Adobe Illustrator

2024 Release

Classroom in a Book®

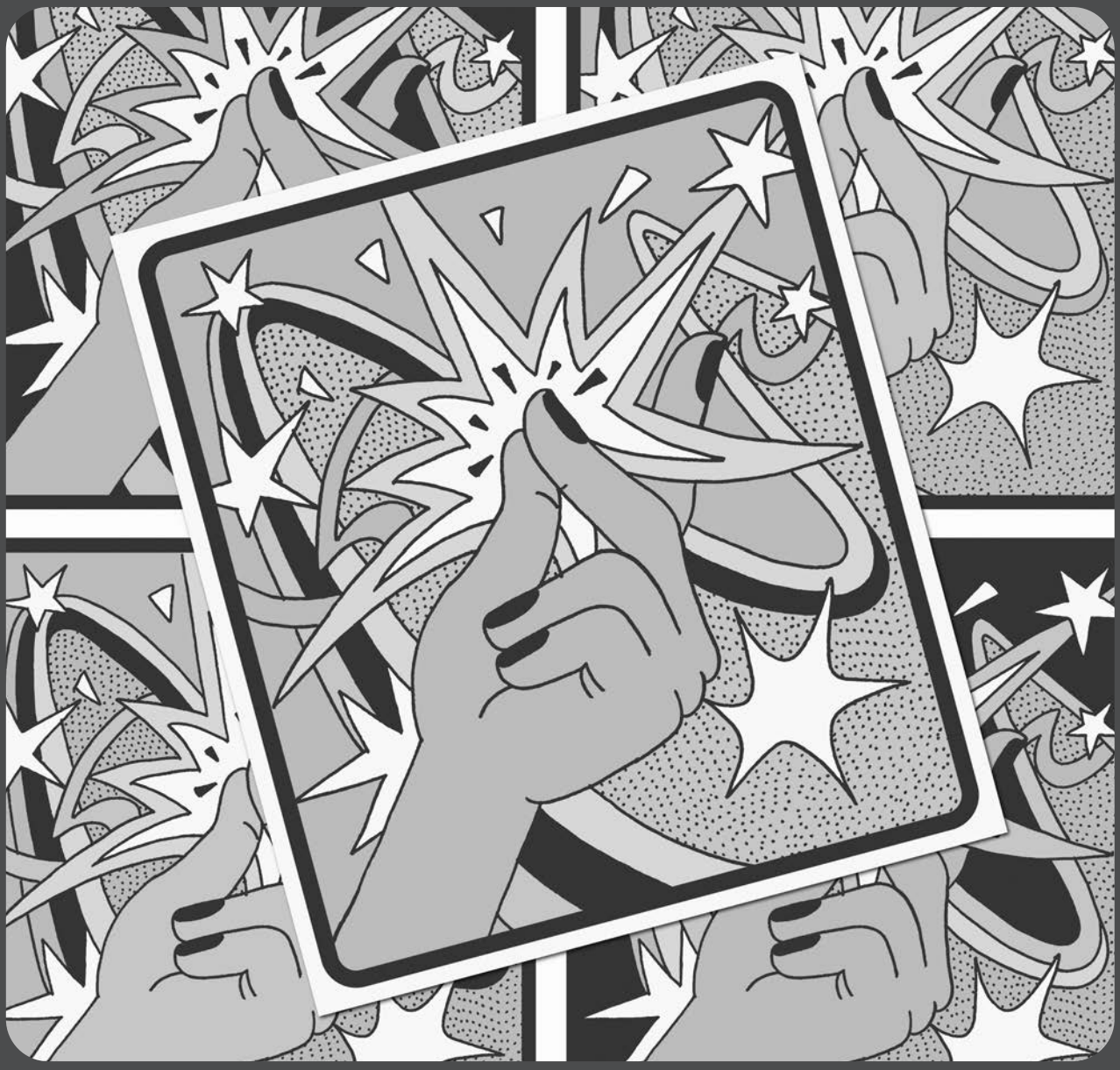
The official training workbook from Adobe

Brian Wood

FREE SAMPLE CHAPTER

Adobe Illustrator

2024 Release



Classroom in a Book®

The official training workbook from Adobe

Brian Wood

Adobe Illustrator Classroom in a Book® 2024 release

© 2024 Adobe. All rights reserved.

Adobe Press is an imprint of Pearson Education, Inc. For the latest on Adobe Press books, go to *peachpit.com/adobepress*. To report errors, please send a note to errata@peachpit.com. For information regarding permissions, request forms and the appropriate contacts within the Pearson Education Global Rights & Permissions department, please visit *www.pearson.com/permissions*.

If this guide is distributed with software that includes an end user license agreement, this guide, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. Except as permitted by any such license, no part of this guide may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written permission of Adobe. Please note that the content in this guide is protected under copyright law even if it is not distributed with software that includes an end user license agreement. The content of this guide is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Adobe. Adobe assumes no responsibility or liability for any errors or inaccuracies that may appear in the informational content contained in this guide.

Please remember that existing artwork or images that you may want to include in your project may be protected under copyright law. The unauthorized incorporation of such material into your new work could be a violation of the rights of the copyright owner. Please be sure to obtain any permission required from the copyright owner. Any references to company names in sample files are for demonstration purposes only and are not intended to refer to any actual organization.

Adobe, the Adobe logo, Acrobat, Classroom in a Book, Creative Cloud, Creative Cloud logo, After Effects, Animate, Illustrator, InDesign, Photoshop, Firefly, and PostScript are either registered trademarks or trademarks of Adobe in the United States and/or other countries. Adobe product screenshots reprinted with permission from Adobe.

Apple, Safari, Mac, macOS, and Macintosh are trademarks of Apple Inc., registered in the U.S. and other countries. Microsoft, Windows, Windows XP, Windows 7, and Windows 8 are either registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries. Wacom and Intuos are trademarks of Wacom Company Ltd. PANTONE®, myPANTONE™ and other Pantone LLC properties are trademarks or registered trademarks of Pantone LLC in the United States and other countries. All rights reserved. NVIDIA is a trademark and/or registered trademark of NVIDIA Corporation in the U.S. and/or other countries. All other trademarks are the property of their respective owners. Unless otherwise indicated herein, any third party trademarks that may appear in this work are the property of their respective owners and any references to third party trademarks, logos or other trade dress are for demonstrative or descriptive purposes only. Such references are not intended to imply any sponsorship, endorsement, authorization, or promotion of Pearson Education, Inc. products by the owners of such marks, or any relationship between the owner and Pearson Education, Inc. or its affiliates, authors, licensees or distributors.

Adobe Inc., 345 Park Avenue, San Jose, California 95110-2704, USA

Notice to U.S. Government End Users. The Software and Documentation are "Commercial Items," as that term is defined at 48 C.F.R. §2.101, consisting of "Commercial Computer Software" and "Commercial Computer Software Documentation," as such terms are used in 48 C.F.R. §12.212 or 48 C.F.R. §227.7202, as applicable. Consistent with 48 C.F.R. §12.212 or 48 C.F.R. §§227.7202-1 through 227.7202-4, as applicable, the Commercial Computer Software and Commercial Computer Software Documentation are being licensed to U.S. Government end users (a) only as Commercial Items and (b) with only those rights as are granted to all other end users pursuant to the terms and conditions herein. Unpublished-rights reserved under the copyright laws of the United States. Adobe Inc., 345 Park Avenue, San Jose, CA 95110-2704, USA. For U.S. Government End Users, Adobe agrees to comply with all applicable equal opportunity laws including, if appropriate, the provisions of Executive Order 11246, as amended, Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974 (38 USC 4212), and Section 503 of the Rehabilitation Act of 1973, as amended, and the regulations at 41 CFR Parts 60-1 through 60-60, 60-250, and 60-741. The affirmative action clause and regulations contained in the preceding sentence shall be incorporated by reference.

