4 | Creating and Applying Colors, Tints, and Gradients

The Swatches palette lets you apply, modify, and save colors, tints, and gradients in your document. You can apply LAB, RGB, or CMYK colors, process and spot colors, tints, and gradients of blended colors to your text and graphics.

In this introduction to working with colors, you'll learn how to do the following:

• Add colors to the Swatches palette

• Apply colors to objects

• Create dashed strokes

• Create and apply a gradient swatch

• Adjust the direction of the gradient blend

• Create a tint

• Create a spot color

Getting started

In this lesson, you'll work on a 2-page spread for a magazine article about origami. If you've gone through the two previous lessons, the design of this document will look somewhat familiar. The document includes two layers (Art and Text), two master pages (B is based on A), and a separate main story and sidebar. Before you begin, you'll need to restore the default preferences for Adobe InDesign. Then you'll open the finished document for this lesson to see what you'll be creating.

1 To ensure that the tools and palettes function exactly as described in this lesson, delete or deactivate (by renaming) the InDesign Defaults file and the InDesign SavedData file. See "Restoring default preferences" on page 2.

2 Start Adobe InDesign.

3 Choose File > Open, and open the 04_a.indd file in the ID_04 folder, located inside the Lessons folder within the IDCIB folder on your hard disk. If an alert message appears that asks which dictionary file you want to use, click No (Windows) or Document (Mac OS).

4 Choose File > Save As, rename the file **04_Color.indd**, and save it in the ID_04 folder.

5 If you want to see what the finished document will look like, open the 04_b.indd file in the same folder. You can leave this document open to act as a guide as you work. When you're ready to resume working on the lesson document, choose its name from the Window menu.

For a color version of the finished document, see the color section.

Note: As you work through the lesson, feel free to move palettes around or change the magnification to a level that works best for you. For more information, see "Changing the magnification of your document" on page 50 and "Using the Navigator palette" on page 57.

Defining printing requirements

It's a good idea to know printing requirements before you start working on a document. For example, meet with your prepress service provider and discuss your document's design and use of color. Because your prepress service provider understands the capabilities of their equipment, they may suggest ways for you to save time and money, increase quality, and avoid potentially costly printing or color problems. The magazine article used in this lesson was designed to be printed by a commercial printer using the CMYK color model.

Adding colors to the Swatches palette

You add color to objects using a combination of palettes and tools. The InDesign color workflow is centered around the Swatches palette. Using the Swatches palette to name colors makes it easy to apply, edit, and update colors for objects in a document. Although you can also use the Color palette to apply colors to objects, there is no quick way to update these colors, called *unnamed colors*. Instead, you'd have to update the color of each object individually.

You'll now create most of the colors you'll use in this document. Since this document is intended for a commercial press, you'll be creating CMYK process colors.

1 Make sure no objects are selected, and then click the Swatches palette tab. (If the Swatches palette is not visible, choose Window > Swatches.)

The Swatches palette stores the colors that have been preloaded into InDesign, as well as the colors, tints, and gradients you create and store for reuse.

2 Choose New Color Swatch from the Swatches palette menu.

3 Deselect Name With Color Value, and for Swatch Name, type **Purple**. Make sure Color Type and Color Mode are set to Process and CMYK, respectively.

The Name With Color Value option names a color using the CMYK color values you enter, and automatically updates the name if you change the value. This option is available only for process colors and is useful when you want to use the Swatches palette to monitor the exact composition of process color swatches. For this swatch you deselected the Name With Color Value option so that you can use a name (Purple) that's easier to read for this lesson.

4 For the color percentages, type the following values: Cyan = **67**, Magenta = **74**, Yellow = **19**, Black = **12**, and then click OK.
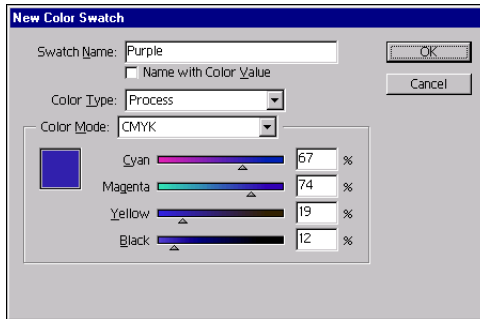
5 Repeat the previous three steps to name and create the following colors:

|	C	M	Y	K
Red	0	69	60	12
Green	51	19	91	12
Gold	0	31	81	4

If you forgot to type the name for a color or if you typed an incorrect value, double-click the swatch, change the name or value, and then click OK.

