

ADOBE® ILLUSTRATOR® CS4

CLASSROOM IN A BOOK®

Instructor Notes



Adobe® Illustrator® CS4 Classroom in a Book® for Windows® and Mac OS

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INSTRUCTOR NOTES

Getting Started

The Adobe Illustrator CS4 Classroom in a Book course presents students with tips, techniques, and solutions for using the Adobe Illustrator CS4 software. The Instructor Notes are intended to complement the information in the *Adobe Illustrator CS4 Classroom in a Book*.

The information is organized to follow the sequence of instruction in each lesson.

About the workbooks

It is recommended that each student in the class have an individual copy of the *Adobe Illustrator CS4 Classroom in a Book*. Students will use this book as you lead them through projects. Additionally, the book can be used as a self-paced tutorial.

Course strategy

If you're teaching a 12-session class, you can teach approximately one chapter of this book per class. The book contains 15 lessons, some of which may take a while to complete. If you are teaching a 10-session class, you may want to combine some of the lessons in a single class. For example:

- Lessons 2, 3, and 4 are focused on different aspects of creating and editing shapes and other content.
- Lessons 6 and 9 are both focused on working with color.

We recommend that, at an absolute minimum, you teach Lessons 1 through 8 along with 11 (Lessons 9, 10 and 12–15 cover more special-purpose features.) The majority of the basic Adobe Illustrator features and the Illustrator work environment are covered in these lessons. However, completing all the lessons makes a far superior introduction. Before beginning a lesson, encourage students to browse through it, and read any sidebars.

Enhanced/new features

Below is a short list of the new and improved features in Illustrator and where they are covered in the book.

- Lesson 1 covers the new interface and navigating multiple artboards.
- Lesson 2 shows enhanced smart guides and selecting a key object when aligning.
- Lesson 3 introduces adding artboards to a document as well as covers the new smart guide functionality (measurement labels, etc.).
- Lesson 4 covers creating and editing multiple artboards.

- Lesson 6 shows the updated/improved Edit Color/Recolor Artwork dialog box as well as the new Kuler panel.
- Lesson 9 covers the new gradient panel and gradient tool, including transparency in gradients and manipulating gradients directly on the artboard (colors, transparency, etc.)
- Lesson 10 shows the new Blob Brush tool (in conjunction with the Eraser tool as well).
- Lesson 11 covers the new and improved Appearance panel. As a side note, filters are now gone from Illustrator.
- Lesson 12 introduces the new Appearance panel functionality as well as graphic style additions including context preview and text previews.
- Lesson 14 shows InDesign integration (with the new InDesign Links panel) as well as Flex integration.

Managing student projects

One way to simplify file storage and retrieval in classroom situations is to ask students to create a folder on their hard disks, name it [Student's] Lessons (substituting the student's actual name for "Student"), and then copy each project folder into the main Lessons folder. Having students keep all their working files in their own Lessons folder makes it easy for you to clean up files when a class is over.

Lesson 1: Getting to Know the Work Area

This lesson provides an overview of the work area and basic functionality of Illustrator. By the end of the lesson, students should understand how all the basic Illustrator elements work together to create page layouts. They should also understand the overall interface of Illustrator, including, how to access panels, where tools are located, and how to navigate documents.

Understanding the workspace

Page 31: The workspace in Illustrator has changed quite a bit from previous versions. One thing worth noting is the difference between Windows and Mac OS. On Windows, the application menus are in the Application bar, whereas on Mac OS, the menus are above the Application bar. Also, on Windows the Application frame is always on and it's turned off on Mac OS (Window > Application Frame).

Tools panel

Pages 32–34: Many of the tools have popup options—so tools you need to access may be hidden beneath other tools. All the tools and all the popups are shown on page 32. The tool tips for each tool display its name and single-letter shortcut. The Tools panel can be configured in various ways, including horizontal.

Panels and workspaces

Pages 35–42: With the proliferation of panels in Illustrator, it's important to keep the workspace neat and organized. Encourage students to learn to open, close, dock, float, collapse, expand, and group panels to meet specific needs—then save that panel configuration as a workspace.

You may want to point out the two reasons why the Tab keyboard shortcut is so useful. Hiding and showing all panels instantly allows quick evaluation of images without the distraction of panels, and when working on a small screen it more easily allows use of the entire screen for image editing. Let students know that they can save their customized panel positions by making a copy of the Adobe Illustrator CS4 Prefs file.

Panel menus

Page 40: Make sure students know that panels have menus that provide additional features and panel-customization options.

Context menus

Page 41: Context menus are widely used throughout Illustrator—for example, you can modify an object's stroke weight from a context menu or perform a

transformation. To display context menus, right-click (Windows) or Control-click (Mac OS) on objects, within text, on artboards, and more. These helpful menus provide quick access to frequently used features.

Changing the view of artwork

Pages 42–44: While the Zoom tool works well, you can work more efficiently by holding down the modifier keys to temporarily activate the Zoom tools. Press Ctrl+spacebar (Windows) Command+spacebar (Mac OS) to temporarily activate the Zoom tool, which allows you to quickly increase your magnification without having to switch tools. You can find other zoom controls in the View menu and on the Application bar.

Navigating and scrolling

Pages 45–46: Since Illustrator now has the ability to create multiple artboards, navigating and scrolling are becoming more important. You can use the space bar to temporarily activate the hand tool to scroll through a document. When entering text, using the Alt (Windows) or Option key (Mac OS) to temporarily access this tool, rather than needing to switch using the Tools panel. Another shortcut option is to simply use Alt+spacebar (Windows) or Option+spacebar (Mac OS) any time, no matter what context. Since there is the possibility for multiple artboards, it is important to learn the Window > Fit Artboard In Window and Window > Fit All In Window commands. Other shortcuts that students may find useful are Ctrl+F6 (next document), Ctrl+Shift+F6 (previous document) (Windows) and Cmd+` (next document), Cmd+Shift+` (previous document) (Mac OS).

Arranging documents

Pages 47–50: It is important to note that new windows are not the same as new documents. You can create multiple views of the same document, opening new windows as necessary. Each window is simply a separate view of the same document. The Application bar displays across the top of the screen by default, but can be hidden to save screen space (Mac OS only). The Control panel also displays across the top of the screen; most users keep it open but you may wish to move it to the bottom of the screen.

Document groups

Pages 50–51: At first, document groups can be a bit confusing. They are intended to make it easier to navigate and temporarily associate files together.

The Navigator panel

Pages 52–53: The Navigator panel may become more important to users as they navigate multiple artboard documents.

Questions

- 1 Name two ways that you can switch to another workspace.
- 2 If you are looking for a tool and it is not visible, where might it be located?

Answers

- 1 By choosing either Window > Workspace > name of workspace, or choosing the workspace name from the workspace switcher in the Application bar.
- 2 Some tools are nested, as they are located behind other tools. You must click and hold down on a tool to select any tools that are nested behind it.

Lesson 2: Selecting and Aligning

This lesson provides an overview of selecting objects and anchor points as well as the different ways to align them. By the end of the lesson, students should have a better understanding of what shapes are composed of (anchor points) and how to select, move, group, and align them.

Using the Direct Selection tool

Pages 63–64: It is really important that students understand the base functionality difference between the Selection and Direct Selection tools. When working with these tools, it may become easier to access the tool shortcuts (V-Selection tool or A-Direct Selection tool). Smart guide measurement labels are also briefly discussed. Smart guides may be a bit overwhelming now that they are turned on by default. Throughout the book we attempt to have users turn them on when necessary and turn them off when otherwise.

Selection and Anchor Point Preferences

Page 64: Making the points larger and the handles a different icon can go a long way to helping users select and understand a drawing.

Creating selections with a marquee

Page 65: A problem may arise when users attempt to drag to select with a marquee and they accidentally drag an object.

Working in isolation mode

Page 68: Isolation mode has gotten better and better over the versions of Illustrator. Even if users do not like entering isolation mode, it is very useful to see what it is in case they ever enter the mode accidentally. Also, in most cases, the Escape key exits isolation mode.