Cover Illustration: Marte (Martina Galarza), behance.net/martevisual

ISBN-13: 978-0-13-826382-9
ISBN-10: 0-13-826382-5

$PrintCode

WHERE ARE THE LESSON FILES?

Purchase of this Classroom in a Book in any format gives you access to the lesson files you'll need to complete the exercises in the book.

1 Go to peachpit.com/IllustratorCIB2024.

2 Sign in or create a new account.

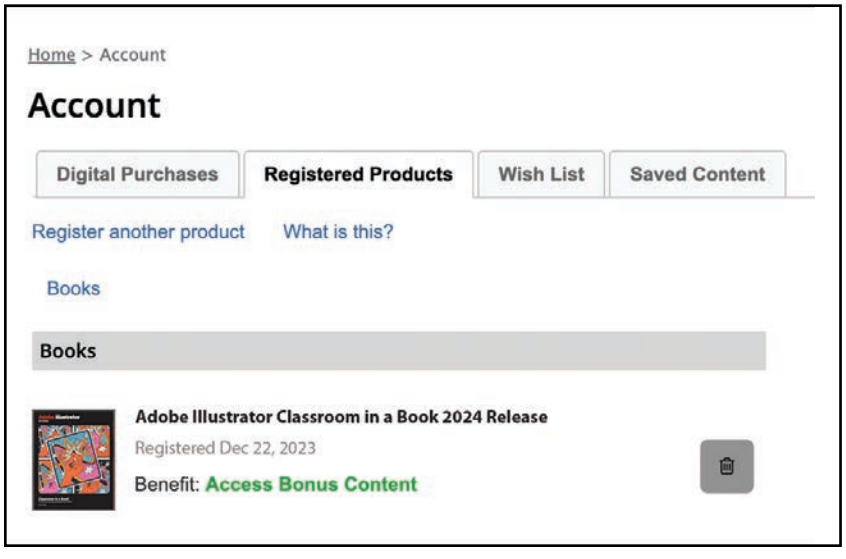
3 Click Submit.

● **Note:** If you encounter problems registering your product or accessing the lesson files or web edition, go to peachpit.com/support for assistance.

4 Answer the questions as proof of purchase.

5 The lesson files can be accessed through the Registered Products tab on your Account page.

6 Click the Access Bonus Content link below the title of your product to proceed to the download page. Click the lesson file links to download them to your computer.



● **Note:** If you purchased a digital product directly from peachpit.com, your product will already be registered. Look for the Access Bonus Content link on the Registered Products tab in your account.

CONTENTS

GETTING STARTED 1

About Classroom in a Book® 1
Prerequisites 1
Installing the program 2
Fonts used in this book 2
Online Content 2
Lesson files 2
Web Edition 3
Accessing the lesson files and Web Edition 3
Restoring default preferences 4
To reset the current Illustrator preferences 4
Additional resources 5
Adobe Authorized Training Partners 5

WHAT'S NEW IN ADOBE ILLUSTRATOR 2024 RELEASE 6

Mockup (Beta) 6
Text to Vector Graphic (Beta) 6
Generative Recolor 7
Retype (Beta) 7
Search layers 7
Contextual Task bar 7
WebP export 7

A QUICK TOUR OF ADOBE ILLUSTRATOR 2024 RELEASE 8

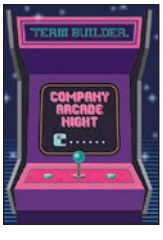
Starting the lesson 10
Creating a new document 10
Saving the document 11
Creating shapes 12
Editing shapes 13
Rounding corners 13
Copying shapes 14
Combining shapes using the Shape Builder tool 15
Applying and editing color 16
Transforming artwork 17
Recoloring artwork 18

Applying a gradient 20
Editing strokes 21
Creating with the Curvature tool 22
Applying a brush 23
Working with type 24
Warping text 25
Working with effects 26
Adding more text for practice 26
Aligning artwork 27

1 GETTING TO KNOW THE WORK AREA 28

Welcome to Adobe Illustrator! 30
Opening an Illustrator file 31
Exploring the workspace 32
Getting to know the tools 33
Working with the Properties panel 34
Exploring the Contextual Task Bar 35
Finding more tools 36
Working with panels 38
Moving and docking panels 40
Switching and resetting workspaces 41
Using panel and context menus 43
Changing the view of artwork 45
Using view commands 45
Using the Zoom tool 46
Panning in a document 49
Rotating the view 50
Viewing artwork 51
Navigating multiple artboards 52

2 TECHNIQUES FOR SELECTING ARTWORK 56



Starting the lesson 58
Selecting objects 59
Using the Selection tool 59
Selecting and editing with the Direct Selection tool 61
Selecting with a marquee 62
Locking objects 64

Unlocking objects 65
Selecting similar objects 65
Hiding objects 66
Selecting in Outline mode 67
Aligning objects 68
Aligning objects to each other 68
Aligning to a key object 68
Distributing objects 69
Aligning anchor points 70
Aligning to the artboard 71
Working with groups 72
Grouping items 72
Editing a group in Isolation mode 73
Creating a nested group 74
Editing a nested group 74
Exploring object arrangement 76
Arranging objects 76

3 MAKE A LOGO WITH SHAPES 78

Starting the lesson 80
Creating a new document 80
Saving your document 81
Working with basic shapes 84
Creating rectangles 84
Editing rectangles 85
Changing the color of the shapes 87
Rounding rectangle corners by dragging 88
Rounding individual corners 89
Changing a corner type 90
Creating an ellipse 92
Editing an ellipse 92
Changing stroke alignment 94
Creating a pie shape from an ellipse 94
Drawing lines 96
Editing a line 96
Creating polygons 98
Editing a polygon 99
Creating a star 100
Working with drawing modes 101
Using Draw Inside mode 101

Practicing with Draw Inside mode 103
Editing content drawn inside 103
Pasting artwork between documents 104
Using Image Trace to convert images into editable vector art .. 105
Cleaning up traced artwork 107
Adding the text and bear logo to the flyer 108
Using Text to Vector Graphic (Beta) 109

4 EDITING AND COMBINING SHAPES AND PATHS 112

Starting the lesson 114
Editing paths and shapes 115
Cutting with the Scissors tool 115
Joining paths 117
Cutting with the Knife tool 118
Cutting in a straight line with the Knife tool 119
Using the Eraser tool 121
Erasing in a straight line 122
Creating a compound path 123
Outlining strokes 125
Combining shapes 126
Working with the Shape Builder tool 126
Combining objects using Pathfinder effects 128
Understanding shape modes 129
Reshaping a path 131
Using the Width tool 132
Using Intertwine 134
Assembling the sign 135
Assembling the poster 136

5 TRANSFORMING ARTWORK 138

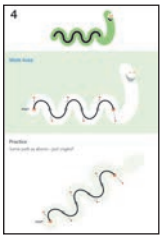
Starting the lesson 140
How can you use artboards? 141
Creating and editing artboards 141
Making a custom-sized artboard 141
Creating a new same-sized artboard 143
Moving and resizing artboards 144
Copying artboards between documents 146
Aligning and arranging artboards 147
Setting options for artboards 149