New colors added to the Swatches palette are stored only with the document they are created in. You'll apply these colors to text, graphics, and frames in your document.

Applying colors to objects

There are three general steps to applying a swatch color: (1) select the text or object, (2) specify in the toolbox whether you'll change the stroke or fill, and (3) select the color in the Swatches palette. You can also drag swatches from the Swatches palette to objects.

1 Select the selection tool ( ), and click one of the diamond shapes at the top of the right page to select the group of objects.
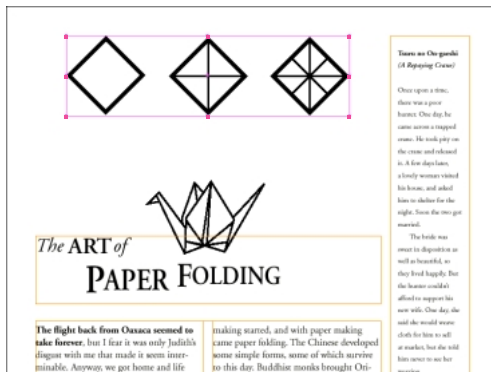
Notice that these three objects are grouped. You will ungroup these objects and lock them in place. Locking these objects will prevent them from being moved accidentally.

2 With the group of objects still selected, choose Object > Ungroup. Choose Object > Lock Position.

3 Deselect the objects. To deselect an object, you can choose Edit > Deselect All, you can click a blank area in your document window, or you can press Shift+Ctrl+A (Windows) or Shift+Command+A (Mac OS).

4 To zoom in on the diamonds, click the zoom tool (🔍), and drag across the three diamonds. Make sure you can see all three diamond shapes.

💡 *To fine tune the zoom magnification, you can press Ctrl+= (Windows) or Command+= (Mac OS). To zoom out, you can press Ctrl+- (Windows) or Command+- (Mac OS).*

5 Select the selection tool (▶), and then click the border of the middle diamond to select it. Select the Stroke box (🔲) in the toolbox, and then click Purple in the Swatches palette.
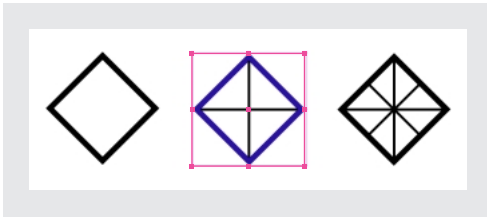

The stroke of the diamond shape is now purple. However, the color is not applied to the lines inside the shape because they are separate objects.

6 Deselect the object.

7 Click the border of the left diamond to select it. Select Red in the Swatches palette to apply a red stroke.

8 With the left diamond still selected, select the Fill box (🔲) in the toolbox, and then select Gold in the Swatches palette (you may need to scroll through the swatches).
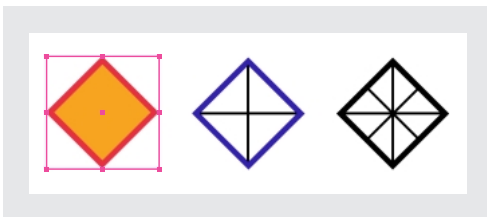

The right diamond requires the same Red stroke and Gold fill. You'll use the eyedropper to copy the stroke and fill attributes from the left diamond in one quick step.

9 Select the eyedropper tool (✐), and click the left diamond. Notice that the eyedropper is now filled (✎), indicating that it picked up the attributes from the clicked object.
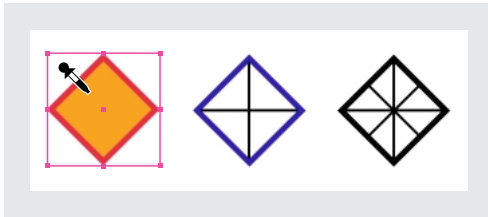
10 With the filled eyedropper tool, click the white background of the right-most diamond. The right diamond takes on the left diamond's fill and stroke attributes.
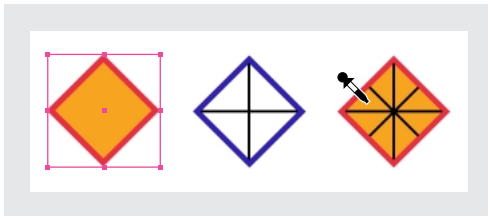
Now you'll change the color of the two diagonal lines in the right diamond.