Select similar objects

Page 68: Due to the fact that screen resolution may be different on monitors, the Select Similar Objects button may be hidden or in another location in the Control panel. You can always guide students to the menu items (Select > Similar > command).

Advanced selection techniques

Page 71: This simple method for hiding selections can keep students from selecting the wrong object. Remind students to use the keyboard shortcuts Ctrl+3 (Windows) or Command+3 (Mac OS) to hide a selection. Ctrl+Alt+3 (Windows) or Command+Option+3 (Mac OS) to Show All the Hidden objects. If students don't want to show all hidden objects at once, suggest that they use layers, and reference Lesson 7.

Aligning

Pages 73–76: Once again, most of the features such as align options, select similar, etc. are usually found in the Control panel when contextually necessary for what is selected on the artboard. You will find that smaller resolution monitors place shortcuts in the Control panel for align options (the word Align) rather than the align options themselves. In Aligning Points (page 74) make sure that students understand that the last point selected in the key object (there is no real visual feedback indicating this). The Aligning to Artboard (page 75) section describes the Align To Selection button and the Align To Artboard button as new ways in CS4 to tell whether or not align to artboard is active. It used to be that the Align To Artboard button was either highlighted or not.

Questions

- 1 When you have multiple objects selected, how do you deselect just one item?
- 2 What happens when you double-click a group?
- 3 Explain what a key object is.

Answers

- 1 To deselect an object, Shift-click the object

- 2 When you double-click a group with the Selection tool, the group enters isolation mode which temporarily ungroups and isolates the grouped objects.
- 2 When aligning objects or anchor points, a key object is the object or anchor point that other selected objects or anchor points align to.

Lesson 3: Creating and Editing Shapes

This lesson provides an overview of shape basics—both how to create them and how to edit them. By the end of the lesson, students should have a better understanding of what types of shapes they can create, as well as the ins and outs of selecting and editing using smart guides throughout the lesson. They will also leave with an understanding of what pathfinder commands are and how they can be used to create and edit shapes.

Creating a document with multiple artboards

Pages 80–82: Multiple artboards are covered in several different lessons. In this lesson, a new document with multiple artboards is created. In a later lesson (chapter 4), students will learn how to edit those artboards. Point out that artboards can be edited later on and that you can have from 1 to 100 artboards in a given document. It is also helpful at this point to describe why multiple artboards can be useful. For instance, a designer needs to create several pieces for a client, including a business card and a postcard mailer. It is usually easier to create both pieces in one document using multiple artboards so that you can more easily organize content and share content between pieces.

About smart guides

Page 86: Point out the importance of working with smart guides. Smart guides can be a nuisance at times, but if the students learn the shortcut for turning them on and off (Ctrl+U Windows or Command+U Mac), it will save them time and maybe they'll use them!

Creating with shapes

Pages 84–90: By default, smart guides are turned on. Throughout this section, they are turned on and off. They are introduced here on page 85 using the measurement labels. Smart guides have been greatly expanded to help users create and edit without having to refer to the Control or Transform panels. One thing worth noting is that as you drag to create shapes, and measurement labels appear, you achieve smaller increments if you are zoomed in closer to the artwork. On page 89, students may have a difficult time starting on step 27 drawing the triangle in the center. It can be easier to draw and align objects using smart guides if the user is zoomed in to the objects.

Outlining strokes

Page 91: Outlining strokes is a great way to turn a stroked line into a closed path. Make sure that students note that if the line initially has a color fill, a more complex group is created when you choose Outline Stroke.

Align stroke

Page 92: Aligning strokes are useful for a lot of reasons. The change can be rather subtle if the user is not zoomed in far enough.

Joining paths

Pages 94–96: In step 4 on page 94, make sure students are aware of the fact that in order to join open paths, you need to select which points are joined. It may be difficult to tell that two anchor points are selected when they drag across the objects. As an instructor, I usually pull the lines apart and show them that there are two anchor points on top of each other. On the bottom of page 95, the two types of joins are discussed (coincident and non-coincident). When points overlap and they are joined, Illustrator “fuses” them into one point.

Using the Eraser tool

Pages 96–97: There are two things to point out with the Eraser tool. The first is that if nothing is selected, it erases whatever is in its path (if it's not locked). The second is that in step 4 on page 97, it may be helpful to zoom in. It may also be helpful to erase more of the star corner than expected. Just like other tools, you can double-click the Eraser tool in the Tools panel and set some erasing properties if you like.

Combining objects

Pages 98–103: This section is a bit more advanced, showing the Pathfinder panel and its commands. In Illustrator CS4, the way the commands in the Pathfinder panel work have changed. Both types of commands (Shape Modes and Pathfinders) now affect the underlying object. It requires a keyboard modifier to turn Shape Mode commands into creating compound shapes. This section, through page 103 takes the students through creating 2 gears using the two different methods.

On page 102 step 15, it may prove difficult to resize the shape to the exact measurement indicated if the user is not zoomed in enough.

Working with shape modes

Pages 100–103: One question that lots of students ask is when should they (or do they ever need to) expand a compound shape as on page 103, step 18. A good rule of thumb is when you need to edit the shape further by combining it with other

shapes or you need to be able to edit the anchor points of the combined shape, it's a good idea to expand. Other reasons may include applying certain effects, creating a compound shape with another object, or creating slices for a web project from the content bounding box, for example.

Using Live Trace to create shapes

Pages 103–106: Live Trace can be a system intensive operation, so it's a good idea to mention that before attempting on a larger, more complex raster image. Also, talk about the benefits of linking to an image when placed, then tracing it. If the original image is edited in Photoshop, for instance, then the Live Trace object is updated when the image is updated in Illustrator.

Questions

- 1 Describe a few ways in which smart guides can be useful.
- 2 When joining 2 paths, what must you select before joining?
- 3 What is the difference between Shape Modes and Pathfinders in the Pathfinder panel?
- 4 Explain what expanding a live trace object does.

Answers

- 1 Smart guides let you align content, see measurement information in the measurement label, snap to content, and more.
- 2 In order to join two paths, an anchor point from each line must be selected with the Direct Selection tool.
- 3 They perform the same types of operations by default, but the shape modes can turn objects into compound shapes when a keyboard modifier is used.
- 4 Expanding objects enables you to divide a single object into multiple objects that make up its appearance. A live trace object would be split into the vector artwork that it contains.

Lesson 4: Transforming Objects

This lesson provides an overview of the various transformation commands that can be used for editing content. By the end of the lesson, students should have a better understanding of the various methods for manipulating content by resizing, moving, rotating, skewing, and more.

Adding artboards to the document

Page 111: Multiple artboards are covered in several different lessons. This section introduces adding and editing artboards to an existing document. It's a good idea

to let students know that the Artboard tool allows them to draw artboards, but they don't have to draw them. By choosing File > Document Setup or clicking the Document Setup button in the Control panel (if available).

Editing artboards

Pages 112–114: Illustrator provides several ways to edit artboards, including the Artboard tool and with the artboards options in the Control panel. It is important to remember which artboard is selected when making edits. This is indicated by the number in the corner and the outline. Also, Illustrator lets you print each artboard separately or as a multi-page PDF.

Page 113, step 7: It may be easier to start dragging the artboard, then hold down the Alt key (Windows) or Option key (Mac OS) to duplicate the artboard.

Working with rulers and guides

Page 115: When working with the reset origin point in the upper left corner of the Document window, it's important to double-click to reset the origin. A lot of students single click and the measurements from that point on usually won't match. Guides can also be hidden by choosing View > Guides > Hide Guides. When working with documents that have different units on the rulers, users can right-click (Windows) or Control-click (Mac OS) on a ruler and choose a different unit from the context menu that appears.

Scaling objects

Pages 116–118: On page 116, step 1, another way to set the Scale Strokes & Effects is to choose it from the Transform panel menu. In Illustrator there are many ways to approach the same task. In this chapter, the smart guides are used in conjunction with the Transform panel among others. If students find it to be difficult to match measurements found in this section, they can zoom in for more precision or after the fact, change the measurements in the Transform panel.

Page 117, step 8: When users set the reference point locator, Illustrator remembers it for the next transformation. If the Transform panel were used again (before resetting the program preferences), the reference point locator would need to be addressed.