Working with rulers and guides 149
Creating guides 150
Positioning artwork using the Properties panel 151
Transforming content 152
Working with the bounding box 152
Scaling objects precisely 153
Rotating objects with the Rotate tool 155
Scaling using Transform Each 156
Shearing objects 156
Transforming using menu commands 157
Using repeats 158
Applying a mirror repeat 158
Editing a mirror repeat 160
Working with the Puppet Warp tool 161
Adding pins 161
Rotating pins 163

6 USING THE BASIC DRAWING TOOLS 166

Starting the lesson 168
Creating with the Curvature tool 169
Drawing paths with the Curvature tool 169
Drawing a river path 170
Editing a path with the Curvature tool 172
Creating corners with the Curvature tool 173
Creating dashed lines 175
Creating with the Pencil tool 177
Drawing paths with the Pencil tool 177
Drawing straight lines with the Pencil tool 178
Joining with the Join tool 180
Finishing the Camp logo 181
Adding arrowheads to paths 182

7 DRAWING WITH THE PEN TOOL 184



Starting the lesson 186
Why use the Pen tool? 186
Starting with the Pen tool 187
Creating straight lines to make a crown 187
Continuing to draw a path 189
Practicing by making another crown! 190

Drawing a house with the Pen tool 190
Practicing by making another house! 192
Exploring curved paths 192
Drawing a curve with the Pen tool 193
Practicing by creating more curves! 194
Drawing a series of curves with the Pen tool 194
Practicing by creating continuous curves! 195
Changing path direction 196
Practicing by creating more curves! 197
Combining curves and straight lines 198
Practicing by making the other sail! 199
Practicing by creating more curves! 200
Putting your learning into practice 200
Editing paths and points further 204
Deleting and adding anchor points 205
Converting between smooth points and corner points 207
Converting anchor points with the Anchor Point tool 208

8 USING COLOR TO ENHANCE ARTWORK 210

Starting the lesson 212
Exploring color modes 213
Working with color 214
Applying an existing color 214
Making a custom color 215
Saving a color as a swatch 216
Editing the global swatch 218
Editing a non-global swatch 219
Using the Color Picker to create color 221
Using Illustrator swatch libraries 223
Creating and saving a tint of a color 224
Copying appearance attributes 226
Using the Color Guide panel for creative inspiration 227
Applying colors from the Color Guide panel 228
Using Recolor Artwork to edit colors in artwork 229
Recoloring artwork 229
Sampling color in Recolor Artwork 231
Making color variations with sample prompts using Generative Recolor 233

Making color variations with custom prompts using Generative Recolor 234
Working with Live Paint 235
Creating a Live Paint group 235
Painting with the Live Paint Bucket tool 236
Modifying a Live Paint group 238

9 ADDING TYPE TO A PROJECT 240

Starting the lesson 242
Adding text 243
Adding text at a point 243
Adding area type 244
Converting between area type and point type 246
Importing a plain-text file 247
Threading text 248
Formatting type 250
Changing font family and font style 250
Activating Adobe Fonts 250
Applying fonts to text in Illustrator 252
Changing font size 254
Changing the color of text 255
Changing additional character formatting 255
Changing paragraph formatting 257
Vertically aligning area type 258
Resizing and reshaping type objects 259
Creating columns of text 259
Reshaping type objects 260
Creating and applying text styles 261
Creating and applying a paragraph style 261
Sampling text formatting 262
Practicing paragraph styles 263
Editing a paragraph style 263
Creating text lists 265
Applying text lists 265
Editing text lists 265
Wrapping text 266
Curving text on a path 267
Warping text 269
Reshaping text with a preset envelope warp 269

Editing the content of the envelope warp 269
Creating text outlines 270
Exploring Retype (Beta) 271

10 ORGANIZING YOUR ARTWORK WITH LAYERS 274

Starting the lesson 276
What are layers? 277
Creating layers 278
Creating a sublayer 280
Editing layers and objects 281
Locating content in the Layers panel 281
Dragging content between layers 283
Trying another method for dragging content to a layer 285
Locking and hiding layers 286
Reordering layers and content 288
Viewing individual layers or objects as outlines 290
Pasting layers from another document 291
Merging layers into a new layer 293
Searching and filtering layers 294
Creating a clipping mask 295

11 GRADIENTS, BLENDS, AND PATTERNS 298

Starting the lesson 300
Working with gradients 301
Applying a linear gradient to a fill 301
Editing a gradient color 302
Saving a gradient as a swatch 303
Adjusting a linear gradient fill 304
Applying a linear gradient to a stroke 306
Editing a gradient on a stroke 307
Applying a radial gradient to artwork 309
Editing the colors in the radial gradient 310
Adjusting the radial gradient 311
Applying gradients to multiple objects 312
Adding transparency to gradients 313
Applying a freeform gradient 314
Editing a freeform gradient in Points mode 315
Applying color stops in Lines mode 317
Creating blends 318

Creating a blend with specified steps 318
Modifying a blend 319
Creating a smooth color blend 320
Editing a smooth color blend 321
Getting creative with patterns 322
Applying an existing pattern 322
Creating your own pattern 323
Applying your pattern 325
Editing your pattern 326
Putting it all together 326

12 USING BRUSHES TO CREATE AN AD 328

Starting the lesson 330
Working with brushes 331
Using Calligraphic brushes 331
Types of brushes 331
Applying a Calligraphic brush to artwork 332
Editing a brush 333
Drawing with the Paintbrush tool 334
Editing paths with the Paintbrush tool 336
Removing a brush stroke 338
Using Art brushes 339
Applying an existing Art brush 339
Creating an Art brush 340
Editing an Art brush 341
Using Pattern brushes 344
Creating a Pattern brush 345
Applying a Pattern brush 347
Editing a Pattern brush 348
Using Bristle brushes 350
Changing Bristle brush options 350
Painting with a Bristle brush 351
Grouping Bristle brush paths 352
Working with the Blob Brush tool 352
Drawing with the Blob Brush tool 352
Editing with the Eraser tool 354

13 EXPLORING CREATIVE USES OF EFFECTS AND GRAPHIC STYLES 356

Starting the lesson 358
Using the Appearance panel 360
- Editing appearance attributes 361
- Adding another fill to content 362
- Adding multiple strokes and fills to text 364
- Reordering appearance attributes 367

Using live effects 369
- Applying an effect 369
- Editing an effect 371
- Styling text with a Warp effect 372
- Temporarily disabling effects to make edits 373

Applying a Photoshop effect 375
Applying 3D effects 376
Using graphic styles 379
- Creating and applying a graphic style 379
- Updating a graphic style 380
- Applying a graphic style to a layer 381
- Scaling strokes and effects 383

14 CREATING ARTWORK FOR A T-SHIRT 386

Starting the lesson 388
Working with symbols 389
- Using default Illustrator symbol libraries 389
- Transforming symbol instances 391
- Editing a symbol 392
- Working with dynamic symbols 393
- Creating a symbol 394
- Practice editing a symbol 396
- Breaking a link to a symbol 396
- Replacing symbols 397

Working with Creative Cloud libraries 399
- Adding assets to a Creative Cloud library 399
- Using library assets 401
- Updating a library asset 402

Creating a mockup 403
Working with global editing 405

15 PLACING AND WORKING WITH IMAGES 408

Starting the lesson 410
Placing image files 411
Placing an image 411
Transforming a placed image 413
Cropping an image 414
Placing a Photoshop document 416
Placing multiple images 419
Masking content 420
Masking content with a shape 421
Exploring the mask you made 421
Editing the mask and image 422
Automatic masking for an image 423
Editing the image mask 424
Creating an opacity mask 425
Editing an opacity mask 427
Working with image links 428
Finding link information 428
Embedding and unembedding images 429