11 Select the selection tool (▶), and then deselect the objects.

12 Holding down Shift, select the two diagonal lines inside the right diamond. Release Shift. Select the Stroke box (▣) in the toolbox, and then select [Paper] in the Swatches palette.
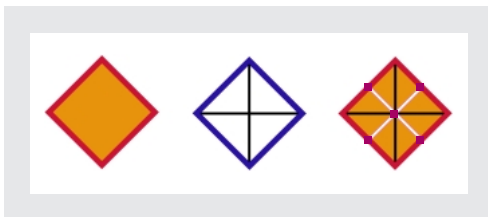
[Paper] is a special color that simulates the paper color on which you're printing. Objects behind a paper-colored object won't print where the paper-colored object overlaps them. Instead, the color of the paper on which you print shows through.

Creating dashed strokes

You'll now change the lines in the center and right diamonds to a custom dashed line.

1 Deselect the objects. Holding down Shift, use the selection tool (▶) to select the four vertical and horizontal lines in the middle and right diamonds. Release Shift.
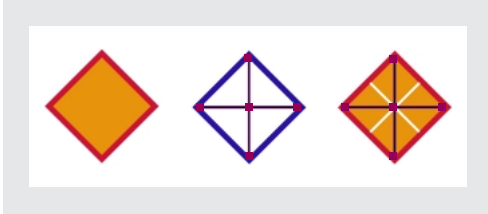

2 Choose Window > Stroke to display the Stroke palette, and then choose Show Options from the Stroke palette menu to display additional options.

3 For Type, select Dashed.

Six dash and gap boxes appear at the bottom of the Stroke palette. To create a dashed line, you specify the length of the dash, and then the gap, or spacing, between the dashes.

**4** Type the following values in the Dash and Gap boxes: **6**, **4**, **2**, **4** (press Tab after you type each value to move to the next box). Leave the last two dash and gap boxes empty.
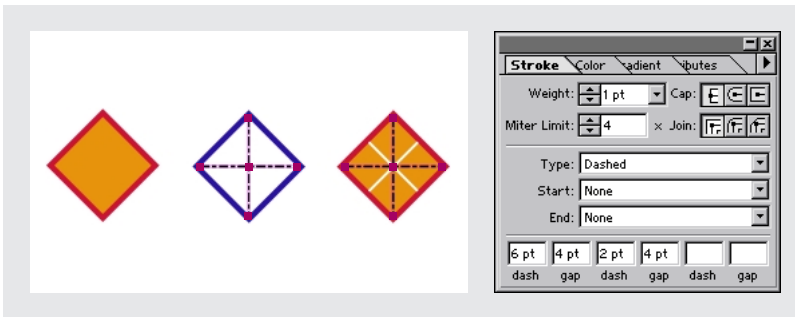
5 Close the Stroke palette, and then choose File > Save.

Working with gradients

A *gradient* is a graduated blend between two or more colors, or between tints of the same color. You can create either a linear or a radial gradient.
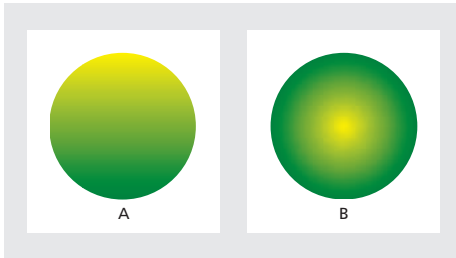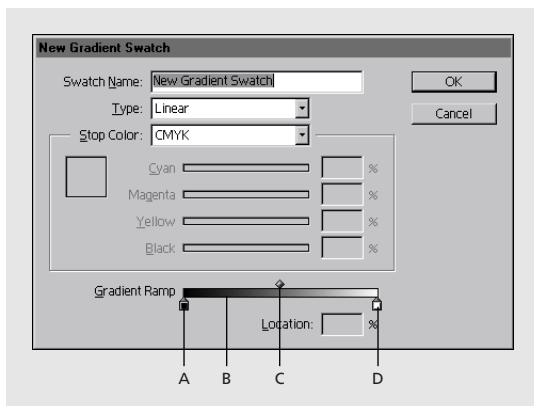

A. *Linear gradient* **B.** *Radial gradient*

Creating and applying a gradient swatch

Every gradient in InDesign has at least two color stops. By editing the color mix of each stop and by adding color stops in the Gradient palette, you can create your own custom gradients.