At the end of the “Scaling objects” section, review with the students that several different methods were used to scale. You may have the class discuss why each of them is useful:

- The Transform panel is best for scaling with numerical precision. Let students know that they can click on the X or Y link in the Control panel to open the Transform panel.

- The Bounding Box is a convenient and intuitive way to scale because it doesn't require using any special tools or panels.
- The Scale tool is a visual tool that allows precision, because you can scale by dragging, yet the center point and scale percentages can be set precisely if needed. Then point out that the same flexible range of choices is available for the other transformation that are covered later.

Reflecting objects

Pages 118–119: The reflect tool can be used with or without the modifier key as in step 5 on page 118. The modifier key just forces Illustrator to reflect around where the user clicks rather than the center of the object (by default).

Rotating objects

Page 120: On page 120, step 9, users may click and set the rotation point in the wrong place. To clear the rotation point and reset it in the center, you can select another tool and then select the Rotate tool.

Shearing objects

Page 123: When dragging with the Shear tool, the user will notice the measurement label that appears. The label gives you an idea of the angle of skewing. In step 6 on page 123, the actions are very precise by setting the shear point, releasing the mouse button, then dragging with the Shift key. Students can experiment without holding down the Shift key.

Positioning objects precisely

Pages 124–125: Illustrator offers many ways to position content. By utilizing the measurement labels for distance in the x and y directions, you can position content precisely. The shape in this section is first dragged into the corner because the measurement label shows the distance from where you start dragging the shape.

Page 125, step 12: If the origin is not set correctly, the object does not move to the correct position.

Using the Free Distort effect

Page 128, step 10: When double-clicking to enter isolation mode, then selecting the sandals group, if the objects were not grouped on page 127, step 7, then both sandals will not select.

Making multiple transformations

Pages 128–129: There are several reasons why all of the business cards are on separate artboards. First, each artboard (business card) can have a bleed built in, second, the artboards can easily be resized.

Also, it isn't necessary to use the Transform Each command to move all objects a uniform amount; the Move command or the Transform panel would do this just as well. You may want to demonstrate a more effective example of the Transform Each command—rotating a row of triangles. With the entire row of triangles selected: Using the Rotate tool, Free Transform tool, or Transform panel would change the positions of the triangles. Using the Rotate option (and no others) in the Transform Each dialog box would rotate each triangle without changing its position.

Questions

- 1 How can you reset the ruler origin?
- 2 If you enter coordinates into the Transform panel and the object moves to an unexpected position, what are two things to check?
- 3 What is the reference point locator used for?
- 4 Name three ways to scale an object.

Answers

- 1 To reset the rule origin, you double-click in the upper-left corner of the Document window where the rulers intersect.
- 2 When an object doesn't move as expected, make sure the point of origin and ruler origin are where you expect them to be. Objects are transformed relative to their point of origin, and object positioning occurs relative to the rulers' zero point.
- 3 The reference point locator lets you specify the reference point when you perform a transformation.
- 4 Scale can be accomplished using the Transform panel, the Bounding Box, and the Scale tool.

Lesson 5: Drawing with the Pen and Pencil tools

In the Illustrator Tools panel, the Pen tool serves an important purpose—to draw paths precisely, especially smooth curves. The Pen tool does this much more effectively than more natural drawing tools such as the Pencil tool. It isn't easy to learn the Pen tool. Students may be intimidated by it, and some may question whether it's worth the effort. In fact, proficiency with the Pen tool and the Bezier curve editing techniques associated with it are key career skills for digital artists. It's useful

in a wide variety of situations, because it makes quick work of complex curves that would take forever to draw precisely using other tools.

The Pen tool appears across the Adobe product line. It's essential for creating clipping paths and complex selections in Adobe Photoshop. In Adobe After Effects, Premiere, and InDesign, Bezier curve editing forms the basis for animation motion paths. The Pen tool is featured in the Adobe InDesign Tools panel for its utility in creating layout elements and clipping paths. Students will find variations on the Pen tool in other graphics programs.

Paths are the foundation of all shapes in Illustrator and other graphics programs, and path editing gives students total control over this universe. This alone should motivate students to master the Pen tool.

Getting started

Page 134: Use the Getting started section for a warm-up for teaching the fundamentals of the Pen tool that can be sometimes lost when applied directly to a project. Practice with the students on these specially designed exercise files to build the foundation before using the Pen tool for actual shape creation.

Creating curved paths

Pages 137–140: Caution students about creating curves by creating multiple anchor points. This can cause jagged edges and increases the file size.

As long as students remember to drag in the direction of the curve, the path should fall into place.

Remind students that if they make a mistake to NOT delete the point, but use Edit > Undo instead. This leaves the path active so that they do not accidentally create a new one.

Curves and corner anchor points

Page 141: This important technique is much more effective when the keyboard is used to change the curved point to a corner point or vice versa. Show the students the effect by creating a square and selecting the Pen tool. Hold down Alt (Windows) or Option (Mac OS) to change the Pen tool to the Convert Anchor Point tool. Have the students click on a corner of the rectangle to see it change into a curved path, click again to change it back into a corner point. Also, for those that do not like to use keyboard shortcuts, you can show them the Convert Selected Anchor Points To Smooth button and the Convert Selected Anchor Points To Corner button in the Control panel.

Creating the arrow

Page 144, step 3: If a student's line isn't straight, they may have dragged accidentally, instead of clicking. A good habit for drawing straight segments is to consciously bring the mouse to a stop before clicking. If the caret doesn't appear, the pointer was probably moved away from point B. The caret appears only when the pointer is within snap-to distance of the point.

Page 138, step 4: Of all the ways to deselect an object, the safest way is the Select > Deselect command or its keyboard shortcut, Ctrl+Shift+A (Windows) or Command+ Shift+A (Mac OS). The reason is that if a large filled object is behind the path, there may not be an empty area to click, and the larger object may become selected.

Splitting a path

Page 145: If appropriate, you may want to discuss and compare the Scissors tool to the Knife tool: The Scissors tool is useful for making a single cut. The Knife tool can slice across multiple segments and create entire closed paths from them.

Also, now that smart guides are used, it is easier to select an anchor point or click to cut a path.

Adding arrowheads

Page 146, step 2: The book says that the arrowhead appears at the end of the line, the last anchor point added. Arrowheads are one of the situations in which path direction matters. In other words, if a student applies a Start arrowhead and it appears on the wrong end, that simply means the start of the path (the first anchor point drawn) is really the other end.

Drawing curves

Pages 147–149: As students move through this lesson, they may find curve drawing to be challenging, particularly the placement of points. Sometimes an analogy can help. For example, drawing paths can be like making curved shapes out of push pins and wire. The best place to put the push pins is at the points where each curve segment begins and ends. Then you shape the wire around the push pins.

Selecting a curve

Page 147: The results students get from editing a path can vary dramatically depending on what's selected. Make sure that students understand the distinctions among the different levels of selection possible for a path: an entire path, a segment, or a point can be selected. For example:

- If you select a point and press Delete, the two segments on both sides of the point are erased.
- If you select a segment and press Delete, the segment is erased.
- If you select the entire path and press Delete, the entire path is erased.
- You can instantly erase half of a path by selecting half of its points and pressing Delete.

Splitting and converting points

Page 150: Discuss the converting anchor points options buttons in the Control panel as another way to convert from corner to smooth and vice-versa.

Editing curves

Pages 153–156: Be sure to tell students to zoom in for ease of selection.

Drawing with the Pencil tool

Pages 156–159: The Pencil tool is much more free-form than the Pen tool and can be a bit of a relief at times. Remind students to watch the Pencil tool cursor and make sure that an x appears when they want to create a new path, rather than edit an existing one.

Exploring on your own

Page 162: Encourage students to learn the keyboard shortcuts for the Pen tool and path drawing. Keeping one hand over the keyboard for tool switching and the other hand on the mouse can facilitate efficient, uninterrupted drawing. The most important shortcut to learn is the Ctrl (Windows) or Command (Mac OS) key for temporarily switching to the Selection or Direct Selection tool.