16 SHARING PROJECTS 432

Starting the lesson 434
Fixing the missing image link 435
Packaging a file 436
Creating a PDF 438
Exporting artboards and assets 439
Exporting artboards 439
Exporting assets 440
Inviting others to edit 443
Sharing for review 445

INDEX 448

Pearson's Commitment to Diversity, Equity, and Inclusion . 463
Contributors 464
Production Notes 464

3 MAKE A LOGO WITH SHAPES

Lesson overview

In this lesson, you'll learn how to do the following:

- Create a new document.
- What is a bleed?
- Use tools and commands to create a variety of shapes.
- Understand Live Shapes.
- Create rounded corners.
- Discover other ways to round corners.
- Work with drawing modes.
- Use the Place command.
- Use Image Trace to create shapes.
- Work with Draw Behind mode.
- Simplify paths.
- Explore Text to Vector Graphic (Beta).
- See the latest Text to Vector Graphic feature.

This lesson will take about 60 minutes to complete. To get the lesson files used in this lesson, download them from the web page for this book at *peachpit.com/IllustratorCIB2024*. For more information, see "Accessing the lesson files and Web Edition" in the Getting Started section at the beginning of this book.

Creating and editing shapes are essential to creating Illustrator artwork. In this lesson, you'll create a new document and then use the shape tools to create and edit a series of shapes for a logo.

Starting the lesson

In this lesson, you'll explore the different methods for creating artwork by using the shape tools and other methods to create a logo for an adventure company.

Note: If you have not already downloaded the project files for this lesson to your computer from your Account page, make sure to do so now. See the "Getting Started" section at the beginning of the book.

1. To ensure that the tools function and the defaults are set exactly as described in this lesson, delete or deactivate (by renaming) the Adobe Illustrator preferences file. See "Restoring default preferences" in the "Getting Started" section at the beginning of the book.
2. Start Adobe Illustrator.
3. Choose File > Open. Locate the file L3_end.ai, which is in the Lessons > Lesson03 folder that you copied onto your hard disk, and click Open.

   This file contains the finished illustrations that you'll create in this lesson.

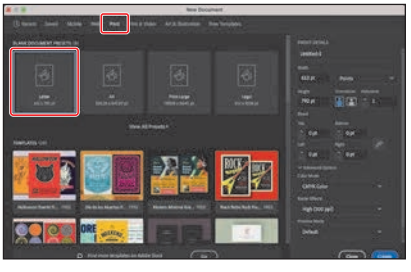
4. Choose View > Fit Artboard In Window; leave the file open for reference, or choose File > Close.

Creating a new document

To start, you'll create a new document for the logo.

1. Choose File > New.
2. In the New Document dialog box, change the following options:

   - Click the Print category at the top of the dialog box.
   - Click the Letter blank document preset, if it isn't already selected.



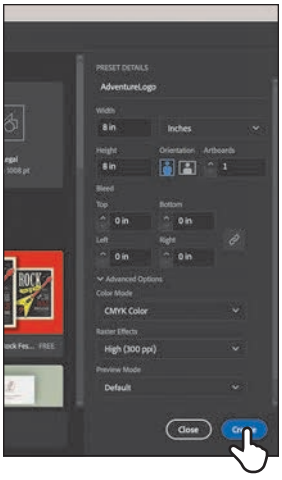
   You can set up a document for different kinds of output, such as print, web, video, and more, by choosing a category. For example, if you are designing a flyer or poster, you can select the Print category and select a document preset (size). The document will be set with the units in points (most likely), the color mode as CMYK, and the raster effects to High (300 ppi)—all optimal settings for a print document.

3 On the right side of the dialog box, in the Preset Details area, change the following:

- Enter a name for the document in the blank space under Preset Details: **AdventureLogo**.

The name will become the name of the Illustrator file when you save it later.

- Units: Choose Inches from the units menu to the right of the Width field.
- Width: Select the Width value, and type **8**.
- Height: Select the Height value, and type **8**.
- Orientation: Portrait ( ).
- Artboards: 1 (the default setting).



At the bottom of the Preset Details section on the right side of the dialog box, you will also see Advanced Options and a More Settings button (you may need to scroll to see it). They contain more settings for document creation that you can explore on your own.

4 Click Create to create a new document.

Note: You can set the units to whatever makes sense to you. Know that throughout the lesson I use inches. There is a note in the "Creating rectangles" section that will help when it comes to entering the value I give you in inches.

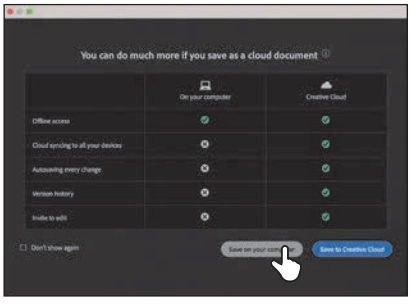
Saving your document

With the document open, now you'll save it locally.

1 Choose File > Save.

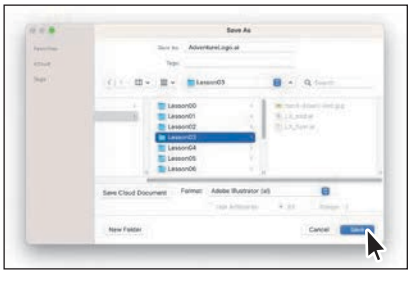
2 If the Cloud Document dialog box opens, click Save On Your Computer to save the document locally.

To learn more about cloud documents, see the sidebar "What are cloud documents?" after this section.



3 In the Save dialog box, set the following options:

- Filename: **AdventureLogo.ai**
- Saved in the Lessons > Lesson03 folder.
- Leave Adobe Illustrator (ai) chosen from the Format menu (macOS) or Adobe Illustrator (*.AI) chosen from the Save As Type menu (Windows).



4 Click Save.

Adobe Illustrator (.ai) is called a *native format* and is your working file. That means it preserves all Illustrator data so you can edit everything later.

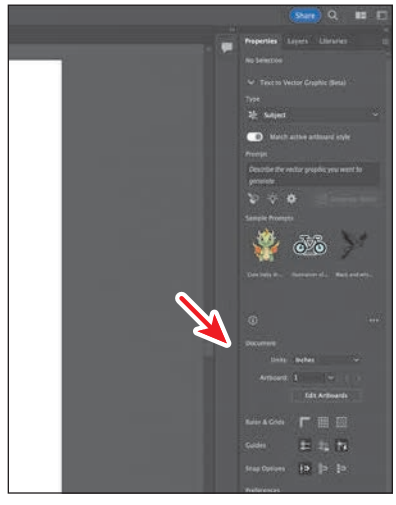
5 In the Illustrator Options dialog box that appears, leave the options at their default settings, and click OK.

The Illustrator Options dialog box is full of options for saving the Illustrator document, from specifying a version for saving to embedding any files that are linked to the document. You usually won't have to change anything in there.

6 Choose Window > Workspace > Essentials (if it's not already selected).

7 Choose Window > Workspace > Reset Essentials to reset the panels and settings for the Essentials workspace.

8 Look in the Properties panel on the right.



With nothing selected in the document, you'll see settings for the document like the units, navigating and editing artboards, showing and hiding useful features like rulers and guides, and much more. The Document Setup button is where you can set options like the document bleed and more. To learn more about bleeds, check out the video at the end of this section.

