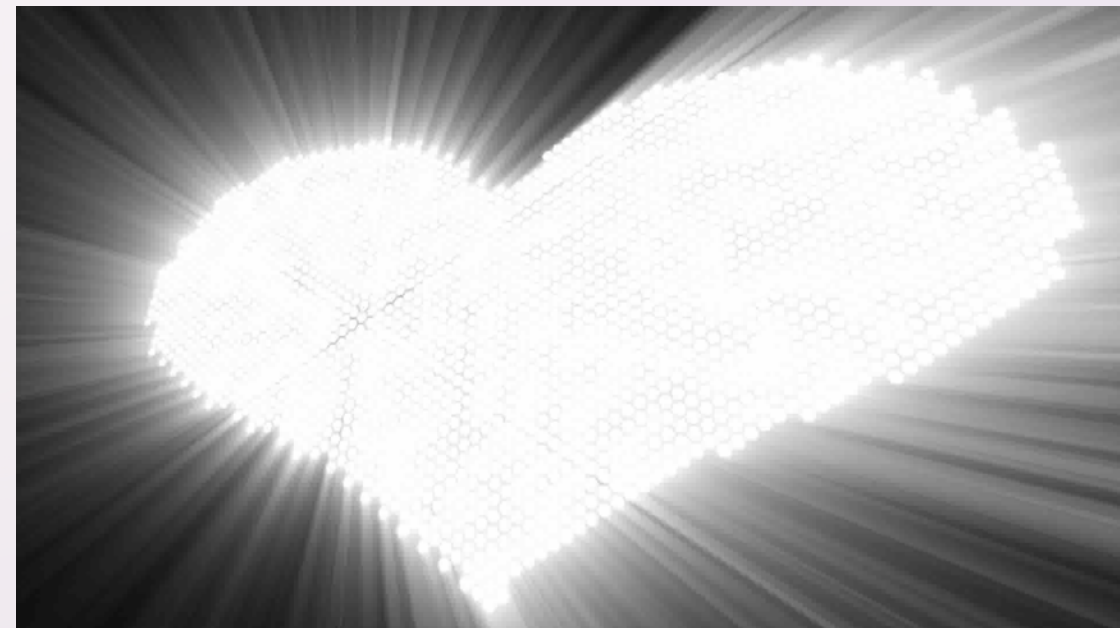
- Each layer can have a zero, one or stack of layer masks
- Default simple mask shapes include rectangle, oval, polygon and star
- Freeform masks are drawn with the pen tool
- Comp window mask visibility
- Mask feathering
- Mask transform
- Mask mode, invert and opacity
- Mask animation
- Multiple layer masks
- Masks from Illustrator



TRACK MATTES – Raster based

Track matte basics

- A traditional track matte layer in its simplest form is made up of black and white pixels (Alpha)
- Track mattes can also be greyscale (Luma)
- Either can be inverted for the opposite effect
- Track matte preview switches can be cycled to preview



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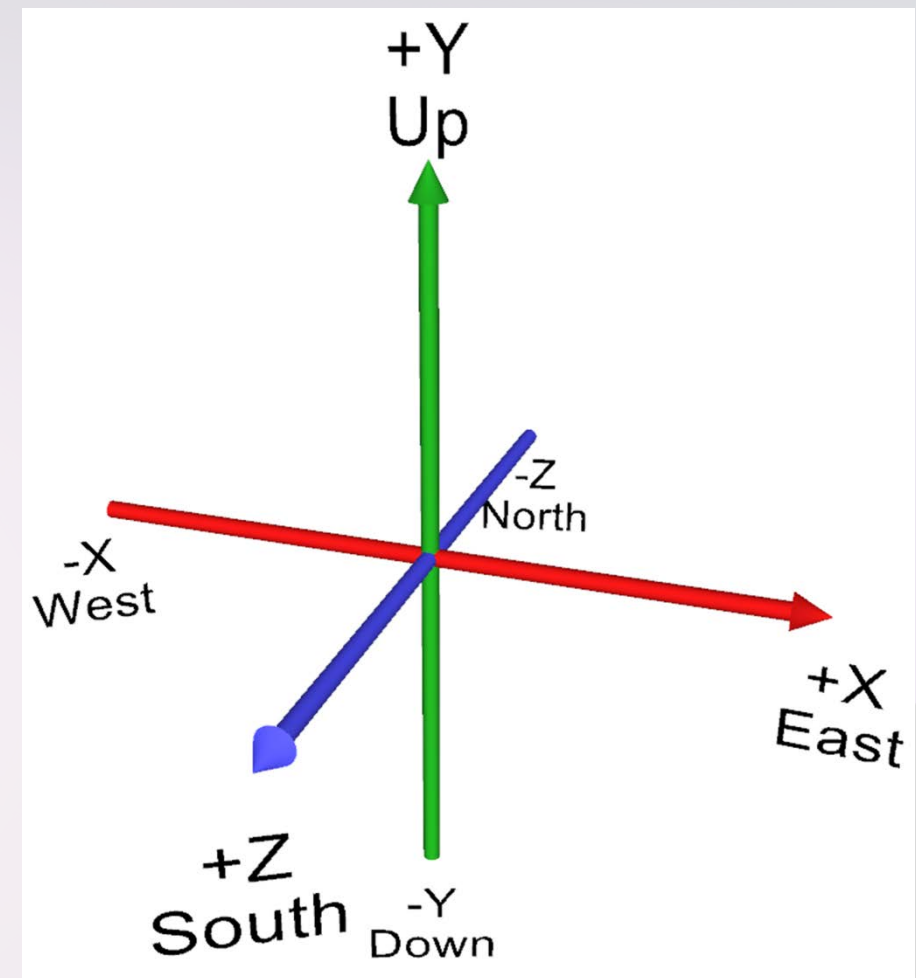
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3D SPACE – Master Z space and add depth

