Getting started

First, you'll view the image that you'll create using masks and channels.

1   Start Photoshop, and then immediately hold down Ctrl+Alt+Shift (Windows) or Command+Option+Shift (Mac OS) to restore the default preferences. (See "Restoring default preferences" on page 5.)

2   When prompted, click Yes to delete the Adobe Photoshop Settings file.

3   Click the Launch Bridge button (▣) in the Application bar to open Adobe Bridge.

4   Click the Favorites tab on the left side of the Bridge window. Select the Lessons folder, and then double-click the Lesson06 folder in the Content panel.

5   Study the 06End.psd file. To enlarge the thumbnail so that you can see it more clearly, move the thumbnail slider at the bottom of the Bridge window to the right.

In this lesson, you'll create a magazine cover. The model for the cover was photographed in front of a different background. You'll use masking and the Refine Mask feature to place the model on the appropriate background.

6   Double-click the 06Start.psd file's thumbnail to open it in Photoshop. Click OK if you see an Embedded Profile Mismatch dialog box.

Creating a mask

1   Choose File > Save As, rename the file **06Working.psd**, and click Save. Click OK if a compatibility warning appears.

Saving a working version of the file lets you return to the original if you need it.

2   Select the Quick Selection tool (🖌). In the options bar, set up a brush with a size of **15** px and Hardness of **100%**.

3   Select the man. It's fairly easy to select his shirt and face, but the hair is trickier. Don't worry if the selection isn't perfect. You'll refine the mask in the next exercise.
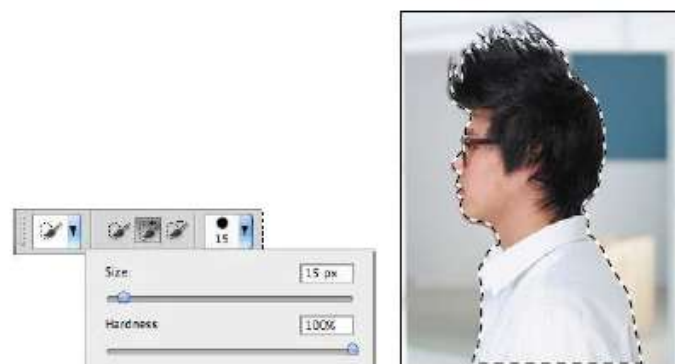
4   Select the Masks tab to make the Masks panel active. (It's grouped with the Adjustments panel by default. Choose Window > Masks if the Masks panel isn't open.)

5   In the Masks panel, click the Add A Pixel Mask button.
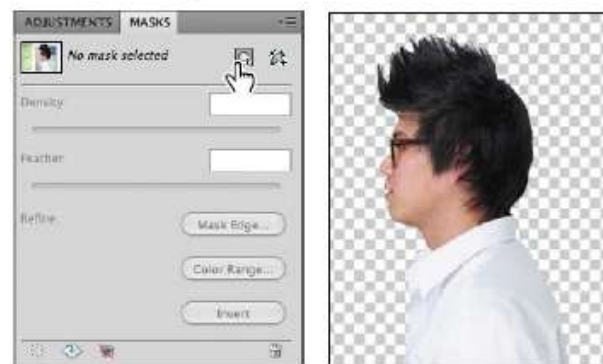
The selection becomes a pixel mask, and a new layer appears in the Layers panel. Everything outside the selection is transparent, represented by a checkerboard pattern.

Refining a mask

The mask is pretty good, but the Quick Selection tool couldn't quite capture all of the model's hair. The mask is also a little choppy around the contours of the shirt and face. You'll smooth the mask, and then fi ne-tune the mask around the hair.