1 Deselect all objects.

2 Choose New Gradient Swatch from the Swatches palette menu.


A. *Left stop* **B.** *Gradient bar* **C.** *Ramp slider* **D.** *Right stop*

Gradients are defined by a series of color stops in the gradient bar. A *stop* is the point at which a gradient changes from one color to the next and is identified by a square below the gradient bar.

3 For Swatch Name, type **Green/Gold Gradient**.

4 Click the left stop marker (⬟). For Stop Color, select Named Color, and then select Green in the list box.

Notice that the left side of the gradient ramp is green.
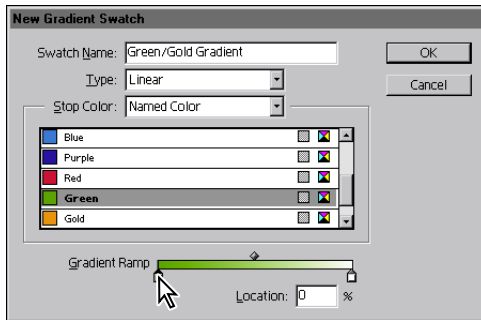
5 Click the right stop marker (⬟). For Stop Color, select Named Color, and select Gold in the list box.

The gradient ramp shows a color blend between green and gold.

6 Click OK.

Now you'll apply the gradient to the fill of the middle diamond.

7 Click the border of the middle diamond to select it.

8 Select the Fill box (◼) in the toolbox, and then click Green/Gold Gradient in the Swatches palette.

## Adjusting the direction of the gradient blend

Once you have filled an object with a gradient, you can modify the gradient by using the gradient tool (◼) to "repaint" the fill along an imaginary line you drag. This tool lets you change the direction of a gradient and change the beginning point and endpoint of a gradient. You'll now change the direction of the gradient.

1 Make sure the middle diamond is still selected, and then select the gradient tool (▨) in the toolbox.
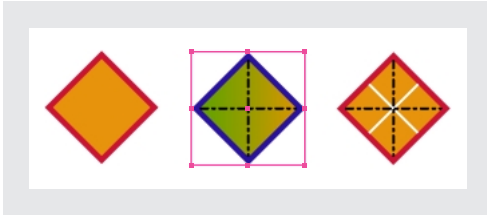
Now you'll experiment with the gradient tool to see how you can change the direction and intensity of the gradient.

2 To create a more gradual gradient effect, place the pointer an inch or so outside the selected diamond and drag past it.
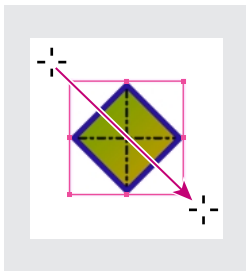
When you release the mouse button, you'll notice that the blend between green and gold is more gradual than it was before you dragged the gradient tool.

3 To create a sharper gradient, drag a small line in the center of the diamond. Continue to experiment with the gradient tool so that you understand how it works.
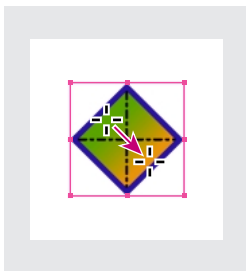
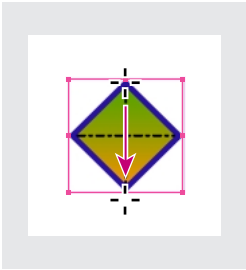**4** When you have finished experimenting, drag from the top corner of the diamond to the bottom corner. That's how you'll leave the gradient of the middle diamond.

5 Choose File > Save.

Creating a tint

In addition to adding colors, you can also add tints to the Swatches palette. A *tint* is a screened (lighter) version of a color. You'll now create a 30% tint of the green swatch you created earlier in this lesson.

1 Deselect all objects.

2 Click Green in the Swatches palette. Choose New Tint Swatch from the Swatches palette menu. For Tint percentage, type **30** and then click OK.
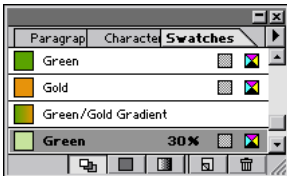
Notice that a new tint swatch appears at the bottom of the Swatches palette. This tint is based on the original Green color swatch. If you change the Green color swatch to a different color, for example, the tint swatch you just created would be a lighter version of the new color.