Z dimension instead of only x and y

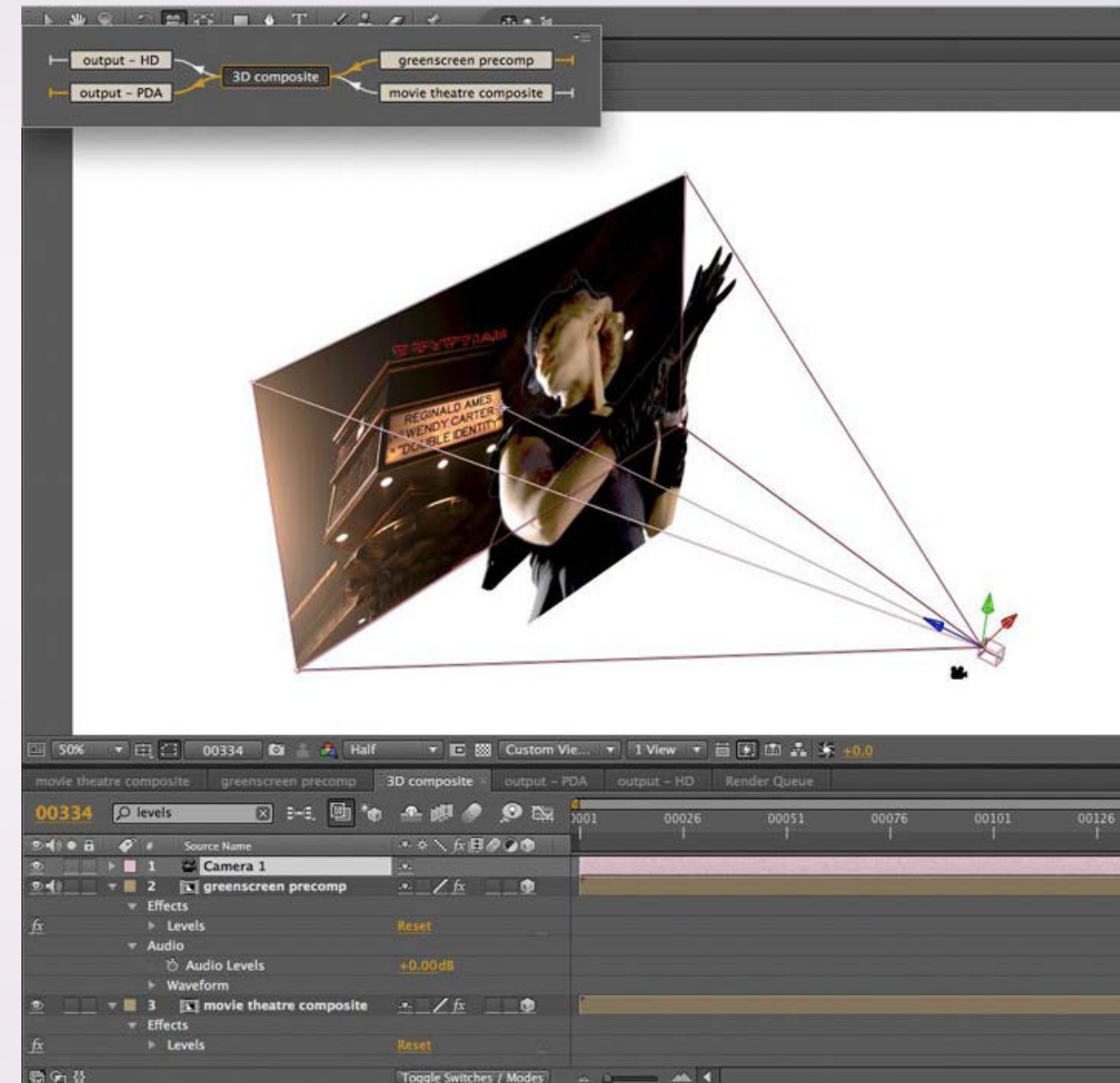
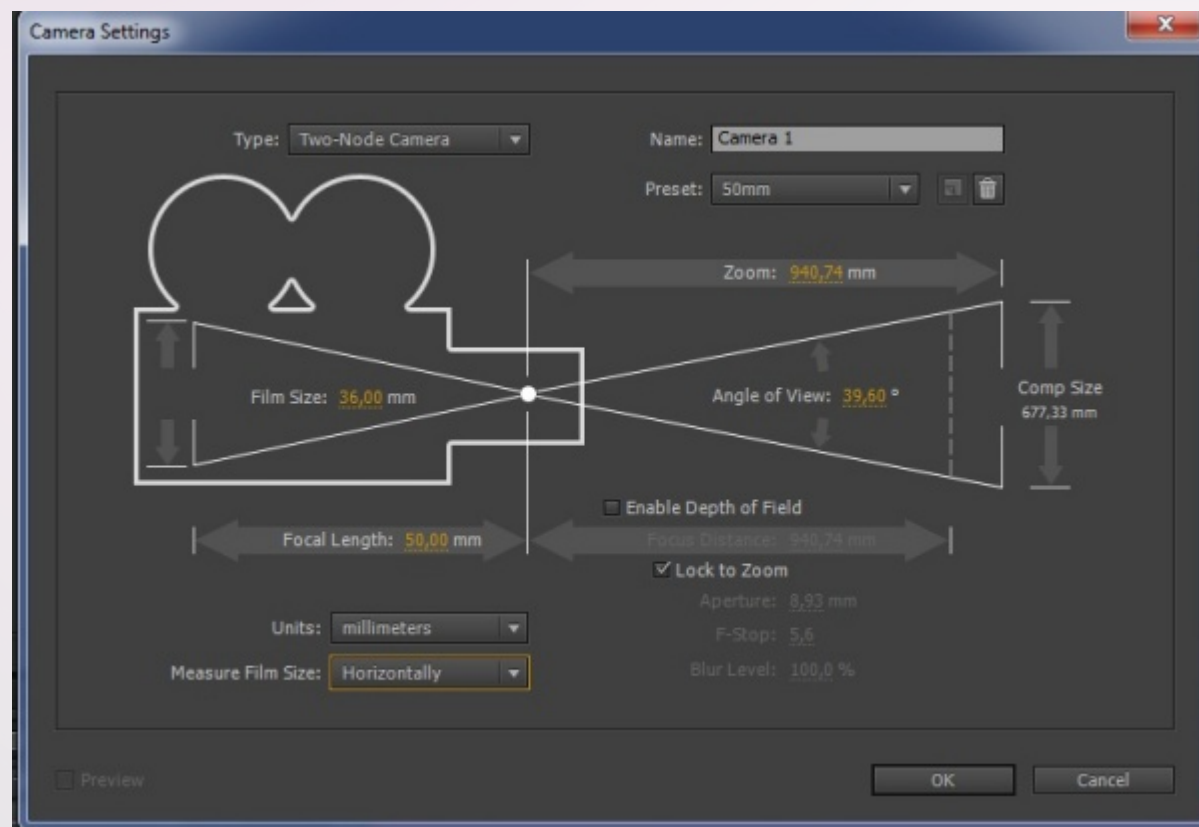
- Added in AE ver 5, via layer switches
- Based off of Quaternion physics
- Rotation vs. orientation
- Comp window tricks and tips