1 In the Masks panel, click Mask Edge. The Refine Mask dialog box opens.
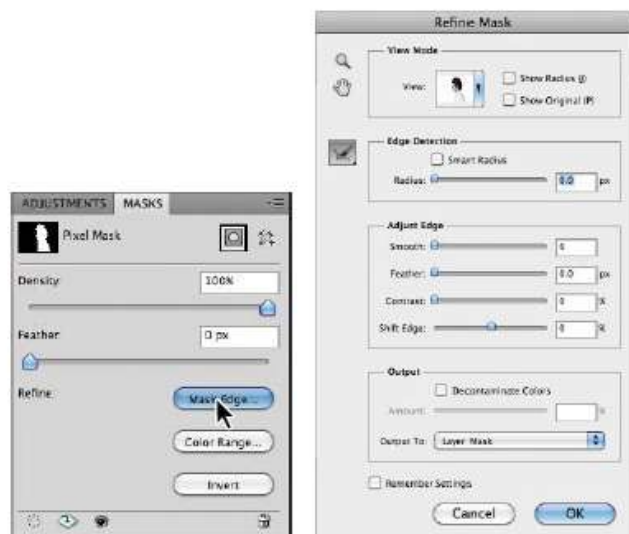
2 In the View Mode area of the dialog box, click the arrow next to the preview window. Choose On Black from the pop-up menu.

The mask appears against a black background, which makes it easier to see the edge of the white shirt and the face.

3 In the Adjust Edge area of the dialog box, move the sliders to create a smooth, unfeathered edge along the shirt and face. The optimal settings depend on the selection you created, but they'll probably be similar to ours. We moved the Smooth slider to 15, Contrast to 40%, and Shift Edge to -8%.

4 In the Output area of the dialog box, select Decontaminate Colors. Choose New Layer With Layer Mask from the Output To menu.

5 Select the Zoom tool in the Refine Mask dialog box, and then click it to zoom in to the face.

6 Select the Refine Radius tool (✐) in the Refine Mask dialog box. Use it to paint out any white background that remains around the lips and the nose. Press [to decrease the brush size and] to increase it.

7 When you're satisfied with the mask around the face, click OK.

A new layer, named Layer 0 copy, appears in the Layers panel. You'll use this layer to add the spikes to the mask of the hair.

8 With Layer 0 copy active, click Mask Edge in the Masks panel to open the Refine Mask dialog box again.

9 From the View pop-up menu, choose On White. The black hair shows up well against the white matte. If necessary, zoom out or use the Hand tool to reposition the image so that you can see all of the hair.

10 Select the Refine Radius tool in the Refine Mask dialog box. Press the] key to increase the size of the brush. (The options bar displays the brush size; we used 300 px at first.) Then, begin brushing along the top of the hair, high enough to include the spikes. Press the [key to decrease the brush size by about half. Then, paint along the right side of the head, where the hair is a solid color, to pick up any small, fine hairs that protrude.

As you paint, Photoshop refines the mask edge, including the hair, but eliminating most of the background. If you were painting on a layer mask, the background would be included. The Refine Mask feature is good, but it's not perfect. You'll clean up any areas of background that are included with the hair.

11 Select the Erase Refinements tool (🖌), hidden behind the Refine Radius tool in the Refine Mask dialog box. Click once or twice in each area where background color shows. When you erase an area, the Refine Mask feature erases similar colors, cleaning up more of the mask for you. Be careful not to erase the refinements you made to the hair edge. You can undo a step or use the Refine Radius tool to restore the edge if necessary.

12 Select Decontaminate Colors, and move the Amount slider to 85%. Choose New Layer With Layer Mask from the Output menu. Then click OK.

13 In the Layers panel, make the Magazine Background layer visible. The model appears in front of an orange patterned background.

Creating a quick mask

You'll create a quick mask to change the color of the glasses frames. First, you'll clean up the Layers panel.

1 Hide the Magazine Background layer so you can focus on the model. Then delete the Layer 0 and Layer 0 copy layers. Click Yes or Delete to confirm deletion of the layers or their masks, if prompted; you do not need to apply the mask to the current layer because Layer 0 copy 2 already has the mask applied.

2 Double-click the Layer 0 copy 2 layer name, and rename it **Model**.

3 Click the Edit In Quick Mask Mode button (◉) in the Tools panel. (By default, you have been working in Standard mode.)

4 In the Tools panel, select the Brush tool (🖌).

5 In the options bar, make sure that the mode is Normal. Open the Brush pop-up panel, and select a small brush with a diameter of **13 px**. Click outside the panel to close it.

