# TUTORIALS

TECHNIQUES / TIPS / TRADE SECRETS

POSER 6

# the art of anime

Discover how to utilise the dual qualities of simplicity and power of Poser 6 to recreate your very own anime-style character based on the model included on this issue's CD

BY ADAM BENTON

**FACTFILE**

**FOR**
*Poser*

**DIFFICULTY**
Elementary/ Intermediate

**TIME TAKEN**
30-90 minutes

**ON THE CD**
- *Poser 6* demo
- DAZ Productions *Poser* content (see page 122)
- Supporting *Poser* scene files and original content (OBJ format)
- Full-sized screenshots

**ALSO REQUIRED**
N/A

**Some 3D purists sneer at *Poser*, considering it a toy – an inferior tool. Some may even suggest that it 'cheats' in some way, but this really is missing the whole point of the application that's currently in its sixth incarnation and still going strong.**

*Poser* attracts a broad range of artists, from amateur hobbyists to film studio professionals. Some use it as their only image-making application, which, with the advances in *Poser 6*'s lighting and rendering engine (now capable of using HDRI, IBL and Ambient Occlusion) is definitely becoming a more viable option for higher quality output. However, others tend to use it as a kind of advanced plug-in for applications that are better suited to the creation of more complex scenes.

If you're a commercial illustrator with stringent deadlines, you use the tools available to get the job done. It's rare that you'll have the luxury of time (or budget) to model, rig, texture and clothe a figure – let alone a whole crowd of them – or create hundreds of body and facial morphs for the one character in your urgently needed illustration or pre-viz work! This is where *Poser* really shines, with an arsenal of original figures onboard, all rigged and ready for work. There's also a vast online community of third-party content creators filling almost every niche and genre conceivable.

In this tutorial, we take you through a practical, real-world example of creating the lead character for the illustration on the facing page. You'll choose a suitable figure type, apply MAT (texture) files, use facial morphs to alter her character, apply and conform clothing and hair, and import and parent third-party props. You'll also find tips on posing the model and preparing her for export to another application for final texturing and rendering.

Developer e frontier has provided an exclusive demo of *Poser 6* on this issue's CD, and DAZ Productions has donated a generous bundle of *Poser* content from its store, worth more than $100: install this first. Restrictions on the demo mean that to get the full benefit of the tutorial, you'll need the commercial version of *Poser 6*, but it should enable you to explore the basic techniques.

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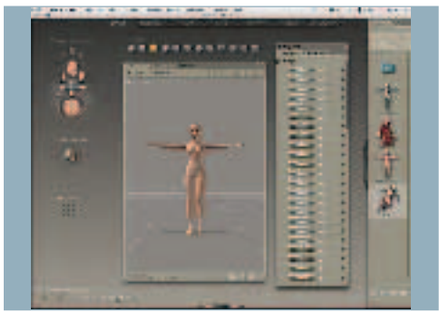
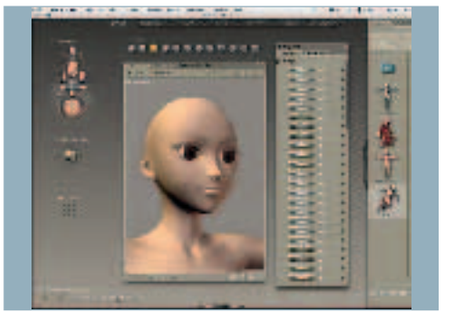
## STAGE ONE | Figure set-up

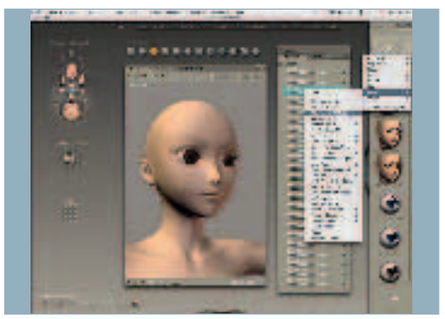
01 Launch *Poser 6* and you'll be presented with a default scene file containing one of the new *Poser 6* characters, called 'James'. We don't need him for this tutorial, so click anywhere on his body and press [Delete] on your keyboard. A dialog box will ask you whether you're sure. Click 'OK'.