CAMERAS – A new perspective

Don't need to include cameras, but gives much more control

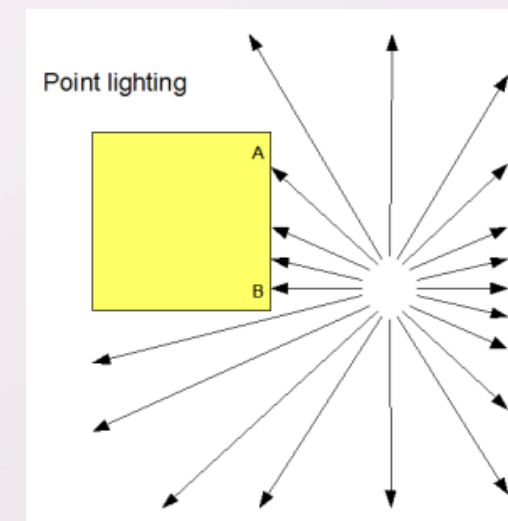
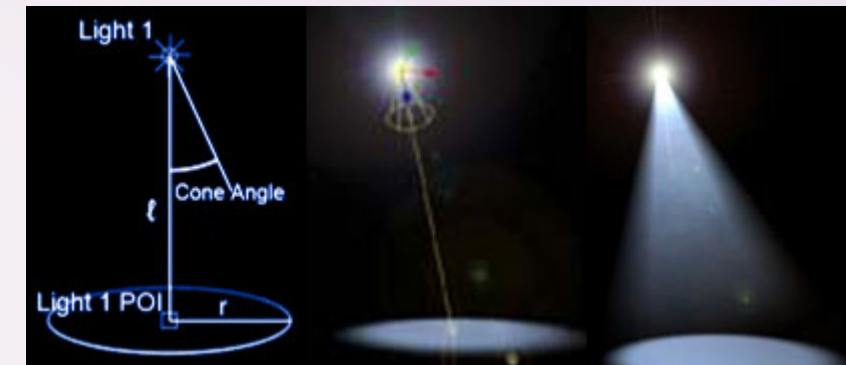
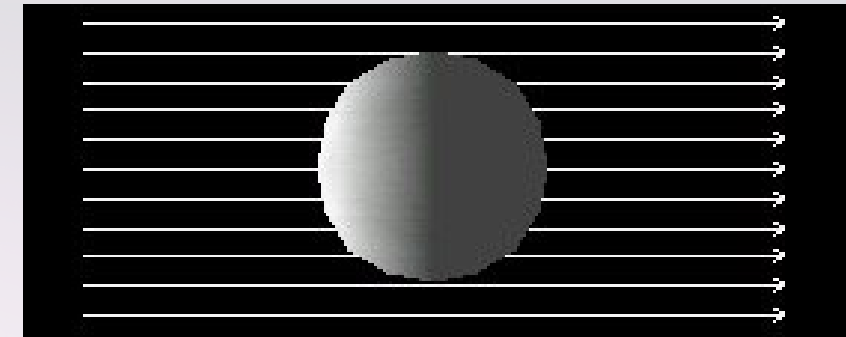
- Shooting script overview (wide, medium, tight)
- Adding your first camera
- Working in draft view
- Depth and lens angle
- Import/export camera data points