3 Choose View > Fit Page in Window to center the right page of the spread in the document window. Using the selection tool (➤), click the sidebar text frame on the right side of the page.

4 Make sure the Fill box (■) is selected, and then click the Green tint you just created in the Swatches palette.

Before and after adding fill tint

Creating a spot color

This publication will be printed to a commercial printer using the standard CMYK color model, which requires four separate plates for printing—one for cyan, one for magenta, one for yellow, and one for black. However, the CMYK color model has a limited range of colors, which is where spot colors come in handy.

In this publication, the title design calls for a metallic ink not found in the CMYK color model. You'll now add a metallic spot color from a color library.

1 Deselect all objects.

2 Choose Window > Swatch Libraries > PANTONE Coated.

The Swatch Libraries command lets you import entire color libraries from color systems such as the PANTONE Coated and PANTONE Process systems, as well as from other InDesign and Adobe Illustrator documents.

3 Locate and double-click PANTONE 876 CVC.

 *To select an item in a palette using the keyboard, hold down Ctrl+Alt (Windows) or Command+Option and click an item in the palette. Then quickly type the color number. In this case, you would quickly type **876** to select PANTONE 876 CVC.*

About spot and process color types

A spot color is a special premixed ink that is used instead of, or in addition to, CMYK inks, and that requires its own plate on a printing press. Use spot color when few colors are specified and color accuracy is critical. Spot color inks can accurately reproduce colors that are outside the gamut of process colors. However, the exact appearance of the printed spot color is determined by combination of the ink as mixed by the commercial printer and the paper it's printed on, so it isn't affected by color values you specify or by color management. When you specify spot color values, you're describing the simulated appearance of the color for your monitor and composite printer only (subject to the gamut limitations of those devices).

A process color is printed using a combination of four standard process inks: cyan, magenta, yellow, and black (CMYK). Use process colors when a job requires so many colors that using individual spot inks would be expensive or impractical, such as when printing color photographs. Keep the following guidelines in mind when specifying a process color:

• Don't specify a process color based on how it looks on your monitor unless you have set up a color management system properly and you understand its limitations for previewing color. For best results in a printed document, specify process colors using CMYK values printed in process-color reference charts, such as those available from a commercial printer.

• The final color values of a process color are its values in CMYK, so if you specify a process color using RGB or LAB, those color values will be converted to CMYK when you print color separations. These conversions will work differently if you turn on color management; they'll be affected by the profiles you've specified.

• Avoid using process colors in documents intended for online viewing only, because CMYK has a smaller color gamut than a typical monitor.

Sometimes it's practical to print process and spot inks on the same job. For example, you might use one spot ink to print the exact color of a company logo on the same pages of an annual report where photographs are reproduced using process color. You can also use a spot color printing plate to apply a varnish over areas of a process color job. In both cases, your print job would use a total of five inks—four process inks and one spot ink or varnish.

–—From the *Adobe InDesign User Guide*, Chapter 9

The metallic spot color is added to your Swatches palette. Notice the icon (▣) next to the color name in the Swatches palette. This icon indicates that it is a spot color.
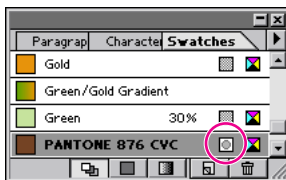
4 Close the PANTONE Coated palette.

Note: The color you see on your monitor does not reflect the actual printed color. To determine the color you want to use, look at a chart provided by the color system, such as the PANTONE Color Formula Guide 747XR, or an ink chart obtained from your printer. It's a good idea to minimize the number of spot colors you use. Each spot color you create generates an additional spot color plate for the press, increasing your printing costs.

Applying color to text

As with frames, you can apply a stroke or fill to text itself. You'll apply colors to the text inside the frames on page 2 of the document.

1 In the Pages palette, double-click the page 2 icon to center page 2 in the document window.

2 Select the type tool (T) in the toolbox, and then double-click "Origami" to select the title.

3 Make sure the Fill box (■) in the toolbox is selected, and then click PANTONE 876 CVC in the Swatches palette. Click a blank area to make sure no objects are selected.

Your monitor probably shows the text in a dull brown shade, but the actual printed color of the text will be the metallic spot color. Next, you'll insert another text frame and apply colors to the text.