9 Choose View > Fit Artboard In Window to ensure that you can see the entire artboard (page).

What is a bleed?

To learn about document bleed, check out the video *Edit document settings*, which you'll find in the Web Edition. For more information, see the "Web Edition" section of "Getting Started" at the beginning of the book.

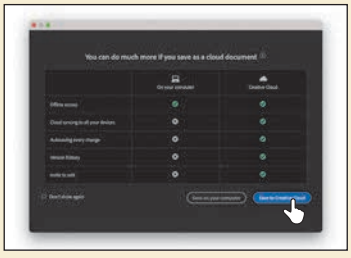
What are cloud documents?

Aside from saving your Illustrator documents locally, you can also save them as cloud documents. A cloud document is an Illustrator document that is stored in Adobe Creative Cloud and can be accessed *anywhere* you sign in to Illustrator.

Here's how to save as a cloud document and access cloud documents.

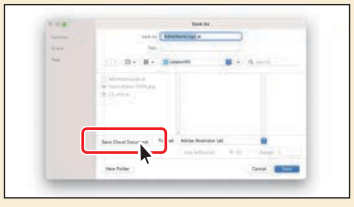
- After you create a new document or open a document from your hard drive, you save the file as a cloud document by choosing File > Save As.

  The first time you do this, you will see a Cloud Document dialog box with options to save as a cloud document or save on your computer.



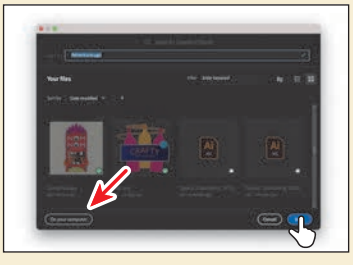
- To save as a cloud document, you would click the Save To Creative Cloud button. You can see it in the previous figure.

  If instead of the Cloud Document dialog box you see the Save As dialog box and want to save as a cloud document, you can click the Save Cloud Document button.

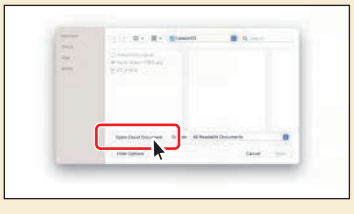


- In the dialog box that appears, you can change the name and click the Save button to save the document to Creative Cloud.

  When working on cloud documents, changes are automatically saved, so the document is always up to date.



Tip: If you change your mind and want to save the file locally, you can click On Your Computer in that dialog box (an arrow is pointing to it in the figure).



Want to open a cloud document?
Choose File > Open. In the Open dialog box, click the Open Cloud Document button.

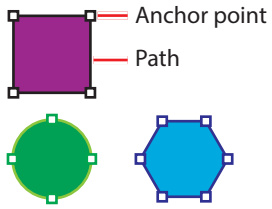
You can then open a cloud document from the dialog box that appears.

Working with basic shapes

In the first part of this lesson, you'll create all kinds of shapes, including rectangles, ellipses, and polygons.

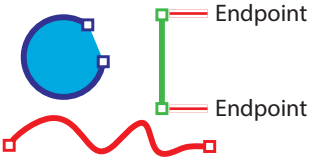
Shapes you create are made of *anchor points,* with paths connecting the anchor points.

For instance, a basic square is made of four anchor points on the corners, with paths connecting those anchor points (see the upper figure at right). A shape is referred to as a *closed path* because the ends of the path are connected.



Examples of closed paths

A path like a line is an open path. An *open path* has distinct anchor points on each end, called *endpoints* (see the figure at right). You can fill both open and closed paths with color, gradients, or patterns.



Examples of open paths

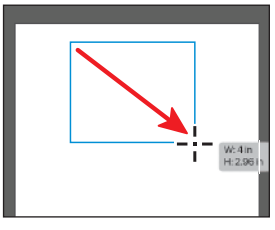
Creating rectangles

The main logo art for the adventure company will be a bear. You'll start by creating a few rectangles, and you'll explore creating them using two different methods.

1 Select the Rectangle tool ( ) in the toolbar.

First we'll create the larger rectangle that will be the body of the bear.

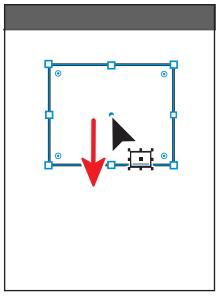
2 Near the top of the artboard, drag to create a rectangle, and then release the mouse button.

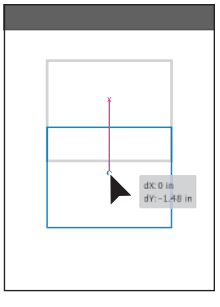


Don't worry about the size yet; you'll resize it shortly.

As you drew the shape, did you happen to notice the width and height in the little gray tool tip next to the pointer? That is called the *measurement label.* That label is a part of Smart Guides (View > Smart Guides).

3 Move the pointer over the small blue dot in the center of the rectangle (called the *center point widget*). When the pointer changes ( ), drag the shape so it's roughly in the middle of the artboard.



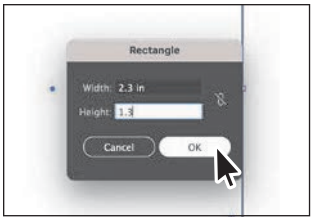


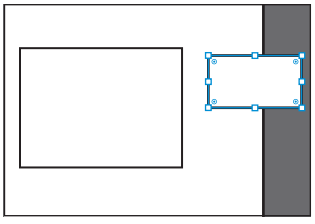
With the Rectangle tool selected (or any other shape tool), this is how you need to move a shape. Otherwise, you will draw a new one!

Next, you'll create a smaller rectangle using a more precise method to serve as the head of the bear.

4 With the Rectangle tool ( ) still selected, click in an empty area of the artboard to open the Rectangle dialog box.

5 In the dialog box, change the Width to **2.3** inches and the Height to **1.3** inches. Click OK to create a new rectangle.





Creating a rectangle by clicking rather than dragging is useful when you need to make a shape of a specific size. For most drawing tools, you can either draw with the tool or click to create a shape this way.

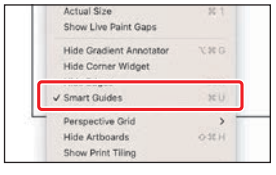
Editing rectangles

All of the shape tools, except for the Star tool and Flare tool (currently), create Live Shapes. Live Shapes have attributes, such as width, height, rotation, and corner radius, that are editable without switching from the drawing tool you are using.

With two rectangles created, you'll make some changes to them so they look more like the body and head of a bear and are scaled relative to each other.

1 Select the Selection tool ( ) in the toolbar.

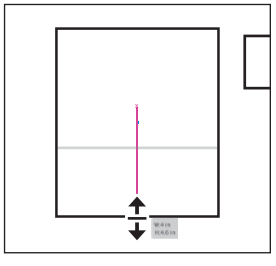
2 Click the View menu and make sure that Smart Guides are on. A checkmark will appear next to Smart Guides in the menu if they are.



You can turn the Smart Guides on when they are useful. In this case, when you resize one of the rectangles, you will see a gray measurement label telling you its size.

3 Click anywhere in the larger rectangle to select it.

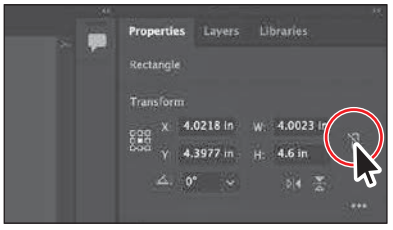
4 Drag the bottom, middle point of the rectangle until you see a height of approximately 4.6 inches in the measurement label (the gray tool tip next to the pointer), release the mouse button.