LIGHTING IN 3D – Illuminating your layers

Lights 101

- Parallel, spot, point and ambient
- Intensity
- Cone angle
- Cone Feather
- Falloff



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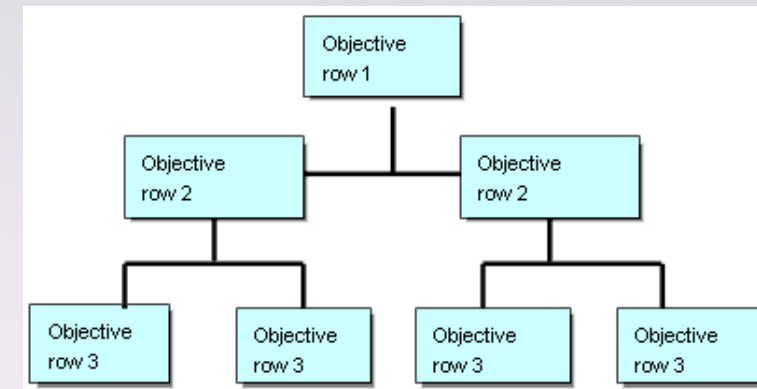
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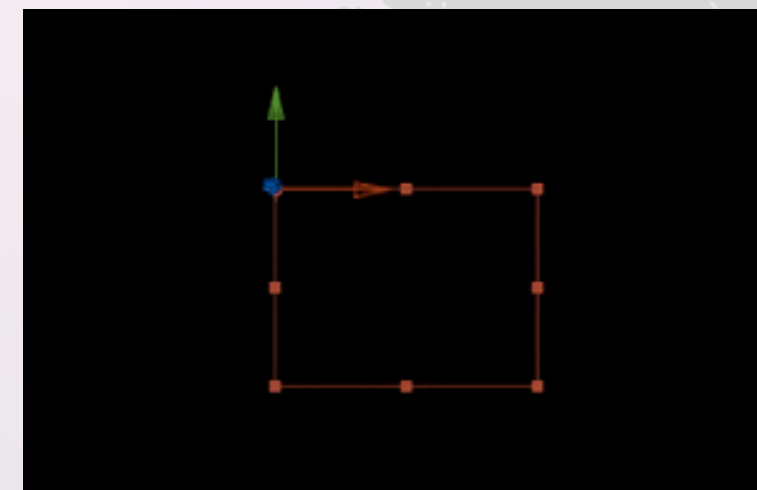
PARENTING – Follow the leader

The ability to group layers together

- How to attach
- Family tree
- Breaking bonds
- Inverse kinematics
- Null object



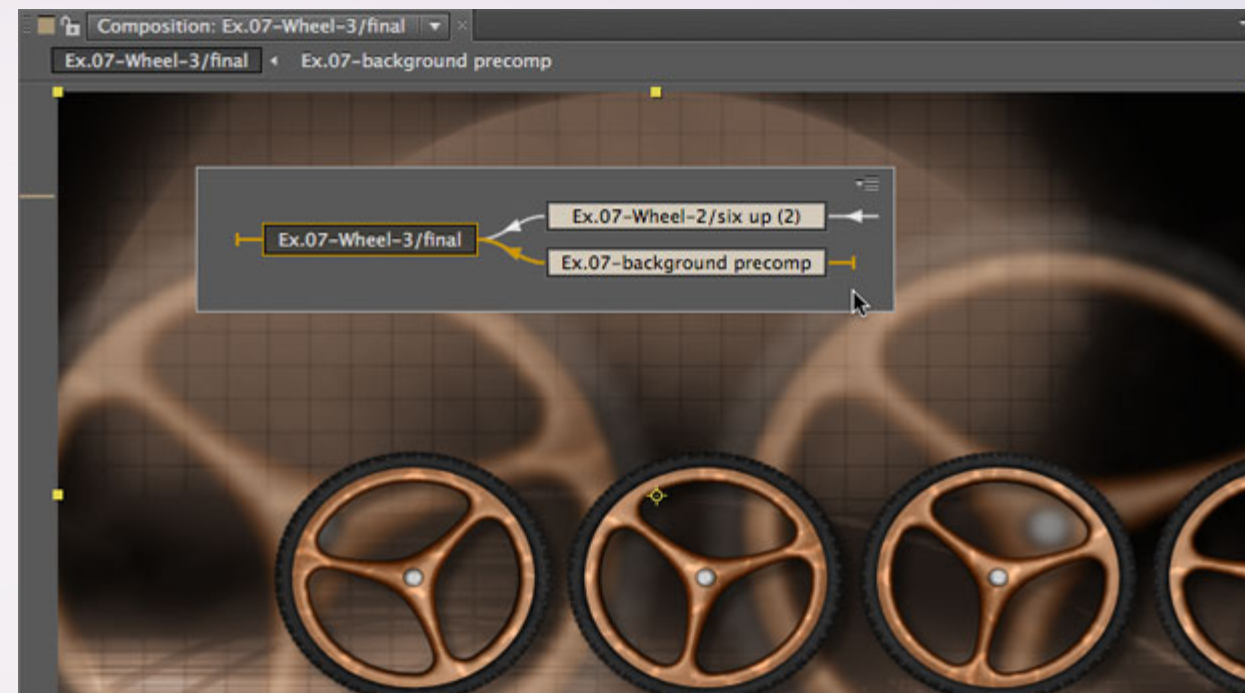
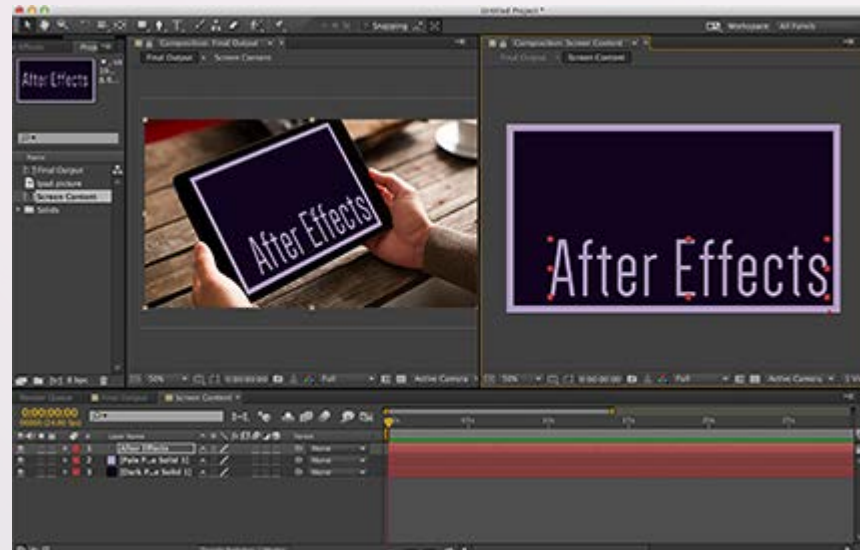
PREPARE FOR THEM BEFORE THEY
COME TO YOUR WORLD