Page 162: Now that students have experience with the Pen and Pencil tools, and ways to edit paths, you can suggest that they don't have to get locked into drawing specific types of paths with specific tools. They can start with any tool—the Pen, the Pencil, or a basic shape—and then fine-tune the path using any path-editing techniques they want. For example, they might sketch out a path by clicking corner points with the Pen tool, smooth it out with the Pencil tool or Smooth tool, and then use any combination of the Pen and point-editing tools to refine the path.

Review questions

- 1 What are the different levels at which a path can be selected?
- 2 When drawing a path with the Pen tool, how do you know when clicking will close a path?

- 3 Which Selection tool selects the entire path?
- 4 When drawing with the Pencil tool, what does an x next to the cursor indicate?
- 5 Name 2 ways to split an existing path.

Review answers

- 1 On a single path, you can select the entire path, one or more segments of a path, or one or more points on the path.
- 2 When the pointer is within the snap to range of a path's starting point, you'll see a small circle next to the pointer. This means the path will close when you click.
- 3 The Selection tool always selects an entire path. (Alt/ Option-clicking the path with the Direct Selection tool is also an acceptable answer.)
- 4 The x next to the cursor indicates that a new path is going to be created.
- 5 Using the Scissors tool to click and split the path or select a point and clicking the Cut Path At Selected Anchor Points button in the Control panel.

Lesson 6: Color and Painting

In this lesson, students study painting techniques in more depth. Students will study what color is, the different types of color controls, color types, and patterns.

Understanding Color

Pages 167–169: Make sure that students are aware of the color modes in an Illustrator document. Have them choose File > Document Color Mode and note that a document can be in CMYK Mode or RGB Mode. Students should set a document's color mode to match the medium in which the artwork will be published—CMYK for print or RGB for online display. For example, a Web designer should work in RGB mode; in CMYK mode, colors for Web documents are limited.

The color mode determines the color model used to display and print Illustrator files. Illustrator bases its color modes on three color models—HSB (for hue, saturation, and brightness), RGB, and CMYK—and the Grayscale (black and white) model. These color models also appear as options in the Color panel menu for specifying color. When creating a new document, a New Document Profile can help you decide which color mode to use based on what it is you are creating (web, print, etc.).

Understanding the color controls

Pages 168–169: The Illustrator user interface for color is deep and powerful. It's designed for maximum flexibility, but features so many color-related panels that beginners may have difficulty determining how to use these panels, and in what order, to achieve a particular effect. For example, some controls appear in more than one place, such as the Fill and Stroke boxes. You can help simplify Illustrator color for your students by breaking out appearance attributes into a hierarchy: While students should study the Color and Swatches panels together, the simplest possible way to apply color is with the Color panel alone. The Swatches panel provides storage for commonly used colors (as well as patterns and gradients). Students only need to use this panel to use an existing swatch or to make a new one. Students should begin using this panel within the first few projects of their own.

After exploring the Color and Swatches panels, move on to the Color Guide panel and the Edit Color/Recolor Artwork feature. The Color Guide can be a great way to choose colors based on things like commonalities. The Edit Color/Recolor Artwork feature is very deep and worthy of exploring, but should be approached gently.

The Appearance panel displays and controls all the above attributes along with effects, with additional powerful options for objects, such as multiple fills and strokes. However, the Appearance panel can be confusing unless a student understands how all of the above panels feed into it.

Building and saving a custom color

Page 170, step 3: If your class includes many Web design students, you may need to point out that the only reason a CMYK color is being mixed here is because this job is going to a printing press.

Editing a swatch

Page 171: To name a color as it's being added to the Swatches panel, students can hold down Alt (Windows) or Option (Mac OS) as they click the New Swatch button. If you have time, you can have your class discuss the relative merits of the color types, especially the difference between global and non-global process colors. Although the name is unfamiliar, global process colors work just like paragraph styles in a word processor; updating the color swatch changes all applied instances of the color throughout the document. Some students may want to plan their documents around this feature since it makes it easy to change many instances of a color instantly. This might also be a good time to ensure that students understand the difference between spot and process colors.

Additionally, it may be helpful to point out that out of all the color types in Illustrator, only spot and process colors are actual techniques for printing color. All the other color types are Illustrator specific concepts invented to manage colors more easily. In other words, students may find that their print service provider may not have heard of “global process colors.”

Creating a spot color

Pages 172–173: The Pantone color book panel they have open will not remain open next time they launch Illustrator. You may wish to point out that the panel can be docked into the workspace and that the panel can be made to open the next time Illustrator opens. From the book panel menu, choose Persistent.

The Color Picker

Page 174: The Color Picker is usually familiar to Adobe Photoshop users and may be familiar to InDesign Users. The Color Picker can show color in two ways, RGB and HSB. To change the way color appears in the Color Picker, select a different color such as G for Green.

Creating and saving a tint

Page 175: It's important to emphasise what tints are as well as that you can create a tint from a global swatch, and not from a non-global swatch.

Copying attributes

Page 175: If you have time, have students double-click the Eyedropper tool to view the attributes that can be copied from one object to another with the it.

The Eyedropper tool can copy appearance and color attributes—including transparency, live effects, and other attributes—from any object in an Illustrator file, from a paint swatch, or from anywhere on the desktop, including from another application.

You can restrict which attributes the Eyedropper tool can copy. You can also use the Eyedropper tool to copy and paste type attributes.

Creating color groups

Page 176: Students should think of color groups as not only a way to organize colors, but also a way to edit colors as a color group using the Edit Color/Recolor Artwork feature. This way a group of colors for a logo, for instance, can all be converted to shades of a single spot color.

Working with the Color Guide panel

Page 177: The Color Guide panel should be a place for exploration. Have students explore and experiment with colors.

Editing a color group

Pages 178–181: On step 3 on page 178, students may not have the group folder selected, so it's a good thing to check. Also, it is good knowing that when you open the Edit Colors/Recolor Artwork dialog box, there is no undo. If a student makes a misstep, it is usually best to cancel the operation and open the dialog box again.

Edit colors in artwork

Page 182: The Color Group Storage area is hidden because there can be too much to look at right away. Break down the Edit Colors/Recolor Artwork dialog box into its main parts for the students so as not too overwhelm. The left side of the dialog box is for editing colors, the right side is for saving those colors as a color group.

Working with the Kuler panel

Pages 182–184: The Kuler panel is a very cool addition to the community of Illustrator, allowing users to post their own color groups and letting you download them for use in your own artwork. Let the students explore this panel and realize that the color groups that appear in the Kuler panel in the book may not be the same since the groups are constantly being pulled from the web.

Assigning colors to your artwork

Pages 184–188: Throughout this section the book asks you to apply color groups that the students have loaded from the Kuler panel. If they do not have the same color groups as those specified in the book, it's OK.

Page 187, step 18: Be careful with the text below step 18 and the note to the right. If someone attempts to follow these instructions, they cannot go back. They will have to restart the whole section if they want the artwork to follow the guide. This text is meant as food for thought.

Painting with gradients and patterns

Page 189: Students should think of applying pattern and gradient swatches in exactly the same way as they would apply a color swatch. For example, while it may not be obvious, gradients and patterns may be applied to strokes as well as fills. You might have students try applying gradients and patterns to strokes, especially using thicker stroke weights.

This section also points you to Lesson 9, “Blending Shapes and Colors” since that chapter focuses almost primarily on working with gradients.

Using Live Paint

Page 194: You may want the students to investigate Live Paint further, as it is just touched upon in this lesson.

The paintable parts of Live Paint groups are called edges and faces. An edge is the portion of a path between where it intersects with other paths. A face is the area enclosed by one or more edges. You can stroke edges and fill faces. Note that modifying the paths in a Live Paint group modifies existing faces and edges, and can create new ones as well. When you edit a path, Illustrator attempts to color the modified or new faces and edges to get the results you expect. If the results are not what you expect, you can reapply the colors you want.

Review questions

- 1 How do you know whether a swatch is about to affect a fill or a stroke?
- 2 What is the difference between a global and non-global swatch?
- 3 What is meant by a spot color?
- 4 How do you open libraries of color swatches?
- 5 What are color groups useful for?
- 6 Why is Live Paint called “Live”?