6 Paint the earpiece of the glasses frames. The area you paint will appear red, creating a mask.

7 Continue painting with the Brush tool to mask the earpiece of the frames and the frame around the lenses. Reduce the brush size to paint around the lenses. Don't worry about the part of the earpiece that is overlapped by hair; the color change won't affect that area.

In Quick Mask mode, Photoshop automatically defaults to Grayscale mode, with a foreground color of black, and a background color of white. When using a painting or editing tool in Quick Mask mode, keep these principles in mind:

- Painting with black adds to the mask (the red overlay) and decreases the selected area.
- Painting with white erases the mask (the red overlay) and increases the selected area.
- Painting with gray partially adds to the mask.

8 Click the Edit In Standard Mode button to exit Quick Mask Mode.

9 Choose Select > Inverse to select the area you originally masked.

10 Choose Image > Adjustments > Hue/Saturation.

11 In the Hue/Saturation dialog box, change the Hue to **70**, a green color that fills the glasses frame. Click OK.
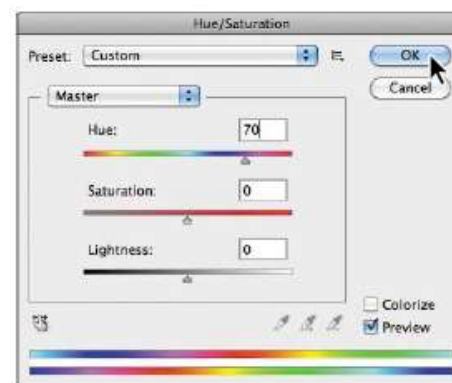
12 Choose Select > Deselect.

**13** Save your work so far.

Manipulating an image with Puppet Warp

The new Puppet Warp feature in Photoshop CS5 gives you greater flexibility in manipulating an image. You can reposition areas, such as hair or an arm, just as you might pull the strings on a puppet. You place pins where you want to control movement. You'll use Puppet Warp to tilt the model's head back, so he appears to be looking up.

1 With the Model layer selected in the Layers panel, choose Edit > Puppet Warp.

A mesh appears over the visible areas in the layer—in this case, the mesh appears over the model. You'll use the mesh to place pins where you want to control movement (or to ensure there is no movement).

2 Click around the edges of the shirt. Each time you click, Puppet Warp adds a pin. Approximately 10 pins should do the trick.
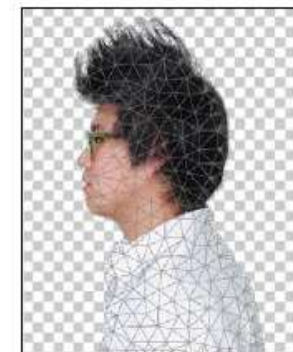
3 Select the pin at the nape of the neck. A black dot appears in the center of the pin to indicate that it's selected.
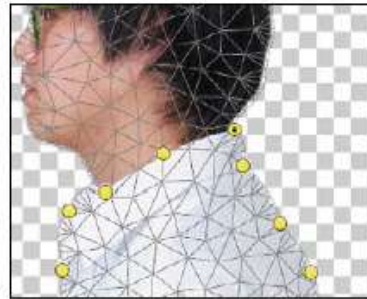
4 Press Alt (Windows) or Option (Mac OS). A larger circle appears around the pin and a curved double arrow appears next to it. Continue pressing Alt or Option as you drag the pointer to rotate the head backwards. You can see the angle of rotation in the options bar; you can enter **135** there to rotate the head back.
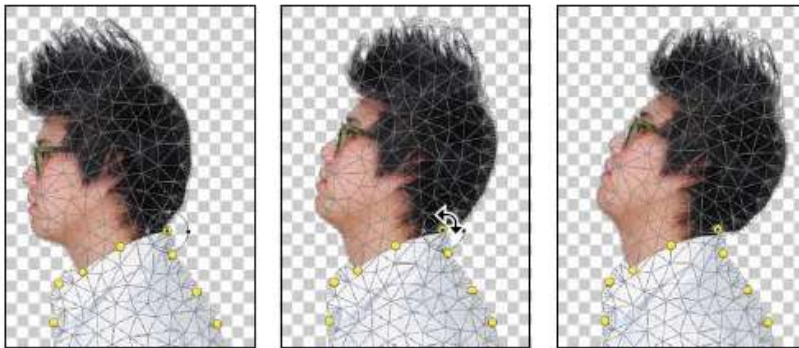
5 When you're satisfied with the rotation, click the Commit Puppet Warp button (✓) in the options bar, or press Enter or Return.