NESTING COMPOSITIONS – Comp hierarchy made easy

Nesting 101

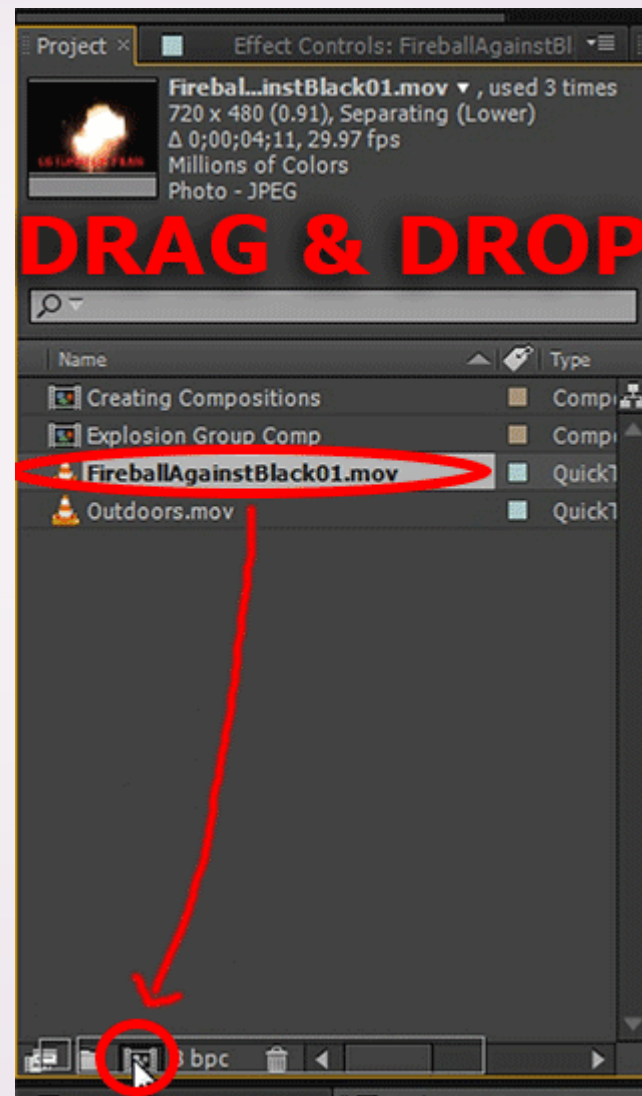
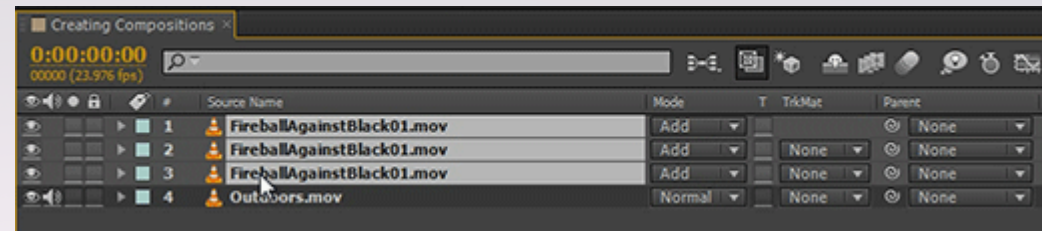
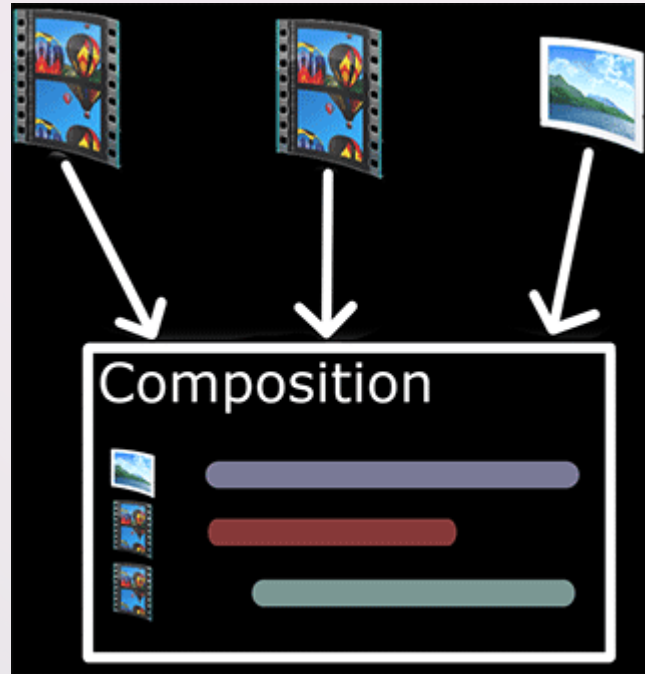
- PreComp and useful naming
- Parenting vs. nesting
- Keeping comps in sync
- Editing nested effects
- Nest default sizes
- Flowchart view
- Render order – M.E.T.