Review answers

- 1 Before applying a color, check the Tools panel to see whether the fill or stroke box is in front. It may be easier to simply use the Control panel to avoid this confusion.
- 2 A global swatch is a swatch saved in the Swatches panel and if you modify the swatch of a global process color, all objects using that color are updated. Non-global process colors do not automatically update throughout the document when the color is edited. Process colors are non-global by default.
- 3 A spot color is a pre-mixed ink that can be used in your artwork in conjunction with or instead of process colors.
- 4 To open a library of color swatches, click the Swatch Libraries Menu button in the Swatches panel and choose a library or choose Window > Swatch Libraries, and choose a library from the submenu.
- 5 Color groups are an excellent way to organize colors as well as to edit color groups as a whole.
- 6 The “Live” in Live Paint refers to the state of the object. If the image that was traced and painted in Illustrator were to be updated, the trace and paint would update as well.

Lesson 7: Working with Type

Adobe Illustrator provides enough control over type that it's often used for complete page layouts. Illustrator includes precise spacing controls and the ability to have type follow a path, or wrap around objects. Graphically, students are free to work with type much as they would with the paths they draw. They can apply colors, gradients, patterns, and effects to the fill or stroke of type, or even change the character outlines.

Working with type

Pages 205–207: When starting this lesson, the first few pages are devoted to discussing and showing the differences between point and area type. It's very beneficial to students to point out why you would create one over the other. For instance, when creating a brochure with several columns of text, area type is more beneficial. When creating labels or headline text, point type can make it easier to edit the appearance.

Importing a plain text file

Page 207: If you have more time, you may want to create Microsoft Word documents and experiment placing them using different import options.

Creating columns of text

Page 208: You might point out that the type containers are actually paths that hold text. In other words, their shapes can be edited freely using the Pen and other tools. If you want, you can demonstrate adding a point or two to a text container, and showing how changing the container shape reflows the text.

Understanding text flow

Pages 209–213: This topic is worthy of much more exercise time than is allotted in this lesson. If you have time, have students create a blank document and import text into a text area. Practice what to do when text overflows and how to thread to other text containers. Something worth mentioning is that no link is created between the Word document placed on page 210, and the Illustrator document.

Formatting type

Pages 214–220: Font and size are also available from the context menu that appears when students right-click (Windows) or Control-click (Mac OS) text selected with the Type tool. It is worth taking the time to explain how character and paragraph formatting affect the text differently (character affects selected text, and paragraph formatting affects the entire paragraph(s)).

Saving and using styles

Page 221: Encourage students to use the style features, as they save time when creating or updating text attributes.

Sampling text

Page 223: This exercise shows that the Eyedropper works just as well on text as it did on graphics in previous lessons. To view the attributes that can be copied and pasted using the Eyedropper tool, double-click the tool in the Tools panel to display its options dialog box.

Reshaping text with an envelope warp

Page 224: Encourage students interested in more practice with warps to create their own object to use for the text. Note that the text engine only requires that the object you want the text to run around be selected.

Page 226, step 13: After returning to the Arc Upper selection, the object may jump. You may warn them of this, then have them move it back down.

Wrapping text around an object

Page 227: Caution students to avoid text wraps that result in lines of text that are too short. Several short lines in a row can lead to unattractive spacing and hyphenation. Also, text wrap does not like grouped objects as you will see if you attempt to wrap text around a group of objects.

Creating text on paths and shapes

Page 228, step 4: Make sure that they click at the beginning of the line because the text will start from where they click.

Page 230, step 10: You can demonstrate sliding the type all the way around both sides, the path, and flipping it across the path, simply by dragging it as in this step. Be careful not to confuse the in and out ports on the sides of the text path with the I-bar used for repositioning text on a path.

Creating text outlines

Pages 230–231: Once type is converted to outlines, it can no longer be edited with the Type tool. For this reason, in their own projects students may want to get into the habit of keeping a “live” copy of the original type on a separate, hidden layer. This way they can access the text later.

Review questions

- 1 Describe the difference between point type and area type.
- 2 How can you copy type attributes from one type object to another?
- 3 When type has been converted to outlines, why must you use the Group Selection tool to select individual characters?
- 4 What does a red plus sign indicate in relation to a text area or type on a path?

Review answers

- 1 Point type is a horizontal or vertical line of text that begins where you click and expands as you enter characters, whereas area type is text that is contained within a type area.
- 2 The Eyedropper tool copies type attributes as well as fill and stroke attributes.
- 3 Type is converted to outlines as a compound path. The Group Selection tool lets you select individual characters (paths) that make up a compound path.
- 4 It usually indicates overflow text, or that text doesn't fit in the type area or on the path.

Lesson 8: Working with Layers

Layers are useful for organizing a document. They maintain the stacking order of objects, such as always keeping lakes and rivers below highways and bridges in a map. Layers can also be used for other organizational purposes, such as creating different versions of an illustration or storing annotations that don't print.

Creating layers

Page 237: The Layers panel contains many indicators that can confuse even veteran users. You may want the class to specifically discuss the differences between the active layer, the selected layer, and selected objects on layers, as follows:

The active layer (displaying the small triangle on the right) is currently subject to editing. When more than one layer is selected, the active layer is the one that will be targeted for operations such as merging layers.

A selected layer or object (highlighted) is the layer that is subject to the commands on the Layers panel menu. It's usually the same as the active layer, except when additional layers are selected. Only one layer can be active but more than one layer or object can be selected.

When more than one layer is selected, they are all highlighted. When more than one object is selected, they all have selection indicators with outlines (the small squares at the right edge). It's possible for a selected object to be on a non-selected layer. You might want to demonstrate these distinctions.

Moving objects and layers

Page 239: Students should be advised to develop the habit of dragging precisely in panels like the Layers panel.

In this exercise, there's an important distinction between dragging the whole layer (to reorder layers) and dragging the layer indicator (to move an object from one layer to another). In Lesson 12, dragging the appearance indicator moves appearance settings to another layer or to the Trash. If a student isn't paying close attention to where in the Layers panel they start dragging, they may experience unexpected results.

Locking layers

Page 241: It might be helpful to mention that although a locked layer can't be edited directly, if objects on the layer use named swatches or styles, editing the named swatches or styles changes the object on the locked layer.

Viewing layers

Page 244, step 8: In an illustration with a large number of objects, displaying some layers in Outline mode can also speed up screen redraw.

Creating clipping masks

Page 247: A clipping mask makes a handy cropping tool. It's useful for trimming objects that extend beyond the page edge or bleed area.

Review questions

- 1 Describe a situation where using layers in a document may be beneficial.
- 2 How can you tell which layers contain selected objects?
- 3 How do you create a sublayer?
- 4 What does a layer clipping mask do?
- 5 How do you merge layers?

Review answers

- 1 Suppose that you are designing a new line of men's shirts. You create a series of different shirts in a single document. Later, you want to be able to export each separately for use on a website. Creating layers would let you turn on and off layers that you didn't want to see, as well as lock content so that when you edit one shirt, it can make it easier to select what you want.
- 2 Layers with selected objects display a selection indicator, a small square at the right edge of the Layers panel.
- 3 To create a sublayer, click the Create New Sublayer button at the bottom of the Layers panel.
- 4 A layer clipping mask hides objects and portions of objects that are both outside the clipping mask and are on the same layer as the clipping mask.
- 5 To merge layers, Shift-click all the layers you want to merge, making sure that the last layer you Shift-click is the one you want all the other layers to merge into. Then choose Merge Selected from the Layers panel menu.

Lesson 9: Blending Shapes and Colors

Blends and gradients create transitions between shapes or colors. This gives students the opportunity to go beyond the hard-edged shapes they have created so far.

Creating and applying a linear gradient

Page 262, step 6: Remind students to double-click precisely in the Gradient panel. For example, if they slightly miss the gradient stop, a new gradient stop is created. Students can easily get lost among the three panels required to make this exercise work.

If needed, review with the class the usage order of all the color-related panels for this exercise: The fill/stroke box in both the Tools panel and the Color panel are the same, displaying the current fill and stroke of the selected object, or of the current color if nothing is selected. Editing a selected gradient stop (the tip of a gradient stop is solid) changes the behavior; now the fill/stroke box displays the color of the selected gradient stop. Clicking a swatch in the Swatches panel replaces the gradient.