4 Using the type tool (T), triple-click "a short story by" at the bottom of the page to select that paragraph.

5 Make sure the Fill box (■) is selected in the toolbox, and then click Purple in the Swatches palette.

6 Triple-click "Clyde Bell" to select the name, and then click Red in the Swatches palette.

7 Choose File > Save.

Applying colors to additional objects

Now you'll apply the same colors used by the small cranes to the large crane image at the bottom of the page. First you'll look at a magnified view of one of the small cranes to see which colors are used.

1 Click a blank area to make sure no objects are selected. Click the magnification tool (🔍), and then drag across one of the small cranes to zoom in.

2 Select the direct-selection tool (⊳), and then click any of the objects in the crane image. Notice that the corresponding swatch in the Swatches palette becomes highlighted when you select the object the swatch is applied to.
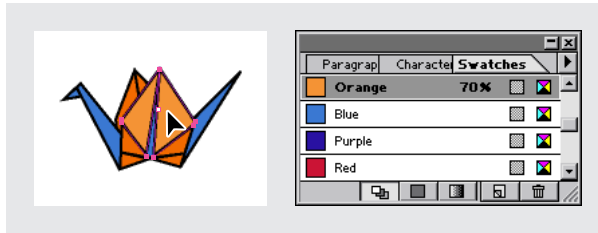

Now you'll apply these colors to the larger image at the bottom of the page.

3 Choose View > Fit Page in Window. Select the selection tool (⊳), and click the large image at the bottom of page 2 to select the object. Choose Object > Ungroup.

Notice that the image consists of many smaller shapes grouped together. Now you'll apply orange to two of these shapes.

4 Deselect all objects, and then select the Fill box (◼) in the toolbar. Holding down Shift, click the two objects indicated below, and apply the Orange fill color (not the Orange tint).
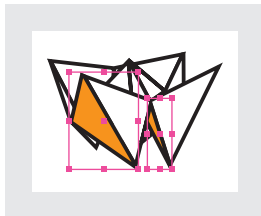

5 Deselect all objects. Drag the Orange 70% fill swatch from the Swatches palette to the object indicated below. Be sure to drop it inside the object and not on the object's stroke.
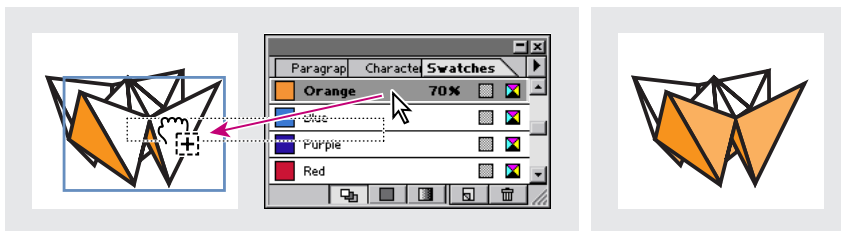
Dragging and dropping can be a more convenient way to apply color when an object is a large, easy target, and you don't have to select the object first. However, in the next step the area is small so you'll go back to applying a color by selection.

**6** Deselect all objects, select the object indicated below, and apply the Blue fill.
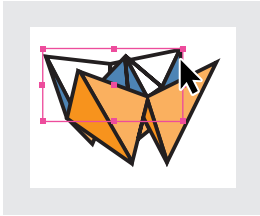
💡 *If you applied the color to the wrong object, choose Edit > Undo Swatch and try again.*

Creating another tint

You'll now create a tint based on the Blue color. When you edit the Blue color, the tint that is based on the color will also change.

1 Deselect all objects.

2 Click Blue in the Swatches palette. Choose New Tint Swatch from the Swatches palette menu. Type **70** in the Tint box, and then click OK.

3 Select the object shown below and apply the Blue 70% fill.
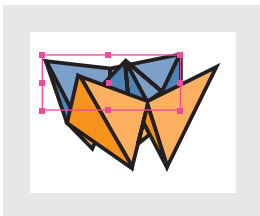
Notice how the large image shares the same colors with the small cranes you imported. Next you'll change the Blue color. Blue 70% is based on the Blue swatch, so the tint will also change.

4 Deselect all objects.

5 Double-click Blue (not the Blue tint) to change the color. For Swatch Name, type **Violet Blue**. For the color percentages, type the following values: Cyan = **59**, Magenta = **80**, Yellow = **40**, Black = **0**. Click OK.

Notice that the color change affects all objects to which Blue and Blue 70% were applied. As you can see, adding colors to the Swatches palette makes it easy to update colors in multiple objects.