PRE-COMPOSING – Nesting in reverse order

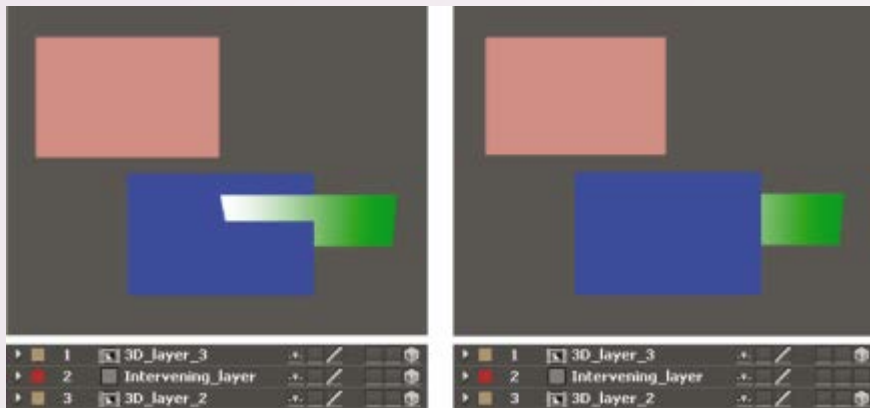
Pre-Composing 101

- Used for grouping
- Options and all attributes
- Fixing the edge
- Trimming excess time
- Embed vs link (duplicate vs multi-use)



COLLAPSING TRANSFORMATIONS – Maximize your resolution

- Lost resolution
- Collapsing switches
- Motion blur
- Transfer modes
- Think ahead
- Adjustment layers
- Opacity



The overlapping of shapes and colors shows us the Render Order of that Shape layer. Bottom = First

25% 0:00:01:11 Full Active Camera 1 View

Pre-comp AE Matte Track Matte VS Style Continuously Rasterize Layer Preserve Transp

00:01:11

#	Source Name	Mode	T	TrkMat	Parent
1	The ove...t Shape layer. Bottom = First	Normal			None
2	★ Shape Layer 1	Normal		None	None

Contents

- Group 2 - RECTANGLE
 - Rectangle Path
 - Fill - BLUE
 - Transform: Group 2 - RECTANGLE
- Group 1 - ELLIPSE + TWISTED RECTANGLE
 - Ellipse - Group B
 - Path - ELLIPSE
 - Gradient Fill - BLUE TO GREEN
 - Fill - RED
 - Transform: Ellipse - Group B
 - Twisted Rectangle - Group A
 - Rectangle Path
 - Round Corners
 - Twist
 - Fill - ORANGE
 - Transform: Twisted Rectangle - Group A
 - Transform: Group...E + TWISTED RECTANGLE

Transform [Reset](#)