Since your rectangle might be bigger or smaller, I didn't tell you which way to drag (up or down).

You can also resize shapes with more precision in the Properties panel, which is what you'll do next.

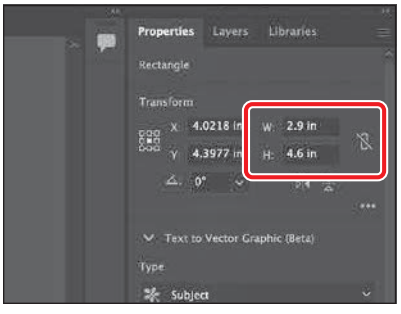
5 In the Transform section of the Properties panel on the right, make sure Maintain Width And Height Proportions to the right of Width (W:) and Height (H:) is *deselected* (it looks like this:).

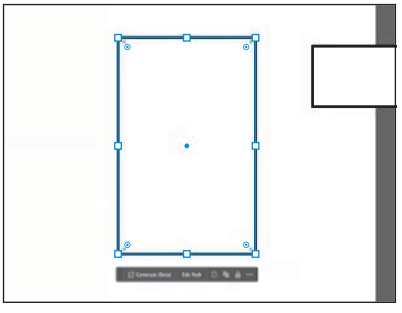


Setting Maintain Width And Height Proportions (turning it on) is useful when you change the height or the width and want the other value to change proportionally.

Tip: Why are we being so precise? In Illustrator you can work as loosely or precisely as you need. I want all of our bear logos to be about the same size and shape, so some precision is necessary!

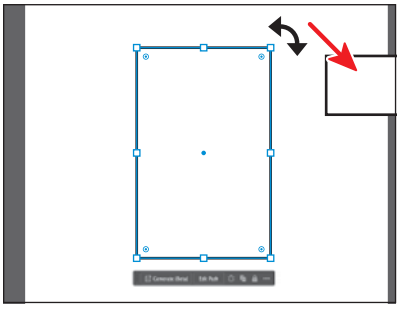
6 Select the Width (W:) value, and type **2.9 in**. Press Return or Enter to accept the change.

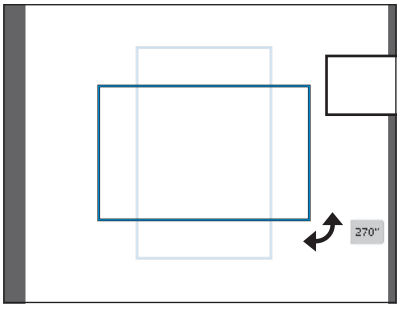




Now you'll rotate the larger rectangle so the bear body is horizontal.

7 Move the pointer just off a corner of the selected (larger) rectangle. When you see rotate arrows (↶↷), drag clockwise to rotate the shape. As you drag, press the Shift key to constrain the rotation to increments of 45 degrees. When an angle of 270° shows in the measurement label, release the mouse button and then the key. Leave the shape selected.

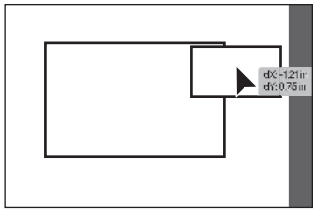




Tip: If you look in the Properties panel, you will also see a Rotate value. There are multiple ways to do almost everything in Illustrator. For instance, if you wanted to rotate more freely—at some random angle—you might do it by dragging, rather than choosing a rotation angle in the Properties panel.

Now you'll drag the smaller rectangle onto the larger rectangle. With the Selection tool selected, you can drag from *anywhere* within the shape bounds, as long as it is filled with a color, pattern, or gradient. You don't have to use the center point like you did previously with the Rectangle tool selected.

8 Drag the smaller rectangle onto the larger rectangle where the head of the bear should go. See the figure.

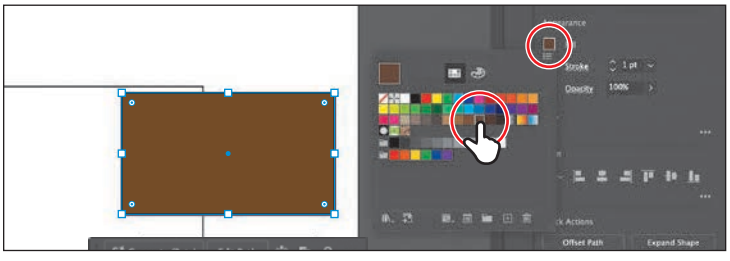


Changing the color of the shapes

By default, shapes are filled with white and have a black stroke (border). Next, you'll change the color of both rectangles to brown so they start to look more like a bear.

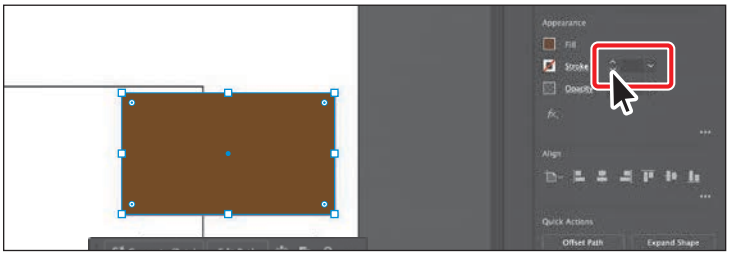
1 With the smaller rectangle still selected, click the Fill color box (□) in the Properties panel on the right. It may be lower in the panel.

2 In the panel that opens, make sure that the Swatches option (▦) is selected at the top. Select a brown color to fill the shape.



3 Press the Escape key to hide the Swatches panel before moving on.

4 Change the Stroke Weight in the Properties panel to 0 (zero).



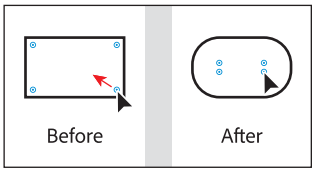
5 Click the larger rectangle to select the body of the bear.

6 For practice, change the fill color to the same brown and set the Stroke Weight to 0 (zero) following the previous steps.

7 Choose Select > Deselect.

Rounding rectangle corners by dragging

The rectangles you created don't look very much like a bear yet. Luckily, we can round the corners of the rectangles to make them more interesting.

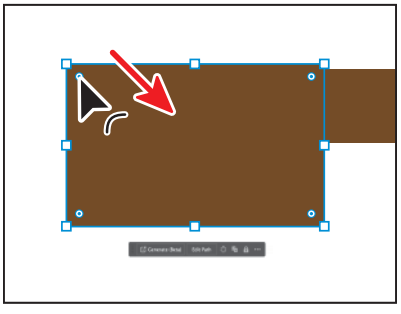


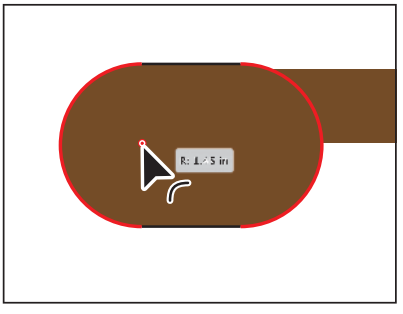
1 Click the larger rectangle to select it.

2 Choose View > Zoom In once or twice.

You need to see the Live Corners widgets (⊙) in each corner of the rectangle. If you are zoomed out far enough, the Live Corners widgets are hidden on the shape. Zoom in until you see them.