If a solid color replaces the gradient, the student should:

- 1 Return to the Gradient panel and reapply the gradient (click the Gradient button). The last gradient used will be reapplied.
- 2 In the Gradient panel, select a gradient stop.
- 3 In Double-click the color stop to edit the color.

Even though a gradient swatch may be highlighted in the Swatches panel, editing gradient colors never affects the gradient swatch. The only way to edit the gradient swatch is to drag a gradient box out of the Tools panel or Gradient panel, and hold down Alt (Windows) or Option (Mac OS) while dropping it on the existing gradient swatch in the Swatches panel.

Adjusting the direction and angle of a gradient blend

Page 264: For a clearer example of adjusting a gradient's direction, you may want to demonstrate the Gradient tool in a separate document that contains nothing but a rectangle and black and white starting and ending gradient colors. Also, show how linear and radial gradients change how the Gradient tool works.

Page 265, step 5: The rotation icon sometimes requires the cursor to be in the "perfect" position to appear. If it doesn't appear, move the cursor closer and further from the end of the gradient stop.

Changing colors and adjusting the gradient

Pages 266–269: It is worth mentioning that there are many ways to adjust the colors in a gradient. Adjusting colors using the Gradient tool may sometimes not be the

best way. After selecting an object, you can edit the gradient in the Gradient panel by clicking below the color bar or double-clicking a color stop. Also, if the Gradient tool adjustments are too much, and you don't want to see all of the "feedback," you can turn off the extra gradient functionality and work like CS3 by choosing View > Hide Gradient Annotator.

Adding transparency to gradients

Pages 273–274: This great new feature will open many a design door. The uses for it are limitless and should be fully explored by students. One thing to keep in mind, as with other types of gradients that a gradient blend to transparency that covers too long of an area can appear banded when printed. Also layering multiple blended objects can lead to more care when outputting the file.

Creating smooth-color blends

Page 279: The number of blend steps calculated by Illustrator assumes print as the output medium.

Review questions

- 1 When might you want to apply a gradient instead of a blend, and vice versa?
- 2 How do you change the number of steps in a blend?
- 3 Name the two types of gradients that you can create.
- 4 How do you save a blend for reuse?
- 5 How do you apply a color swatch to a gradient stop without removing the gradient?

Review answers

- 1 Use gradients when either the linear or radial built-in gradients are the blend shape you need. Use a blend whenever you need an irregularly shaped gradient, such as a gradient that follows a path's contours. Also, a blend must be used when creating a transition between two different shapes.
- 2 To change the number of steps in a blend, use the Selection tool to select a blend, and then choose Object > Blend > Blend Options. You can also double-click on the Blend tool to see these options,
- 3 A linear gradient and a radial gradient.
- 4 To save a blend for reuse, drag it from the fill/stroke box in the Tools panel or Gradient panel, and drop it in the Swatches panel.
- 5 To apply a color swatch without removing the gradient, select the object, then select the Gradient tool. Hover over the object with the gradient fill and the color bar should appear.

Lesson 10: Working with Brushes

The brushes in Adobe Illustrator are quite different than the brushes in Adobe Photoshop and other image-editing and paint programs. In Photoshop, a brush lays down a trail of pixels. In Illustrator, a brush leaves behind a set of vector paths; that set of paths follows a path drawn by the Brush or another drawing tool. Using the Scribble Effect you can make virtually any object in Adobe Illustrator appear as though it was hand-drawn.

Working with the Blob Brush tool

Page 287: The Blob Brush tool is a new and exciting tool in Illustrator CS4. It behaves in a different fashion by creating and editing closed paths. There are several things to look out for when using this tool. First, shapes that have a stroke cannot be edited by the Blob Brush tool. If you create with the Blob Brush tool, the selected stroke becomes the fill and in the absence of a stroke color, the fill stays the fill.

Page 288, step 1: This is an important step for editing a shape. If New Art Has Basic Appearance is selected, it draws a new shape.

Drawing with the Paintbrush tool

Page 293: If appropriate for the class level, you can demonstrate how a brush stroke is really a set of vector paths dynamically associated with the brush stroke's path. With a brush stroke selected, choose Object > Expand Appearance, and note the points that appear on the brush stroke. (At this point it can no longer be edited as a brush stroke.) You can also choose View > Outline to demonstrate this further.

You can also demonstrate the difference between the Blob Brush tool and the Paintbrush tool (the Blob Brush creates and edits closed shapes and the Paintbrush tool creates and edits open paths).

Editing paths with the Paintbrush tool

Page 295, step 1: After students edit the right brush stroke, you can point out that this is the same editing technique they used with the Pencil tool.

Page 296, step 7, second paragraph: The text mentions that the Smooth tool and Erase tools can be used on a brush stroke. This reinforces the point that although a brush stroke contains many components, it's treated as a single path until you expand it.

Using a fill color with brushes

Page 304: The illustration towards the top of page 304 shows an open path that becomes filled. If students haven't compared open and closed filled paths, you

may want to discuss this with them. Point out the way an open path automatically connects the two endpoints, creating a segment without a stroke.

Page 305, step 8: This step should run smoothly, but if the fill color does not apply, try another.

Using Calligraphic brushes

Page 306, step 6: Mention that calligraphic and scatter brushes can be controlled with a pressure-sensitive stylus and drawing tablet. If students aren't aware of them, describe that with a pressure-sensitive stylus, pressing harder creates a thicker line. Whether or not a calligraphic brush is pressure-sensitive depends on the brush settings.

Creating a Pattern brush from swatches

Page 311: The note at the end of the exercise indicates that the Border brush won't show up in the Brushes panel of other files. Let students know that they can move the brush to another file by copying and pasting an object that uses that brush from the file where it was created to another file. As the object is pasted into the second file, its brush is added to the Brushes panel in that file and saved with the file. The object can then be deleted from the file. You can also open another file and click the Brush Libraries Menu button at the bottom of the Brushes panel and choose Other Library to select another Illustrator document to load the brushes.

Applying the Scribble effect

Page 314: Have students experiment with the options in the Scribble Options window. Some options may not apply to text, but work well with the grass and water shapes.

Review questions

- 1 Name the four types of brushes.
- 2 How do you change the brush applied to a path that's already drawn?
- 3 What type of path does the Blob Brush tool create and/or edit—open or closed?
- 4 What's required to create your own Pattern brush?
- 5 What's the difference between a Pattern brush and a Scatter brush?

Review answers

- 1 Calligraphic, Scatter, Art, and Pattern.
- 2 A different brush can be applied the same way as changing a color. Simply make sure the path is selected, and click a new brush in the Brushes panel.

- 3 The Blob Brush tool creates and edits closed paths.
- 4 A Pattern Brush is made up of pattern tiles, so the pattern tiles that make up the brush have to be present in the Swatches panel. If they aren't, you must create them.
- 5 While both a Pattern Brush and a Scatter Brush repeat shapes along a path, Scatter Brush shapes can be laid down some distance away from the path itself. The tiles of a Pattern Brush follow the path tightly.

Lesson 11: Applying Effects

Effects in Illustrator are similar to Effects in InDesign CS4 and Photoshop CS4 Smart Filters. Effects apply to an object, but don't edit the underlying artwork. The effect is only applied over the top of the object. There are many types of effects, including raster effects such as the Dry Brush Artistic effect.

In this lesson, students will gain a better understanding of how to apply and edit all types of effects.

Using Live Effects

Page 314: An effect like the 3D effects offers students the ability to create 3D shapes by extruding, revolving and rotating objects. Each of these choices produce very different effects, depending upon the shape of the original object. Make sure that the students follow instructions closely before they start experimenting with their own shapes. Adobe Illustrator contains tools that can create three-dimensional forms. In this lesson, students learn techniques for applying effects to 2D and three-dimensional shapes and mapping artwork to them.

Applying effects

Page 324, step 7: Grouping objects is necessary when applying certain effects to more than one object. In this case it is necessary.