Group Path Path Op. Paint Transform

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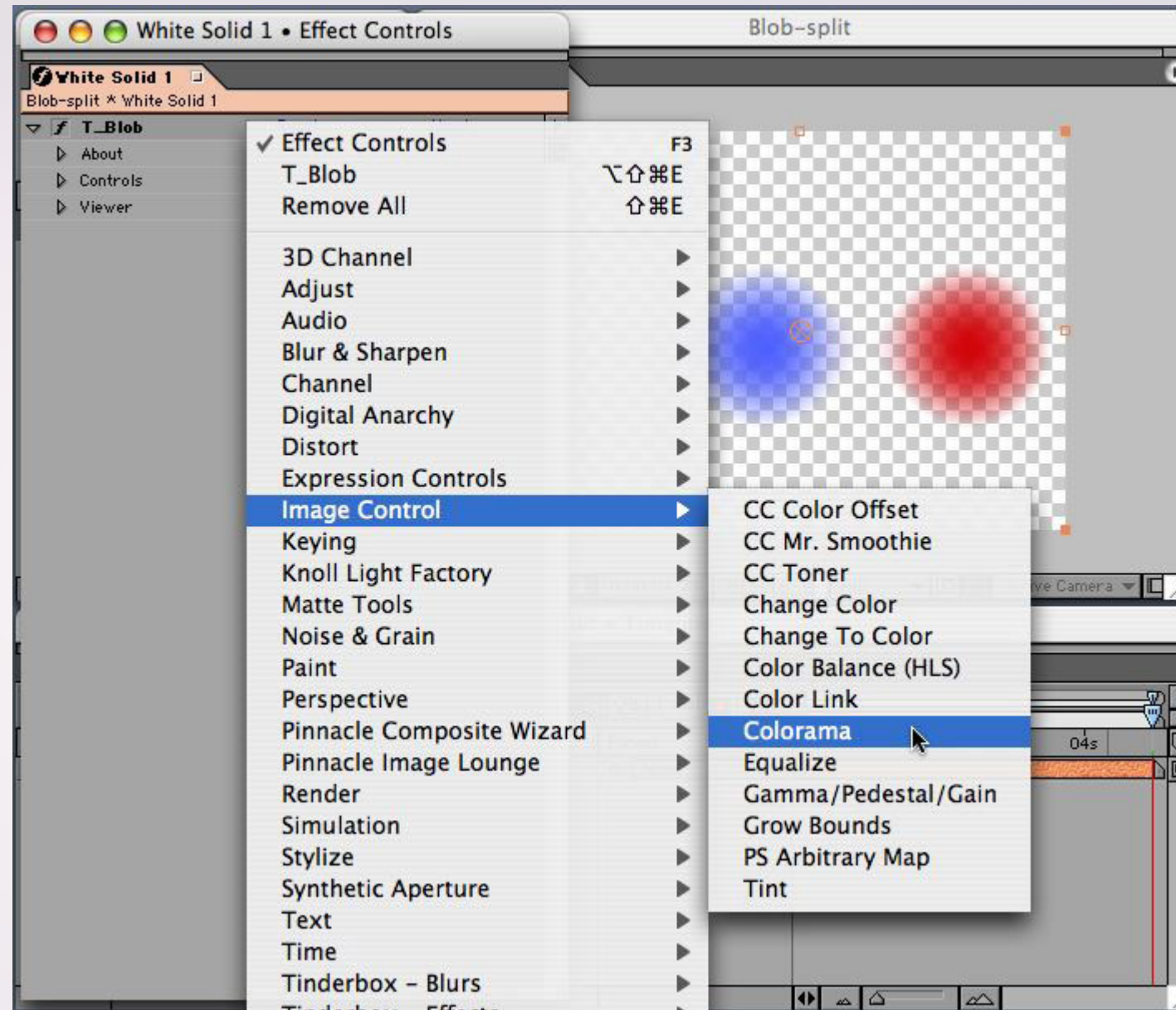
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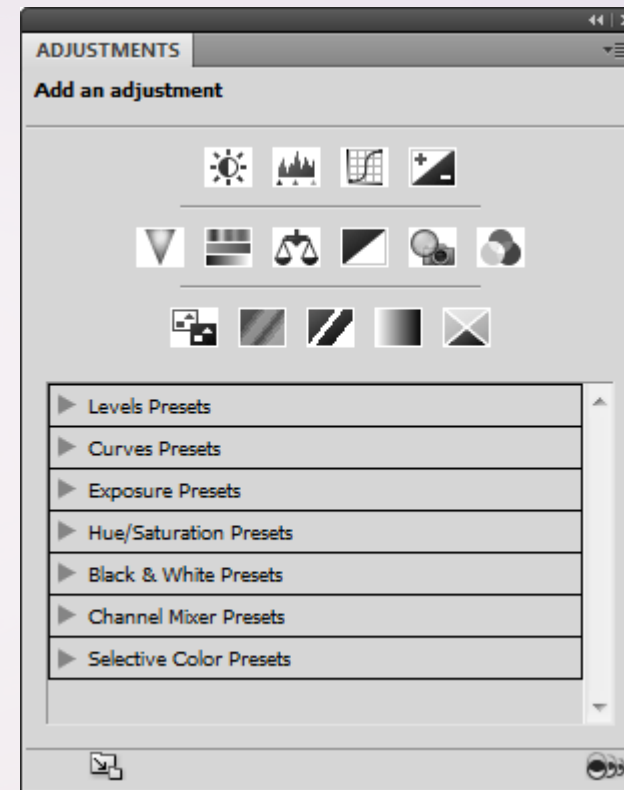
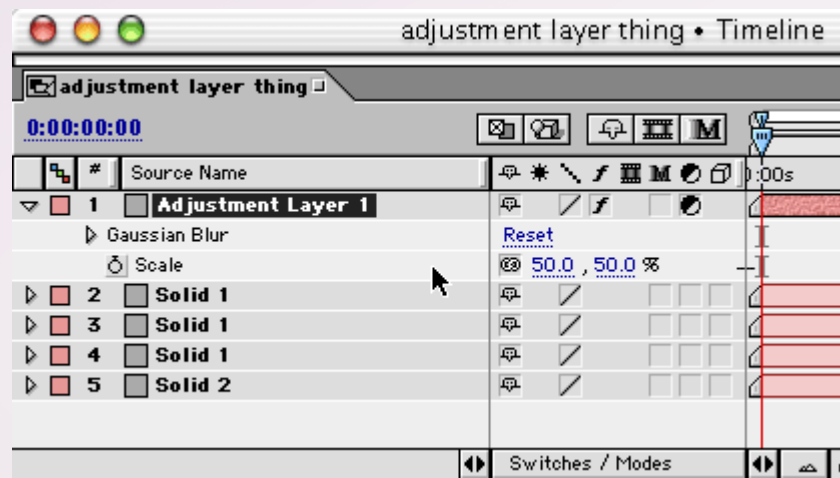
APPLYING EFFECTS – Similar to Photoshop “filters”