6 Save your work so far.

Working with channels

## Using an alpha channel to create a shadow

You've already created a mask of the model. To create a shadow, you want to essentially duplicate that mask and then shift it. You'll use an alpha channel to make that possible.

1 In the Layers panel, Ctrl-click (Windows) or Command-click (Mac OS) the layer icon in the Model layer. The masked area is selected.

2 Choose Select > Save Selection. In the Save Selection dialog box, make sure New is chosen in the Channel menu. Then name the channel **Model Outline,** and click OK.

Nothing changes in the Layers panel or in the image window. However, a new channel named Model Outline has been added to the Channels panel.
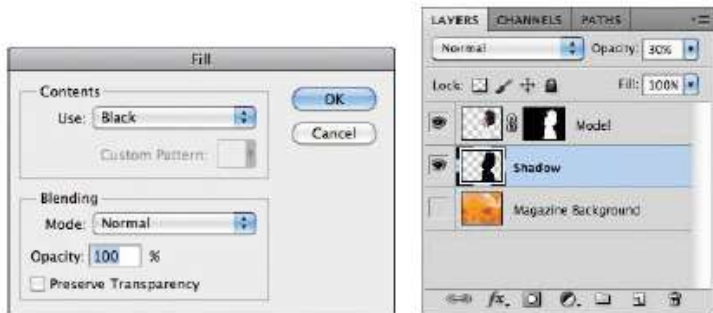
3 Click the Create A New Layer icon at the bottom of the Layers panel. Drag the new layer below the Model layer. Then double-click its name, and rename it **Shadow**.
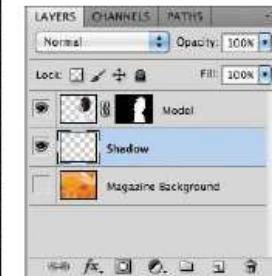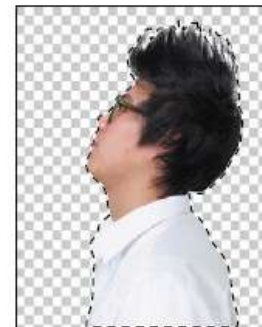
4 With the Shadow layer selected, choose Select > Refine Edge. In the Refine Edge dialog box, move the Shift Edge slider to **+36%**. Then click OK.

5 Choose Edit > Fill. In the Fill dialog box, choose Black from the Use menu, and then click OK.

The Shadow layer displays a filled-in black outline of the model. Shadows aren't usually as dark as the person that casts them. You'll reduce the layer opacity.
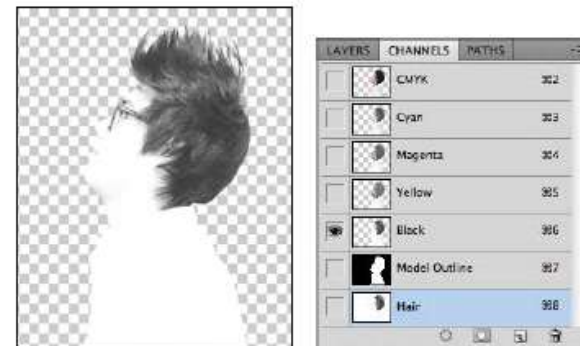
**6** In the Layers panel, change the layer opacity to **30%**.

The shadow is in exactly the same position as the model, where it can't be seen. You'll shift it.

7 Choose Select > Deselect to remove the selection.

8 Choose Edit > Transform > Skew. Rotate the shadow by hand, or enter **-15°** in the Rotate field in the options bar. Then drag the shadow to the left, or enter **845** in the X field in the options bar. Click the Commit Transform button in the options bar, or press Enter or Return, to accept the transformation.