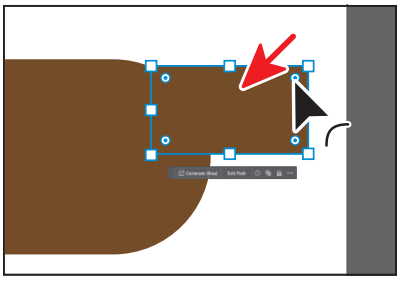
3 Drag any of the Live Corners widgets (⊙) in the rectangle toward the center to round all of the corners. Drag until the corners are as round as they can be.

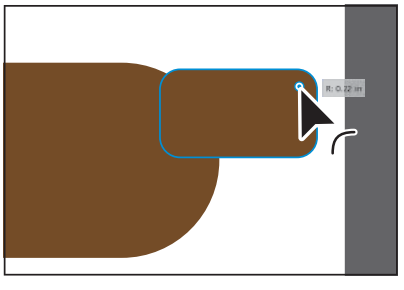




The more you drag toward the center, the more rounded the corners become. If you drag a Live Corners widget far enough, a red arc appears on the shape, indicating you've reached the maximum corner radius.

4 Click to select the smaller brown rectangle (the head of the bear), and drag any of the Live Corners widgets (⊙) to round the corners a little.



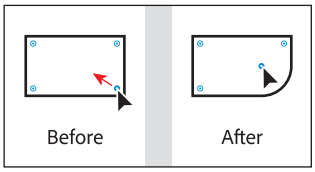


5 Leave the smaller rectangle selected.

6 Choose File > Save to save the file.

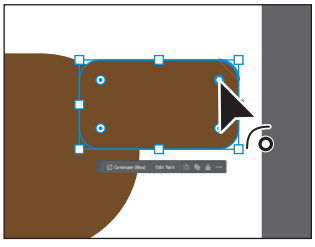
Rounding individual corners

You can also round individual corners using the Selection tool. Next, you'll explore rounding the individual corners of the head of the bear.



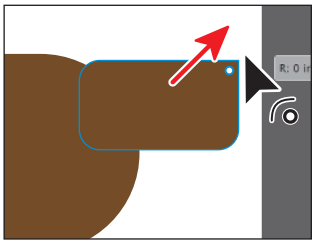
1 With the smaller rectangle selected, click the Live Corners widget (⊙) in the upper-right corner to select it, and then release.

If you move the pointer away, you will see that the widget has changed in appearance, from this (⊙) to this (○). If you drag that corner widget now, it will be the only one that changes.



2 Now, drag the selected corner widget away from the center of the shape to remove the rounding.

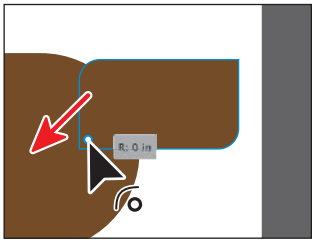
Be careful! If you don't click, release, and then drag, you won't select just the one corner widget. Instead, you'll round them all!

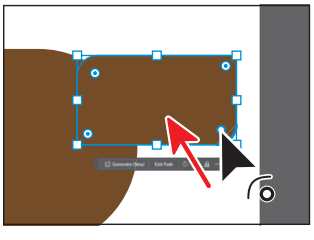


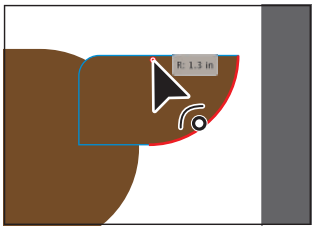
3 Follow the previous steps to remove the rounding from the lower-left corner of the rectangle as well.

4 Click the corner widget in the lower-right corner and release to select it.

5 Then drag it toward the opposite corner, rounding the corner as much as possible.







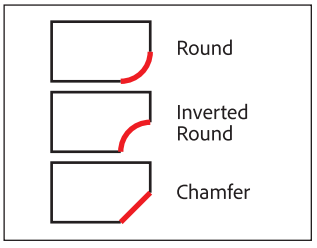
6 Choose Select > Deselect, and then choose File > Save.

Discover other ways to round corners

There are so many ways to round corners. To learn more ways, check out the video *Discover other ways to round corners*, which you'll find in the Web Edition. For more information, see the "Web Edition" section of "Getting Started" at the beginning of the book.

Changing a corner type

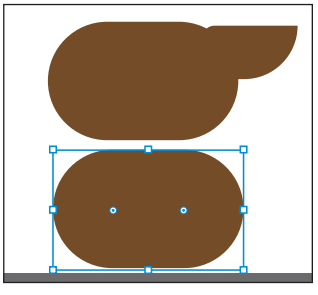
Aside from dragging to round corners, you can also use the Properties panel to change the type of corner radius and make more precise adjustments. The three types are shown in the figure at right.



Now you'll make a copy of the larger rectangle and change the corner types for a few corners. This rectangle will become the belly of the bear.

1. Choose View > Fit Artboard In Window to see the entire artboard.
2. Select the larger rectangle, and to copy it, choose Edit > Copy, and then paste it by choosing Edit > Paste.
3. Drag the copy just below the other rectangles.

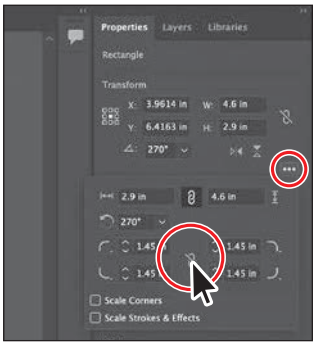
   You might need to select the two original rectangles and move them up a bit. If you do, make sure to select the copy again before continuing.



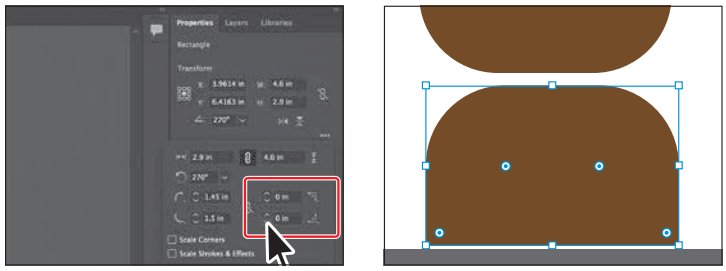
4. In the Properties panel, click More Options (•••) in the Transform section to show more options. It's circled in the following figure.
5. Ensure that Link Corner Radius Values is off—it should look like this: 🔗. You can click the button to toggle it on and off. It's circled in the figure.

   Each corner value in the panel corresponds to a corner in the shape.

   For the next step, *pay attention to which corner is adjusted in the figure.* Since the rectangle was rotated earlier, the corner values in the panel no longer seem to correspond to the correct corner in the shape.

