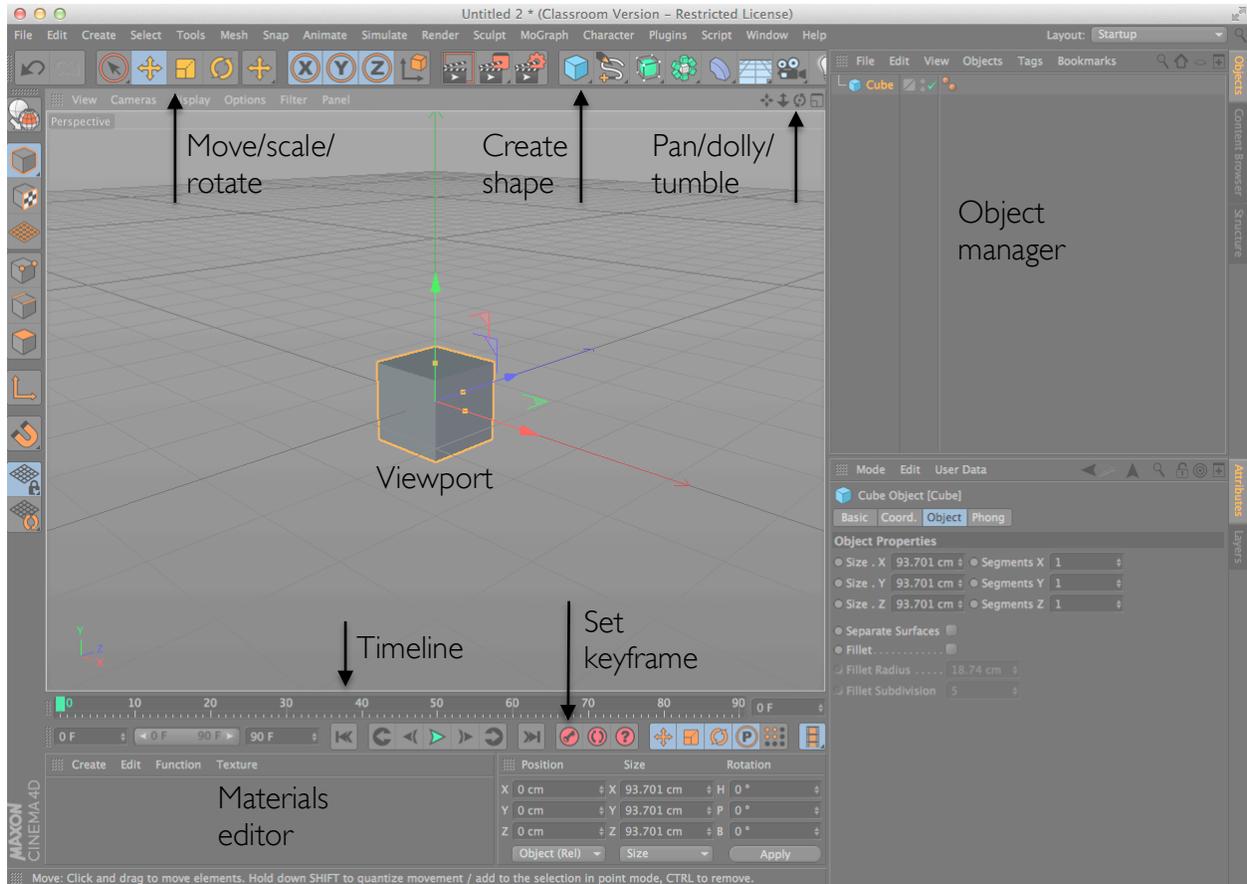


Animating the solar system – an introduction to working in 3D software
Karyn Ho

THE CINEMA 4D INTERFACE



SHORTCUT KEYS

Manipulating objects:

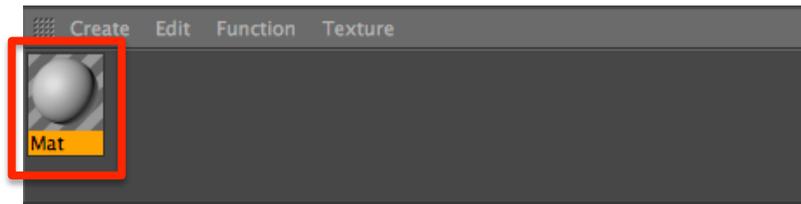
E = move
R = rotate
T = scale

Changing the camera view:

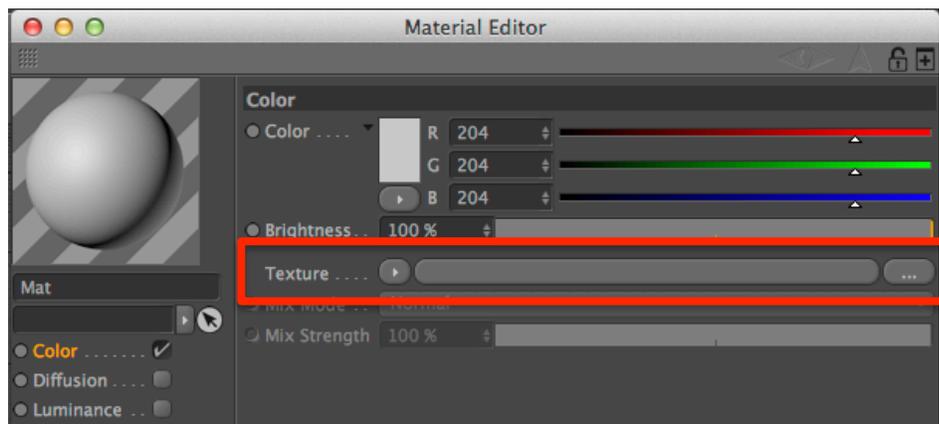
Option + Left Mouse Button = Tumble (rotate)
Option + Middle Mouse Button = Pan (move)
Option + Right Mouse Button = Dolly (zoom)

MAKING A PLANET

1. Click and hold the create shape button, and release over the sphere option to create a sphere.
2. Double-click in the empty space of the Materials editor to create a new material.



3. Double-click the material to bring up the material editor options. Add a texture map file to the Texture field of the colour channel.



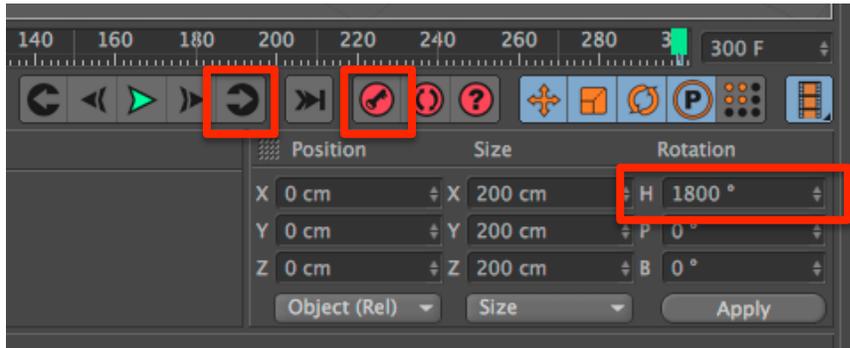
4. Add your material to your sphere: Drag and drop the planet material from the Materials editor to your sphere in the Viewport.

ANIMATING ROTATION

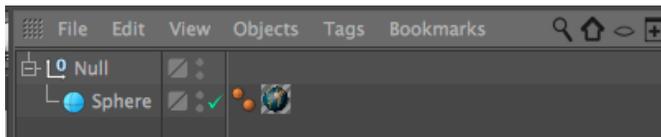
1. Set your timeline to 300 frames. Select your sphere and use the move tool (shortcut key: E) to drag your planet away from the centre of the world. Set a keyframe.



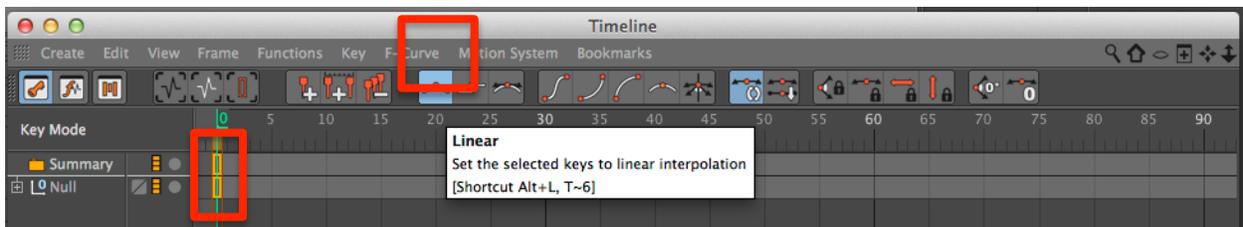
2. Go to your last frame and enter a rotation in the H Rotation field. Set another keyframe.



3. Create a null object (invisible placeholder). Drag and drop your planet sphere onto your null object in the Object manager. This is called parenting – where the child (planet) can move on its own but always follows its parent (the null).

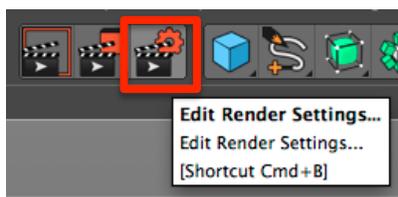


4. Select your null object and set rotation keyframes on the first and last frames (just like in Animation Steps 1-2).
5. BONUS: Create another sphere and a Sun texture for the centre of the solar system.
6. BONUS: To disable easing in/out (acceleration and deceleration), go to Window → Timeline. Select your keyframes and hit the Linear button.