6 Choose File > Save.

Using advanced gradient techniques

Earlier you created and applied a gradient and adjusted its direction using the gradient tool. InDesign also lets you create gradients of multiple colors and control the point at which the colors blend. In addition, you can apply a gradient to individual objects or to a collection of objects to make it appear as if each object were revealing more of the gradient.

Creating a gradient swatch with multiple colors

Earlier in this lesson, you created a gradient with two colors—green and gold. Now you'll create a gradient with three stops so that a green color on the outside will fade to white in the middle.

1 Choose Edit > Deselect All. Then choose New Gradient Swatch from the Swatches palette menu, and then type **Green/White Gradient** for Swatch Name.

The colors from the previous blend appear in the dialog box.

2 Click the left stop marker (⌂), select Named Color for Stop Color, and make sure Green (not the tinted Green) is selected in the list box. Click the right stop marker (⌂), select Named Color for Stop Color, and make sure Green (not the tinted Green) is selected in the list box.

The gradient ramp is now entirely green. Now you'll add a stop marker to the middle so that the color fades towards the center.

3 Click just below the center of the gradient bar to add a new stop. For Location, type **50** to make sure the stop is centered. For Stop Color, select Named Color, and then select [Paper] in the list box.
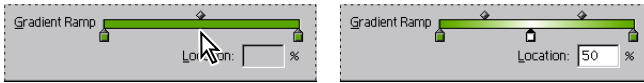
4 Click OK, and then choose File > Save.

Applying the gradient to an object

To finish page 2, you'll create a full-page box and then apply the gradient to its fill. First, let's change the view size so that you can see all of page 2.

1 Choose 50% from the magnification pop-up list at the bottom of the document window.

Before you create the graphics frame, make sure the Art layer is selected. It's a good idea to get into the habit of making sure your objects are placed on the appropriate layer so that you can hide or lock a set of objects easily.

2 Choose Edit > Deselect All. Click the Layers palette tab to bring the Layers palette to the front, and then select Art. (Do not select either box to the left of Art, or you'll hide or lock the objects on the Art layer.)

3 Select the Fill box (◼) in the toolbox, and then select Green/White Gradient in the Swatches palette, if it's not already selected. Select the Stroke box (◻) in the toolbox, and then click the None button (◿) at the bottom of the toolbox.
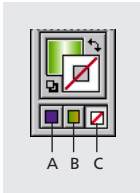
A. *Apply last-used color*
B. *Apply last-used gradient*
C. *Remove color or gradient*

Now that the Fill box is set to the gradient and the Stroke box is set to none, the next object you draw will contain the gradient fill with no stroke.

4 Select the rectangle tool (▭), and then draw a frame that covers all of page 2, including the margins.

**5** With the frame still selected, choose Object > Arrange > Send to Back (not Send Backward).
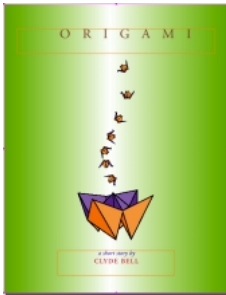
You are now finished with page 2.

Applying a gradient to multiple objects

Previously in this lesson, you used the gradient tool (▮) to change the direction of a gradient and to change the gradient's beginning and end points. You'll now use the gradient tool to apply a gradient across multiple objects in the crane on page 3.

1 Double-click the zoom tool (🔍) to change the view to 100%. Click the Pages palette tab to display the Pages palette, and then double-click the page 3 icon.

2 Click the Layers palette tab to display the Layers palette. Click the empty box just to the left of the Text layer name to prevent you from selecting the text frame accidentally. A crossed-out pencil icon appears in the box.

3 Select the selection tool (↖), and then click the crane image above "The Art of Paper Folding."
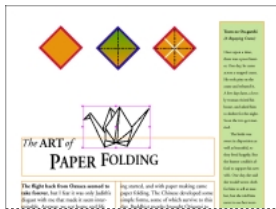

4 With the object selected, choose Object > Ungroup, and then deselect all the objects.

5 To zoom in, hold down Ctrl+spacebar (Windows) or Command+spacebar (Mac OS), and drag across the crane object above "The Art of Paper Folding."

Holding down Ctrl+spacebar or Command+spacebar toggles temporarily to the zoom tool. When you release the keys, the previous tool is selected.