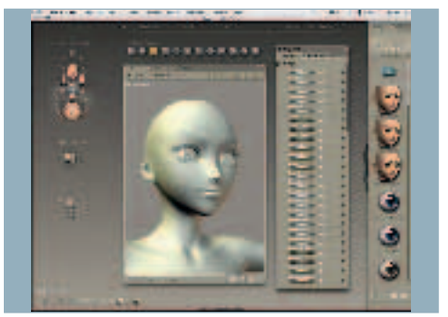
02 To the right of the *Poser* screen layout is the Library palette. This may be docked or closed by default, so click on its handle to reveal the Library categories. For this anime-style character, we'll use the 'Aiko' figure, so click on 'Figures' and look for the folder named '!Aiko 3', and double-click on it.



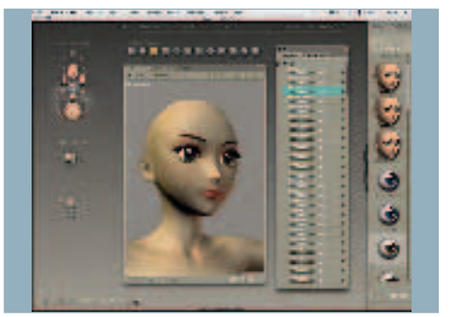
03 Double-click on the thumbnail in the Library and the default Aiko figure will be loaded into the preview window. To the left of the screen layout are the camera controls. Click on the 'face cam' (top-middle). Then, using the camera rotation and move controls (top of preview window), move a little closer and rotate slightly into a three quarter perspective.



04 We want to customise Aiko's face to make her more unique and aesthetically pleasing, and obviously fulfil the requirements for an anime/manga-style character. Before we morph, let's apply a texture that's heading in the right direction as regards style. In the Library palette, click on the small 'down' arrow below the 'Poses' title. In the drop-down menu that opens, select: Pose > MAT Aiko 3 Maps.

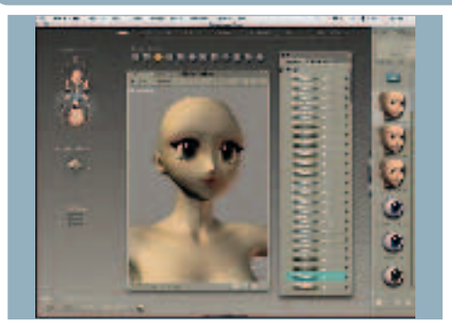


05 Select the '! All Aiko Map 01 lo' texture. Her face now appears to be blank white, so you need to activate the 'Texture Shaded' mode to see the newly applied textures. In the lower-left of your screen are the 'Document Display Style' controls. Select the last one on the right: 'Texture Shaded'.

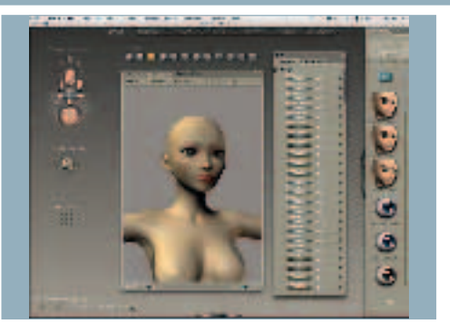


06 Aiko looks a little more anime already! Feel free to choose your own eye colour, and add some makeup if it helps. We've coloured her eyes brown and added the red tinted eye makeup. None of these are permanent changes anyway, as we'll customise the textures in the final scene later. They should help a little while we shape her face.

## STAGE TWO | Morphology



07 Make sure Aiko's head is selected (you'll see the 'Head' title in the Parameters palette). If it isn't, click somewhere on her face. All of her facial morphs are listed in this palette, and dials have a default 'off' setting of '0.000' usually. A setting of '1.000' is fully activated, but they can be set to higher '-/+' settings with sometimes undesirable results!



08 It's sensible to try them all at the fully 'on' state to get a feel for how they each affect the mesh in turn. In this instance, we've tweaked a number of the morphs to get something closer to what we want (see the full-size screenshots on the CD for exact settings). We don't want her features to be so exaggerated that they don't suit the style of the final image.

### EXPERT TIP

**Customisation**

Morphs are your friend! One of the true strengths of *Poser* is its ability to customise your figures quickly and easily using hundreds of pre-made morph targets. These cover basic facial expressions, racial characteristics and shapes, and full body shapes and exaggerated features. There's little excuse for your character to look like someone else's – a common criticism of *Poser* art – if you spend some time playing with morphs and customising to your heart's content. And, of course, you could also create your own (based on the original mesh) to import.