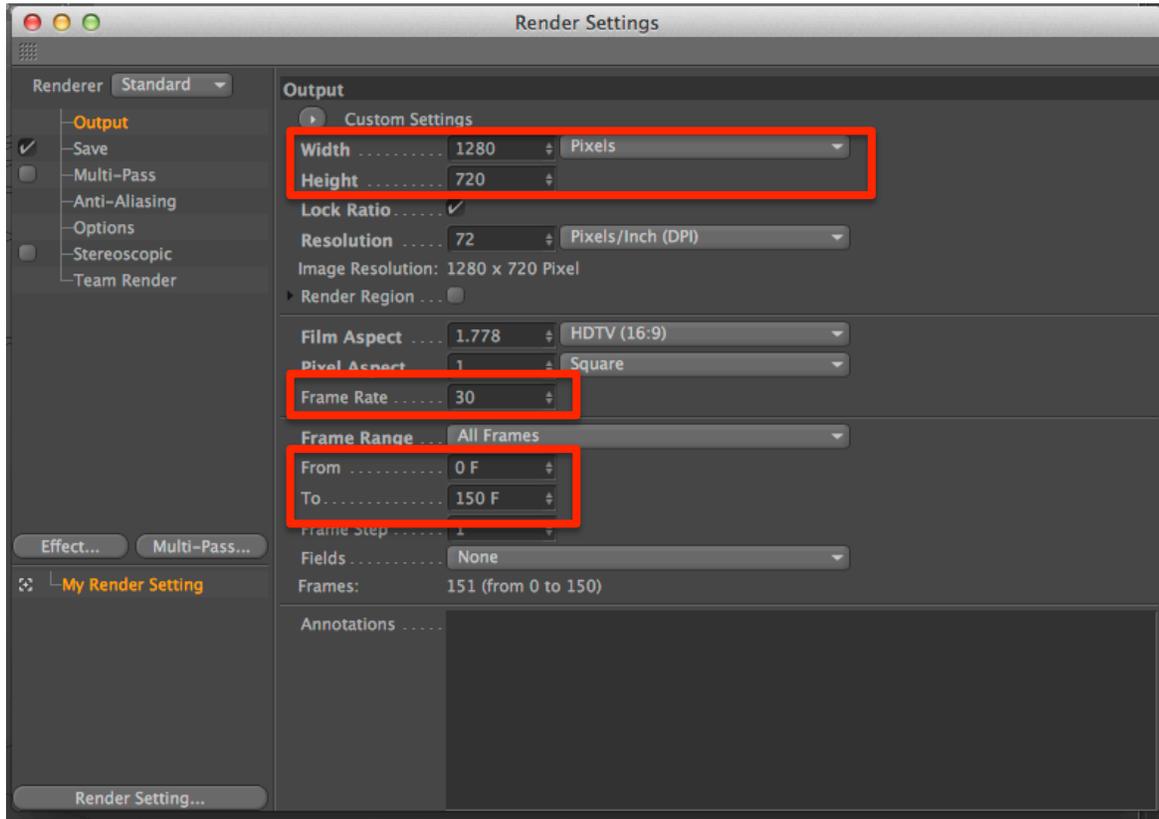


RENDERING YOUR FINAL ANIMATION

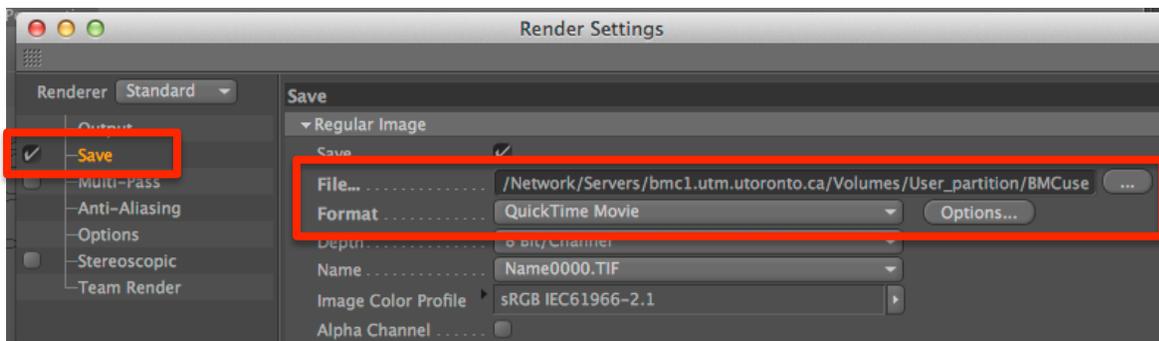
1. Open your render settings:



- Set the size of your movie to 1280x720 pixels, and 30 frames/second. Make sure your frame range covers frames 0-150.



- Under the Save menu, give your file a name and location (like the Desktop) and make sure it is set to QuickTime Movie.



- Render to picture viewer.