Page 326, step 19: You may want to discuss the full implications of the Expand Appearance command used in this step. It can make outlines out of objects that are dynamically generated.

Page 326, step 22: You can also apply effects by choosing them from the Effect menu.

Creating a banner logo with the Warp effect

Page 329: Have students experiment with other warp options to create very different effects.

Creating the 3D cylinder

Page 333: Before having the students go through the rest of this lesson, it would do them good to recreate the shapes shown at the bottom of page 333 and apply the 3D effects to them separately.

Applying a symbol as mapped artwork

Page 336: If this feature is not working, make sure that the students have navigated, using the surface arrows, to the proper surface. If they create their own custom shape they may have additional surfaces that are not visible. Sometimes, the mapped artwork simply needs to be repositioned in the Map Art preview pane.

Creating a revolved object

Page 339: Selecting the correct edge to rotate on can dramatically change the results of the 3D Revolve effect. Make sure that students understand the concepts and imagery on page 339. Also show students what would happen if they applied a stroke to the original shape, rather than a fill, like you see in the lesson (step 13).

Changing the lighting

Page 340: If students are not getting the effect that they are expecting in this section, make sure that they follow the instructions to change the Surface to Diffuse Shading as well as the Ambient Light to 50%.

Mapping a Photoshop image

Page 341: In this section stress that students do not have to create exactly what they see in the book. They should experiment to see the types of results they can achieve with images. The Photoshop image supplied can sometimes leave a rasterized edge on the spheres, depending on the settings.

Review questions

- 1 What is meant by a “live” effect?
- 2 Where can you go to edit an effect applied to an object?
- 3 What is the first step to mapping artwork to a 3D object?
- 4 How do you change the position in space of a 3D object?
- 5 How do you make a 3D object 2D?

Review answers

- 1 Effects are live, which means you can apply an effect command to an object and then continue to modify the effect's options or remove the effect at any time using the Appearance panel.
- 2 The Appearance panel.
- 3 Any object that is to be mapped to a 3D object must first be saved as a Symbol.
- 4 Always double-click and edit the listed 3D effect in the Appearance panel. Use the preview pane to Rotate the object in space. Do this by clicking and dragging on the cube in the preview pane.
- 5 To eliminate the 3D effect, drag the listed 3D effect in the Appearance panel to the trash icon at the bottom of the Appearance panel or select the visibility column of the effect in the Appearance panel to hide the effect.

Lesson 12: Applying Appearance Attributes and Graphic Styles

You can alter the look of an object without changing its underlying structure by applying strokes, fills, transparency, effects and more. Those properties can also be saved as graphic styles to be used on other artwork within that document or another document.

Editing and adding appearance attributes

Page 349, step 5: Targeting the correct component of an object is a key concept for students to understand when working with complex appearances. If a student applies an appearance attribute to an object and the effect isn't what was expected, the first thing the student should check is what was targeted in both the Layers and Appearance panels.

Reordering appearance attributes

Page 351, step 1: At this point in the lesson, comparisons between the Appearance panel and layers may arise. You may want to discuss the differences between the two. It's possible to use layers to do what the Appearance panel does, but using the Appearance panel is like letting each object have its own set of appearance layers. And again, only one path is necessary, where using layers would require duplicate paths.

Adding an additional stroke and fill

Pages 352–353: Once again the ordering in the Appearance panel is very important. With the addition of the links to panels and the visibility icons in the Appearance panel, it can become a bit overwhelming for newcomers. With the addition of the

Add New Stroke button and the Add New Fill button, it has become much easier to create interesting effects.

Creating and saving a graphic style

Page 354: In the context of the panel workflow that's been described, the Graphic Styles panel works with the Appearance panel in much the same way that the Swatches panel works with the Color panel. An appearance is like a super-fill or super-stroke, and a graphic style is like a super-swatch. You may want to point out these parallels if they help students understand the relationship between the Graphic Styles and Appearance panels, and the relationship of those two panels to the other appearance-related panels. At this point, students should think of building up appearances and styles using the following panel workflow:

- 1 Create colors, gradients, and patterns, and save them as swatches. Create and save brushes.
- 2 Apply the swatches and brushes to a path, using as many instances of fills and strokes as necessary, and monitoring your work with the Appearance panel.
- 3 Assign transparency as necessary.
- 4 Save the entire appearance as a graphic style. Then, when a swatch or graphic style needs to be updated, Alt/Option-drag the current Appearance to the Swatches or Graphics Style panel, respectively.

Applying a graphic style to a layer

Page 355, step 1: Point out that the Clear Appearance button in the Appearance panel is a handy “reset” button for use when a new object assumes a complex default appearance that differs radically from the desired appearance.

Page 357, step 14: This step may seem odd, but it just shows that you can target any part of the appearance to be applied. This is very helpful when attempting to reuse formatting elsewhere.

Applying existing graphic styles

Page 358, step 4 and page 359 step 11: A great new feature in CS4 is the ability to see a context preview (right-click (Windows) or Control-click (Mac OS)). Instead of having to click to apply, you can preview what the object will look like.

Adding to an existing graphic style

Pages 360–361: The ability to combine graphic styles easily is a great feature. Try to get the students to select graphic styles from other libraries that come with Illustrator in step 3 on page 360.

Review questions

- 1 How do you edit an effect applied to an object?
- 2 How can graphic styles be shared between Illustrator documents?
- 3 How can you remove an effect from an object?
- 4 How can you preview a graphic style on a selected object?
- 5 With an object selected, what would Alt-clicking (Windows) or Option-clicking (Mac OS) on a graphic style in the Graphic Styles panel do?

Review answers

- 1 To edit an effect applied to an object, click the effect link in the Appearance panel.
- 2 To share graphic styles with other Illustrator documents, copy and paste the object with the graphic style applied to a new document. The graphic style comes in with it. Another way is to click the Graphic Styles Libraries Menu button at the bottom of the Graphic Styles panel and choose Other Library from the menu that appears.
- 3 In the Appearance panel, drag the effect listed onto the Delete Selected Item button or click the visibility column to hide the effect.
- 4 Right-click (Windows) or Control-click (Mac OS) on the graphic style in the Graphic Styles panel.
- 5 It would add the graphic style to the existing style for the selected object.

Lesson 13: Working with Symbols

In this Lesson students are given the opportunity to focus specifically on the uses of Symbols. Stress to students that Symbols are not only used for application with the Symbol Sprayer tool, but as a method for artwork management. A placed symbol can be updated instantaneously throughout a document.

The Symbols panel can also work as a library for storing frequently used artwork. Symbols can also be used in conjunction with Adobe Flash when transferring artwork between the programs.

Using Illustrator symbol libraries

Page 371: Through the Symbols panel students can access all types of pre-existing symbol libraries. This can be a great source of artwork for those beginners or even those seasoned pros who just don't want to draw that blade of grass again. Students can learn a lot by dragging a symbol instance out and breaking the link to the original symbol. In that way, you can see how the artwork was built by using the Appearance panel.

Creating symbols

Page 373: Though the Symbols panel accepts virtually any type of artwork, it does not take artwork that has been placed in Illustrator with Link selected. Make sure that students leave Link deselected in the Place dialog box to embed the artwork into the Illustrator file.

Spraying symbol instances

Page 375: Make sure the students realize that the symbolism tools can change the Symbol's attributes rather quickly. Sometimes it is better to click and release repeatedly to get a slower, more precise, effect on the symbols.

Updating a symbol

Page 380: Remind students that they can also drag symbols out of the Symbols panel to the artboard. They must choose Object > Expand to edit the individual paths in the artwork after it has been placed. This also breaks the connection to the Symbols panel.

Symbols and Flash integration

Pages 384–387: If you have any students that are Flash users, make them aware of the capabilities around Flash and Illustrator integration shown on these pages. Also, the method used for bringing artwork from Illustrator to Flash is not the only method as mentioned toward the end of this section.

Review questions

- 1 What is the only object that cannot be used as a symbol?
- 2 To effect a symbol instance with the Symbolism tools, what else needs to be selected?
- 3 When you save a symbol in a document, does it appear in other new documents automatically?
- 4 How can you edit the contents of a symbol instance without editing other symbol instances of the same symbol on the artboard.
- 5 What is 9-slice scaling?