9 Choose File > Save to save your work so far.

Adjusting an individual channel

You're almost done with the magazine cover image. All that remains is to add color highlights to the model's hair. You'll convert the image to CMYK mode so you can take advantage of the Black channel to do just that.

1 Select the Model layer in the Layers panel.

2 Choose Image > Mode > CMYK Color. Click Don't Merge in the dialog box that appears, because you want to keep your layers intact. Click OK if you're prompted about color profiles.

3 Alt-click (Windows) or Option-click (Mac OS) the visibility icon for the Model layer to hide the other layers.

4 Select the Channels tab. In the Channels panel, select the Black channel. Then choose Duplicate Channel from the Channels panel menu. Name the channel **Hair**, and click OK.

Individual channels appear in grayscale. If more than one channel is visible in the Channels panel, the channels appear in color.

5 Make the Hair channel visible, and hide the Black channel. Then select the Hair channel, and choose Image > Adjustments > Levels.

6 In the Levels dialog box, adjust the levels to move Black to **85**, Midtones to **1**, and White to **165**. Click OK.
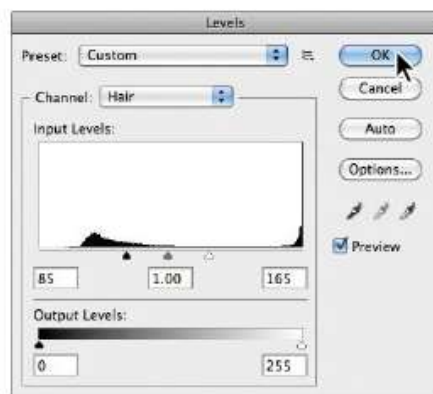
7 With the Hair channel still selected, choose Image > Adjustments > Invert. The channel appears white against a black background.

8 Select the Brush tool, and click the Switch Foreground And Background Colors icon in the Tools panel to make the Foreground color black. Then paint over the glasses, eyes, and anything in the channel that isn't hair.


9 Click the Load Channel As Selection icon at the bottom of the Channels panel.

10 Select the Layers tab. In the Layers panel, select the Model layer.
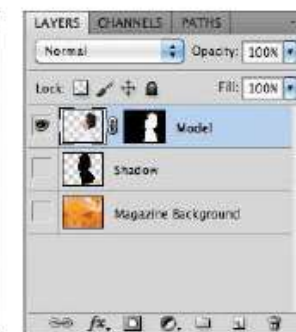
11 Choose Select > Refine Edge. In the Refine Edge dialog box, move the Feather slider to **1.2** px, and then click OK.

12 Choose Image > Adjustments > Hue/Saturation. Select Colorize, and then move the sliders as follows, and click OK:

- Hue: **230**

- Saturation: **56**

- Lightness: **11**

13 Choose Image > Adjustments > Levels. In the Levels dialog box, move the sliders so that the Black slider is positioned where the blacks peak, the White slider where the whites peak, and the Midtones in between. Then click OK. We used the values 58, 1.65, 255, but your values may vary.
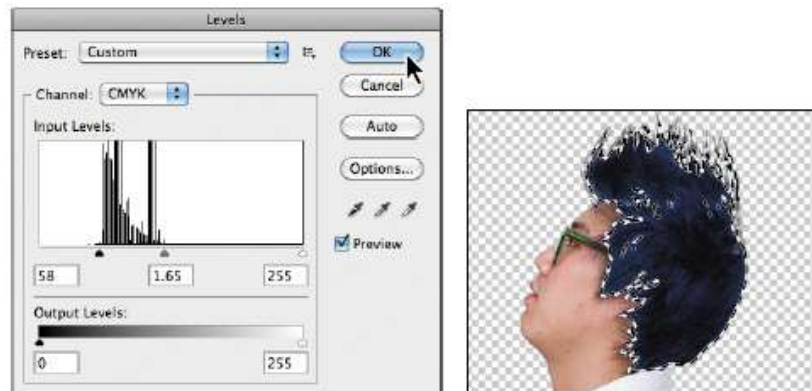
14 In the Layers panel, make the Shadow and Magazine Background layers visible.

15 Choose Select > Deselect.

Your magazine cover is ready to go!