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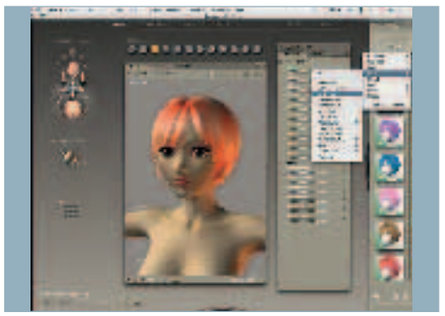
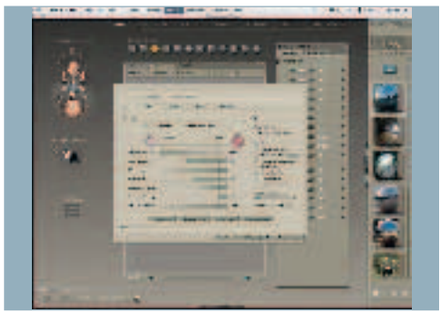
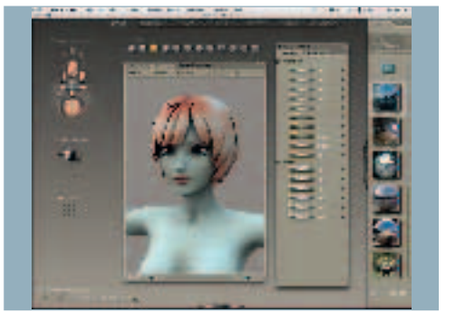
## STAGE TWO (Continued) | Morphology



09 Go to the Library drop-down arrow and select Hair > DAZ Hair. Double-click on 'NyokoHair-B'. Go back to the drop-down and select Pose > MAT Aiko 3 Hair and choose a colour. We'll return to tweak the hair shape and any movement settings later when we establish her pose and action.

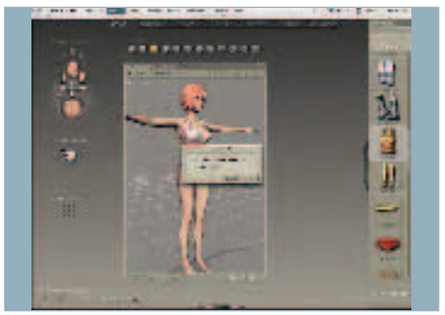


10 Since Poser 6 offers more advanced lighting options, we'll try them out in a quick render. Go to Library > Light > IBL Ambient Occlusion and double-click one of the light probe thumbnails. From the menu bar, choose 'Render > Render Settings'. Move the arrow to the right by one step, so that shadows are activated.



11 Click on the 'Render Now (Firefly)' button and sit back while the render appears. These are not high-quality settings, of course, but it gives us a better idea of how Aiko may start to look in a finished render. You may decide to go back and tweak her morphs further at this stage, otherwise it's time to move on to clothing.

## STAGE THREE | Clothing and prop import



12 Switch back to the 'Main Camera' and, from the Library, select Figures > Aiko 3 Clothing. Scroll down to find 'AL Bodice'. Click on the double tick button at the bottom of the palette. The clothing is applied yet not fixed, so with movement, the bodice will remain static! From the menu, select Figure > Conform To ... and select 'Figure 1' (Aiko) in the dialog before clicking 'OK'.

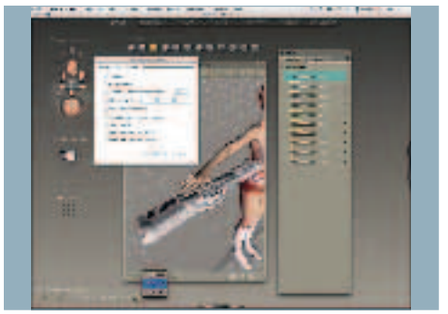
13 Repeat this process for the 'ALBoots' and 'ALPanty' items, and anything else if you like the look of it. Be sure to 'conform' them all to Figure 1 as you go. We're not too concerned with the textures at the moment, as they'll be replaced in the final image anyway.