- Apply and viewing effect
- Effects palette
- Search feature
- Effect parameters
- Sliders and rotary dial
- Scrubbing tips
- Color switches
- Pop ups and drop downs
- Effect point
- Custom interface
- Animating effects
- Pasting effects
- Favorites
- Masks as paths
- Render settings
- F3



ADJUSTMENT LAYERS – The same effect for a stack of layers

- Half moon switch
- Adjustment logic
- Masking



BLACK SOLID FLEXIBILITY – Many effects don't affect layers

- Lens flare
- Stroke
- Position



FAVORITE INTEGRAL EFFECTS – Everyday effects

- Color balance
- Curves
- Hue/Saturation
- Levels
- Directional blur
- Fast blur
- Gaussian blur
- Radial blur
- Polar coordinates
- Ripple
- Color balance
- Tint
- Bevel alpha
- Drop shadow
- Fill
- Lens flare
- Lightning
- Radio waves
- Ramp
- Stroke
- Vegas
- Shatter
- Mosaic
- Roughen edges
- Write-on
- Echo
- Timecode
- Free plugins
- Trapcode
- Boris Continuum Complete
- DigiEffects
- Pinnacle
- The Foundry



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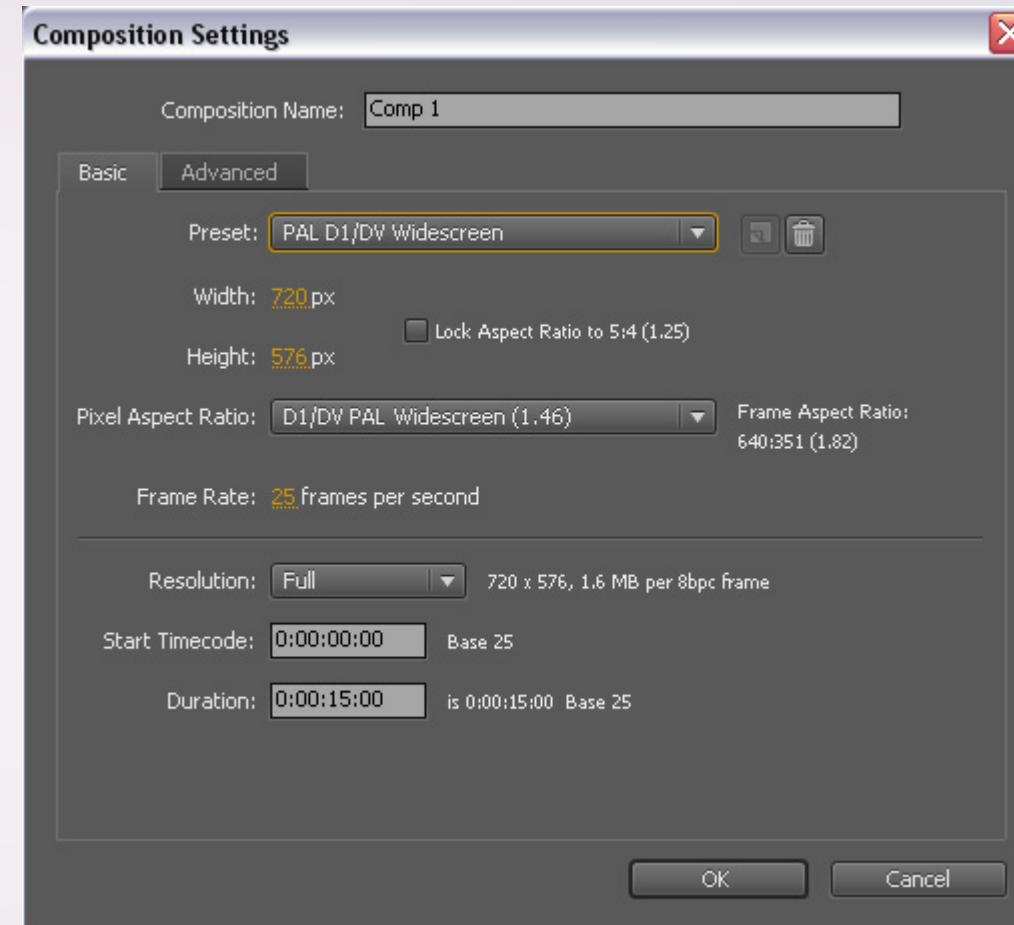
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- Black Solid Flexibility
- Favorite Integral Effects

7) Importing and Rendering

- Import and Interpret
- Render Queue, Settings, Output and Templates

IMPORT AND INTERPRET – Getting files in

- Import or linking files
- Lost links
- Importing with alphas
- Scaling vs Photoshop
- Lost codecs
- Sequencing images
- Photoshop layers, footage vs comps
- AI, PDF and EPS
- Audio
- Importing AE projects
- Old projects
- Interpret alpha and frame rate
- Fields vs progressive
- Pixel aspect



RENDER QUEUE, SETTINGS, OUTPUT AND TEMPLATES – Saving time

- Rendering a movie, still or audio
- Saving render time, what to look for
- Render settings
- Color and alpha render
- Audio setting
- Queue window
- Progress
- Creating and editing templates