6 Select the object shown below, make sure the Fill box (■) in the toolbox is selected, and apply the Red swatch.
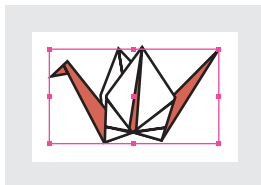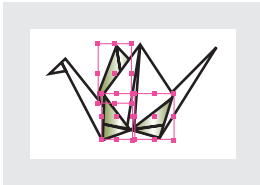
7 Select the object shown below and apply the Green swatch (not the Green tint) as a fill.
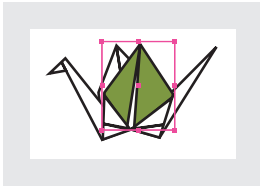

Now you'll apply the Green/White gradient to three different objects.

8 Deselect all objects. Holding down Shift, select the three objects shown below, and then apply the Green/White Gradient.

Notice that the gradient affects each object on an individual basis. Now you'll use the gradient tool to apply the gradient across the three selected objects as one.

9 With the three objects still selected, select the gradient tool (▤) in the toolbox. Drag an imaginary line as shown.
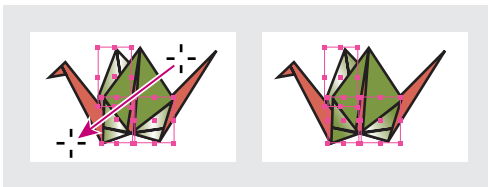
Now the gradient runs across all three selected objects.

Viewing the completed spread

You have finished the spread. Now you'll look at the spread without frame edges or palettes.

1 Choose Edit > Deselect All.

2 To view your spread, choose View > Fit Spread in Window. Then choose View > Hide Frame Edges.

3 Save the file.

Congratulations. You have completed the lesson.

On your own

Follow these steps to learn more about importing colors and working with gradients.

1 To create a new document, choose File > New, and then click OK.

2 To import the colors from a different InDesign document, choose Window > Swatch Libraries > Other Library. Double-click 04_Color (or 04_b.indd). Notice that the colors you created appear in a palette.

3 Make sure the Swatches palette is visible. Double-click Green/Gold Gradient to add it to the Swatches palette. Add a few of the other colors to the Swatches palette.
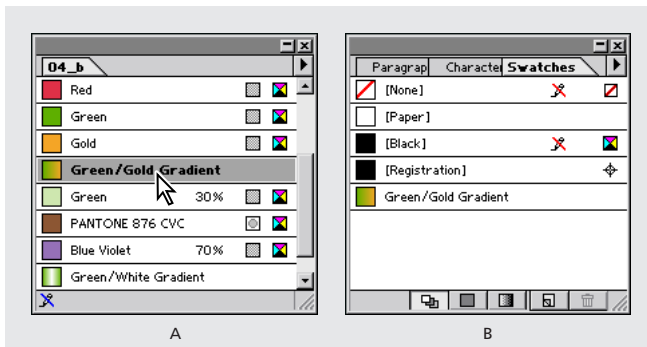
A. *Colors, tints, and gradients imported from another InDesign document*
B. *Swatch added to Swatches palette*

4 Use the ellipse tool (○) to draw a shape. Apply the Green/Gold Gradient to the shape's fill.

5 Double-click Green/Gold Gradient in the Swatches palette to change it. Drag the diamond-shaped slider above the gradient ramp to the right so that the gradient is mostly green, and click OK. Notice that the gradient in the ellipse changes.

6 Create a new gradient swatch that is radial instead of linear. Apply the new gradient to the fill of a different shape you draw. Use the gradient tool to change the gradient.

7 When you are done experimenting with colors, close the document without saving it.

Review questions

1 What is the advantage of applying colors using the Swatches palette instead of the Color palette?

2 What are the pros and cons of using spot colors versus process colors?

3 After you create a gradient and apply it to an object, how do you adjust the direction of the gradient blend?

Review answers

1 If you apply a color to several objects and then decide you want to use a different color, you don't need to update each object individually. Instead, change the color in the Swatches palette and the color of all the objects will be updated automatically.

2 By using a spot color, you can ensure color accuracy. However, each spot color requires its own plate at the press, so using spot colors is more expensive. Use process colors when a job requires so many colors that using individual spot inks would be expensive or impractical, such as when printing color photographs.

3 To adjust the direction of the gradient blend, use the gradient tool to repaint the fill along an imaginary line in the direction you want.