### EXPERT TIP

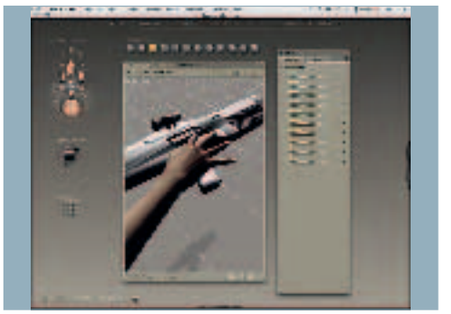
**Make some extra money**

The *Poser* community is vast, and there are thousands of third-party items available, from clothes, hair models, weapons and vehicles to figure morphs, textures and props of every kind. Most are reasonably priced and available online. The quality and diversity has definitely increased over the last couple of years, but sometimes, in the hours you can spend looking for 'the right outfit', you could have probably modelled your own! If you have the time and skill, what you only used once could earn you extra cash on one of the *Poser* broker sites.

14 We've provided a model of a gun, which we need to import and position in Aiko's hand now, since it will be more complicated outside of the T-pose. (Note: The *Poser 6* demo may not permit imports, but if you installed all the files from the CD, you can also find it in the Props library > 'Tutorial Aiko Gun' folder. We'll demonstrate the Import procedure anyway.)



15 Go to the 'File' menu, select Import > Wavefront Object and navigate to find the 'KK_05.obj' file on the CD. In the dialog that opens, set the scale of the object to 40 per cent of figure size. Using the Tran and Rotate dials on the Parameters palette, move the gun into the position shown here. (See the full-size screenshot on the CD for the exact coordinates.)



16 By default, the display is using the 'Fast' preview mode. This reverts all objects to simple boxes when moved, which makes fine adjustments tricky to see. To rectify this, select the icon at the bottom-left of the preview window (see previous screen) and select 'Full'. Now we can get in close and start to pose the hand more easily. In 'Camera Controls', switch to the 'Right Hand Cam'.



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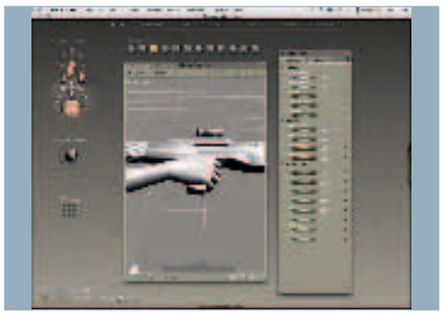
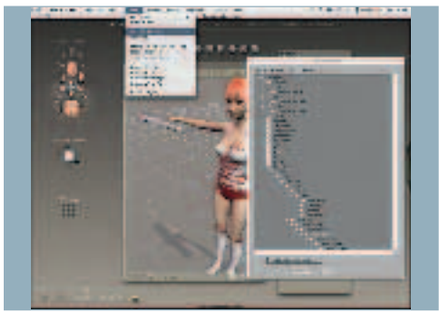
## STAGE FOUR | Posing the character



17 Using the various dials for the right hand and fingers, make fine adjustments to close them around the grip. Ensure you rotate the viewpoint regularly to keep updated of how it looks from all angles. We would avoid the 'Grasp' and 'Spread' hand morphs, as they can do more harm than good. It's better to pose each digit in turn, making adjustments to all of them as you move around.

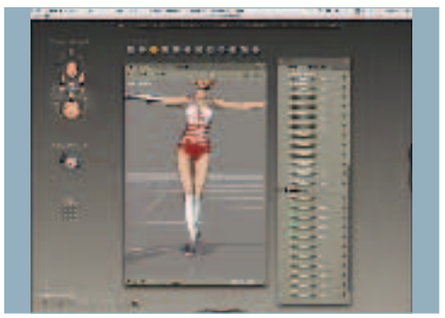


18 Now we need to make the gun a 'child' of the hand. Go to the 'Object' menu and select 'Change Parent'. In the hierarchy list that opens, find the 'right hand', click on it and then choose 'OK'. We'll save the hand pose, too. Select the hand, find the 'Hands' folder in the Library, click the '+' symbol at the bottom, name and save the pose.