Review answers

- 1 The only object that can not be used as a symbol is a linked graphic.
- 2 To effect the Symbol instance with the Symbolism tools, make sure that the symbol is selected in the Symbols panel.
- 3 No, the symbols created in a document stay only in that document by default.

- 4 To edit a single symbol instance, you can break the link to the symbol instance.
- 5 9-slice scaling allows you to specify component-style scaling for movie clip symbols destined for export to Flash. This type of scaling lets you create movie clip symbols that scale appropriately for use as user interface components, as opposed to the type of scaling typically applied to graphics and design elements.

Lesson 14: Combining Illustrator CS4 Graphics with other Adobe applications

Adobe Illustrator is a powerful drawing tool, but it isn't designed for editing photographic images at a pixel level. However, Illustrator can easily import and modify images from Adobe Photoshop, giving students the best of both worlds. In this lesson, students will learn how to integrate Photoshop images into Illustrator layouts as well as discover the best way to import graphics into other Adobe applications like Flash and Flex.

Working with Adobe Bridge

Pages 392–394: The Adobe Bridge is a great application that allows students to locate, organize, and browse the assets you need to create print, web, video, and audio content. The Bridge can be a great tool for previewing content as well. Encourage students to explore the application and keep it open as you work through the chapter.

Vector versus bitmap graphics

Page 395: To show the differences between bitmap and vector you may want the students create a circle in Adobe Illustrator, then choose View > Pixel Preview. Have them toggle the view on and off by using the keyboard shortcut Alt+Ctrl+Y (Windows) or Option+Command+Y (Mac OS).

Placing an Adobe Photoshop file

Page 397: When preparing a print illustration that contains a Photoshop file, students should consult with their print service provider about whether placed images should be linked or embedded for hand-off.

About layer comps

Page 398: If you have time, and access to the Adobe Photoshop application, allow the students to create their own combinations of layers, perhaps with text, shape or Adjustment layers.

Applying a clipping mask to an image

Page 403, step 3: Make sure that students have the clipping path (the mask) selected at this point. It won't work correctly if the background is selected.

Page 403, step 4: Students should not attempt to drag anywhere but where the picture shows. Dragging outside of the picture can lead to mistakes.

Creating compound path and opacity masks

Page 404: You may want to point out that another way to make a compound path is by right-clicking (Windows) or Control-clicking (Mac OS) the selected checkboard squares and choosing Make Compound Path from the context menu that appears. Also, in step 2, the students fill the shapes with white. This is important for the opacity mask later on.

Sampling colors in placed images

Page 408: Emphasize to students that they must select all the text and apply the same color to it. It's important that the text be only one color, to enable exporting editable text.

Exporting a layered file to Photoshop

Page 410, step 4: The Preserve Text Editability option appears dimmed in the Photoshop Options dialog box because the type has been converted to outlines.

Review questions

The following questions are not in the student's Classroom in a Book.

- 1 Name two things that you can use Adobe Bridge for.
- 2 Illustrator creates (primarily) what type of graphics—vector or raster?
- 3 When importing a layered Photoshop file, what's the difference between converting it to objects and flattening it into a single image?
- 4 How can you apply a color already present in another object?
- 5 Where can you update an image linked to an Illustrator file?
- 6 When looking at the Layers panel, how can you tell if an object is a clipping mask?

Review answers

- 1 Adobe Bridge can be used to organize content, preview your graphics, add keywords for searching, and more.
- 2 Illustrator is a vector drawing program.

- 3 Converting a Photoshop file to objects preserves the file's layers. The Photoshop file becomes a layer and the Photoshop file's own layers become sublayers in Illustrator. Flattening a Photoshop file merges its layers into a single Illustrator layer.
- 4 To apply a color from another object, select the appearance attribute of the object you want to change, and then click the Eyedropper tool on the color you want.
- 5 Images can be updated in the Links panel.
- 6 In the Layers panel, you can tell that an object is a clipping mask because its name in the Layers panel is underlined and it is called Clipping Path.

Lesson 15: Output

Print production is where the electronic paths and colors in an Adobe Illustrator file are translated into actual, physical plates required for printing on a press.

Understanding the printing process

Page 420, first paragraph: Students should understand the importance of discussing their design jobs with their print service provider. Even if students understand presses, PostScript, and CMYK, not all print service providers work the same way. The purpose of talking with the printer is to make sure the design job is being prepared to run smoothly on their printer's specific workflow, equipment, and press. Printers can sometimes suggest ways for you to get your job done at a lower budget or higher quality.

Understanding printing devices

Page 422: If possible, you may want to have a loupe and samples of printed output available to examine, or have students bring some print samples from the categories listed in "Understanding the printing process" on page 420.

The class can compare black-and-white halftone screens to color halftone rosettes, and to inkjet output (which usually uses a screening process that doesn't use halftone dots). It is also good to have an original continuous-tone (non-halftoned) photograph to compare. Having actual samples can also be useful for illustrating concepts presented throughout the lesson.

Output device resolution

Page 423: Designers who work mostly in Web design may not be aware of the much higher resolution requirements of print. If your class contains Web designers, make sure that they understand that Web-resolution images can't easily be used in print,

and the best solution is to rescan or obtain a version of the original at print resolution.

What is color management?

Pages 424–426: With color management on everyone's lips, it is important for students to understand the bigger picture of what it means in their workflow. On page 426, the basic steps for producing consistent color break down a very generic color management workflow.

Soft-proofing colors

Page 428, step 1: You might point out that the term Web in the U.S. Web Coated (SWOP) profile refers to a web offset press, and has nothing to do with the World Wide Web. In fact, during this lesson you may want to introduce students to the most common types of presses.

After students click OK in the Proof Setup dialog box, they may be disappointed in the appearance of the colors. Some colors may exhibit a shift or a loss of saturation. You may need to explain that this is an expected consequence of translating RGB colors into a CMYK gamut. It is also a reason why students should design with destination color gamuts in mind.

Printing color separations

Page 430: Students may ask where PPD files can be found. They can be obtained from print service providers or the manufacturers of PostScript output devices. You might also point out that PPDs are not relevant to or available for non-PostScript output devices.

If your classroom has no printer or no PostScript printer, but does have Adobe Acrobat, you may be able to demonstrate color separation by targeting Acrobat Distiller as the PostScript printer. Simply print separations to a PDF file, which you can then display to the class on-screen with Acrobat.

Separating spot colors

Page 437, step 1: Point out that if students find more than a couple of spot colors in the Print dialog box for one of their files, the color swatches in the file may not be set up correctly.

Understanding trapping

Pages 439–440: Students should handle their own traps only after consulting with their printer to determine what amount is appropriate for the press.

Saving a file with transparency

Page 444: It's important for students to communicate clearly with their print service provider about transparency effects in any Illustrator files that they will send to the printer. Service providers must handle transparency effects properly for their high-resolution output devices. In general, transparency effects should be flattened using the highest-quality settings that the print service provider's devices can handle.

One thing to point out to students is that the document raster effects settings are now set when you first create a new document and choose a New Document Profile.

Additional technical documents about preparing transparency effects for commercial printing are available at the Adobe U.S. Web site, <http://www.adobe.com>.

Saving as Adobe PDF

Pages 446–447: Illustrator files and PDF files share a lot of commonalities. Creating a PDF is a great way to send a file to someone and to view it they need the free Adobe Reader.

Review questions

- 1 Why is it important to consider resolution when designing for output to a press?
- 2 How are spot colors different than process colors?
- 3 What (generally) is color management?
- 4 Where can you control specific inks (not colors)?
- 5 How do you overprint a fill or stroke?

Review answers

- 1 Resolution is important for press reproduction because paper reproduces text and images at a much higher resolution than the computer screen. All rasterized effects and imported images must be at a high enough resolution to reproduce well on press.
- 2 Process colors are reproduced on press using a combination of four process inks, while each spot color is reproduced with its own premixed ink.
- 3 Color management helps to maintain color consistency across devices.
- 4 Choose File > Separation Setup to control how the document separates into component inks.
- 5 You can overprint a fill or stroke by using the Attributes panel.