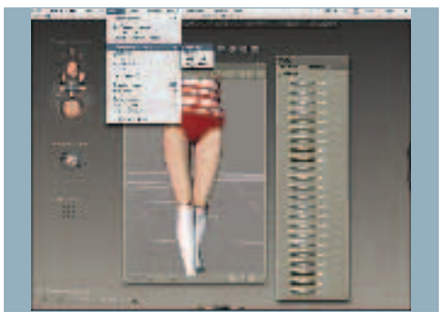
### EXPERT TIP

**Saving time**

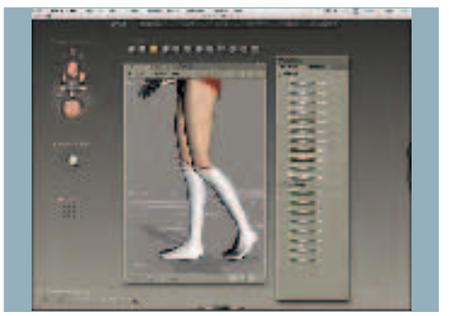
It's not always necessary to create a complicated pose from scratch, and when time is tight, it's worth having a look through the installed Library poses, or the various volumes of third-party poses available online. See if any can be used as a good starting block. The poses don't have to be for the character you're using, as much of the information will carry over between figure types. Where it doesn't, the software will warn you, or there will be some minor distortions or collisions to adjust. If it gets you part way there on a difficult pose, it's a time saver.



19 For a pose to look natural, you need to consider how each element of the form is affected, and for this, you can't beat having a live model to provide temporary reference. If this is impractical, you'll need a full length mirror! Observe how balance is adjusted as you shift positions, and try to apply this to your virtual character. Start by moving Aiko's hip down seven degrees to her left.

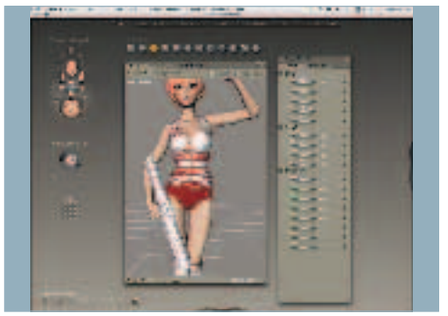


20 As you move the hip down, the Inverse Kinematics (IK) push down on her left leg naturally. However, the IK will prevent you from moving the leg joints independently, so we need to disable it. Go to Figure Menu > Use Inverse Kinematics and uncheck both right and left legs. Bend 'Left Buttock' 8˚, Twist -4˚, Bend 'Left Thigh' -2˚, Twist 2˚, 'Left Shin' Bend 26˚, Side 4˚, Twist -1˚.

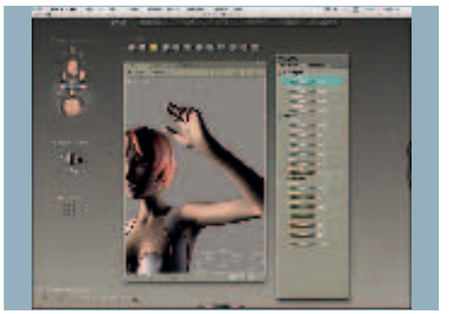


21 As with the hand posing earlier, make sure you rotate around the viewport to check progress, and pull a light around using the 'Light Controls' to help with visibility. To make Aiko's 'Left Foot' make contact with the floor correctly: Twist -8˚, Side 7˚, Bend 37˚, and 'Left Toe' Bend -29˚. On to the right: 'Right Buttock' Bend 10˚, Side -3˚. 'Right Thigh' Twist -9˚, Side 15˚, Bend -13˚.

22 Carry on with the 'Right Shin': Twist 6˚, Bend 1˚. Now on to Aiko's upper body: we want her left arm raised to make a gesture back to her troops, and the right lowered to hold the gun, so we need to emphasise this in the chest and shoulders. First, bring her 'Abdomen' back into line: Side 8˚ and then Bend 'Chest' 7˚, Side 5˚, to give her the swagger of a John Wayne-style leader!



23 Next, the left arm: 'Left Collar' Front-Back 4˚. Up-Down 10˚. 'Left Shoulder' Twist -16˚, Front-Back -20˚, Bend -2˚. 'Left Forearm' Twist 8˚, Side 35˚, Bend -92˚. This elevates her left arm – now to lower her right: 'Right Collar' Twist -3˚, Front-Back -5˚, Up-Down 9˚. 'Right Shoulder' Twist 25˚, Front-Back -6˚, Bend 38˚. 'Right Forearm' Side 21˚, Bend 29˚. 'Right Hand' Side 9˚, Bend 11˚. Phew!



24 Let's sort out the posing of her left hand. This character is a true leader; she's a cool character and means business, so we want to suggest that she's signalling to her army to move in or to prepare to attack. After some more reference gathering (looking in the mirror), we decide on this hand shape. Notice that we've positioned the lights to help create a mood.



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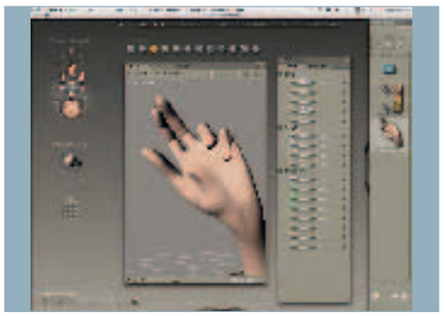
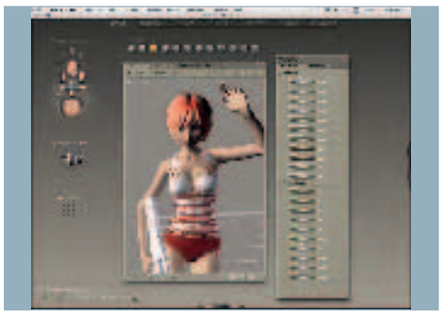
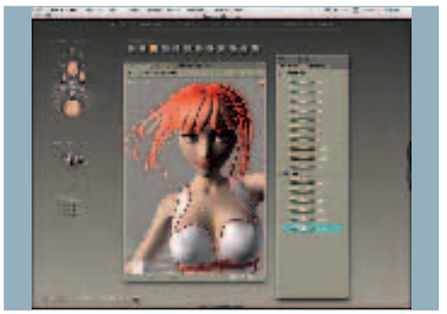
## STAGE FIVE | Final tweaks and exporting



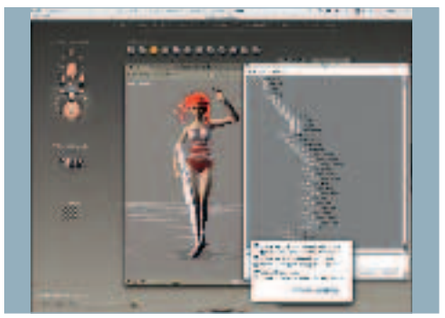
25 Rather than listing the entire hand pose settings, we'll use a 'preset' that was made earlier. Go to the Library > Hands > Tutorial Aiko 3 > Aiko Signal Hand. Double-click the hand image and apply it to the left hand. You can see how you could soon build up your own library of poses to recall later, again saving time and effort later on.



26 Now to her face. She needs more attitude, so we're going to bend her neck down and raise her eyes as though she's looking up at the viewer. Select her 'Neck' Bend 15˚, Side -2˚. Then select her 'Head' Twist -6˚, Side -2˚, Bend 7˚. To make her look up, select each of her eyes and give them an Up-Down rotation of -20˚.



27 Finally, the hair could do with being a bit longer, and it would be nice to add some movement to it, as though it were being blown by a breeze. Select the 'Nyoko Hair' and set the dials like so: 'Hair-Long 0.700', 'Windy-Right 1.600', 'Windy-Left 0.300'. Don't worry if the hair looks a touch sparse around the back. This is due to the preview not showing the reverse of the hair mesh.



28 At this stage, we could start to texture and light her fully in *Poser*. Since she's only one element in a larger scene, we're choosing to export her as an OBJ file for import into *Cinema 4D*. Go to the 'File' menu: File > Export > Wavefront Object. Click 'OK' in the subsequent dialog. In the 'Hierarchy Selection' box that follows, uncheck 'GROUND'. (See CD screenshots for other settings.)

29 Most applications will import an OBJ file easily from *Poser*, but there are some third-party plug-ins that can aid the process and save the manual labour of reapplying all the materials and textures you may have set up in *Poser*. Even if you decide to alter all her materials, being able to see which is applied to what object or selection helps enormously. For *Cinema 4D*, *InterPoser* is excellent.

30 As you can see, we've now either replaced most of the imported materials with those created in *Cinema 4D*, or heavily augmented them with additional shader effects. The base skin and hair texture maps remain the same, but we added a light scattering shader called 'Chanlum' to the skin and eyes, and changed from the default 'Phong' illumination method to 'Blinn', both of which help to add to the realism of the materials. Due to time constraints, we decided not to create new bitmap textures for the clothing, and built a leather material from scratch using layered, procedural noise shaders, along with the 'Dirt' shader for some ageing. With careful, contrasting lighting, and use of hard and soft shadows, our *Poser* anime-style character comes to life. ●



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