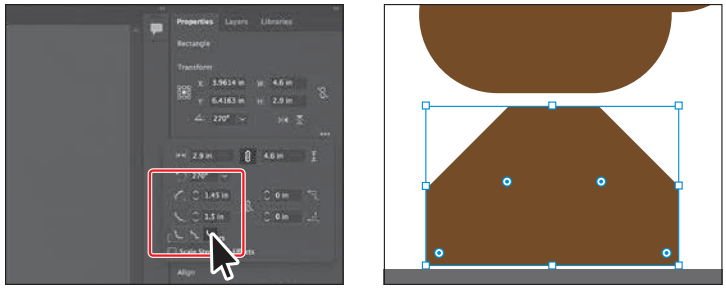


6 Change the lower-left and lower-right corners of the rectangle to 0 (zero).

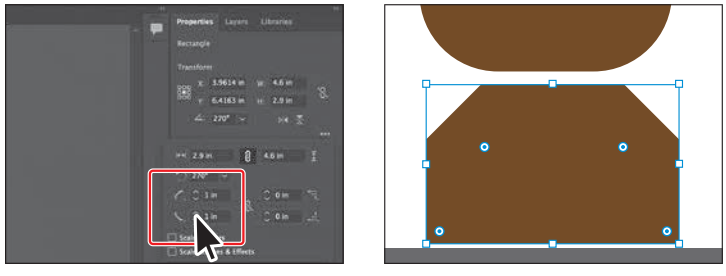


Aside from changing the corner radius, you can also change the corner type. You can choose between Round (default), Inverted Round, and Chamfer.

7 Change the Corner Type setting for the upper-left corner and upper-right corner of the rectangle to Chamfer ( ).

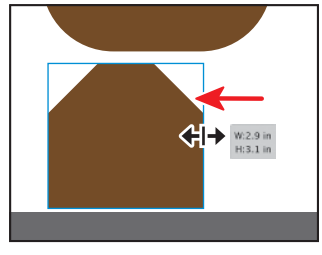


8 Make the corner radius for the same corners smaller. Make them both around 1 inch.



9 Press the Escape key to close the options panel, and leave the rectangle selected.

10 Drag a side handle to make the shape narrower. See the figure.



Creating an ellipse

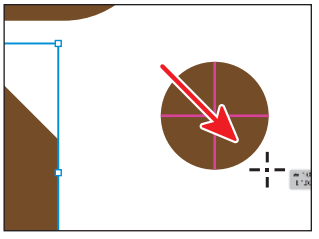
The Ellipse tool is used to create ellipses and perfect circles. Next, you'll create an ellipse with the Ellipse tool ( ) to make an eye for the bear.

1 Press and hold the mouse button on the Rectangle tool ( ) in the toolbar, and select the Ellipse tool ( ).

When you draw the circle that will become the eye of the bear, make it bigger than an eye should be so you can work with it more easily.

Tip: When an ellipse is a perfect circle, you will see magenta crosshairs in it as you are drawing it (with Smart Guides turned on [View > Smart Guides]).

2 In an empty area of the artboard, Shift-drag to make a perfect circle that will become the eye of the bear. As a reference, I made mine about 1 inch in width and height. Release the mouse button and then the key.



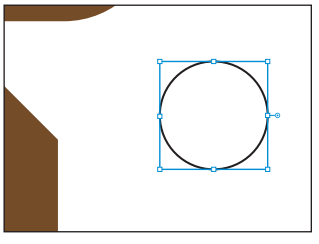
3 Zoom in to the circle by choosing View > Zoom In a few times or by pressing Command and + (macOS) or Ctrl and + (Windows) a few times.

Editing an ellipse

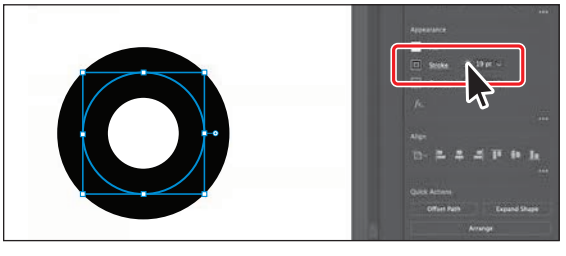
With the eye shape (circle) created, now you'll change the appearance and put it in place.

1 Press the letter D on your keyboard to apply the default of a white fill and black stroke.

This is a keyboard shortcut that I use a lot to remove formatting from shapes and get them back to a default (that's what the "D" stands for) appearance of a white fill and black stroke!

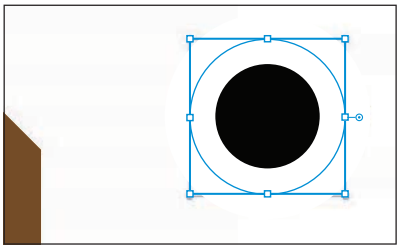


2 Change the Stroke Weight setting in the Properties panel to **19 pt**.



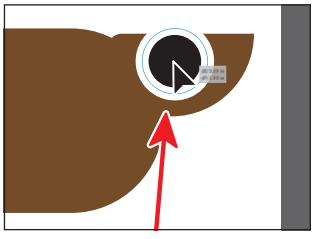
We need the fill to be black and the stroke to be white. So the opposite of what is applied to the current shape.

3 To swap the fill and stroke colors, click the Swap Fill And Stroke arrow (↔) toward the bottom of the toolbar on the left.

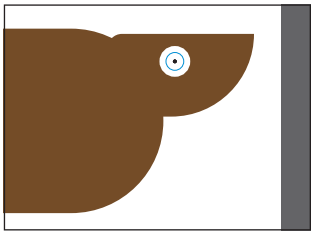


4 To see everything, choose View > Fit Artboard In Window.

5 Drag the circle by the blue center dot (the center point widget) onto the head of the bear, as you see in the figure.

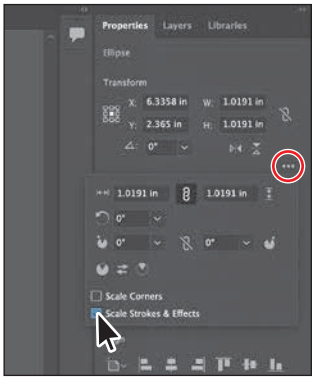


Next you'll make the eye smaller. By default, stroke weights do not scale (they stay the same). So if you were to make the circle a lot smaller, for instance, the stroke weight would stay 19 pt and look rather large. See the figure for an example. To scale the stroke as the circle scales, you can turn on an option.



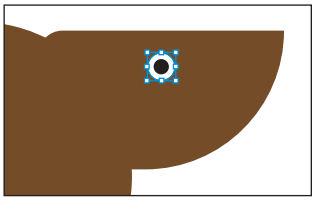
6 Click the More Options button (•••) in the Transform section of the Properties panel. Select Scale Strokes & Effects in the panel that opens.

7 Shift-drag the circle to make it smaller. When it's small enough to look good, release the mouse button and then the key.



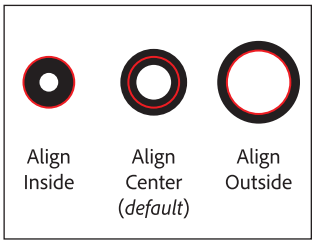
8 Drag the eye where you want it on the bear head.

9 Choose File > Save.



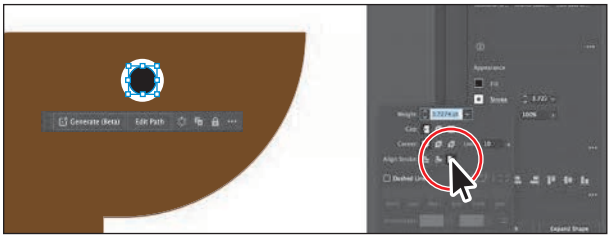
Changing stroke alignment

As you've seen, strokes are borders of an object or path. By default, strokes *center* on a path, which means that along the path, half the stroke weight is on one side and half is on the other.



You can adjust this alignment so the stroke appears in the center (default), inside, or outside. Next, you'll change the stroke so you can still see the fill of the eye.

1. With the eye circle still selected, zoom in by pressing Command and + (macOS) or Ctrl and + (Windows) a few times.
2. Click the word "Stroke" in the Properties panel to open the Stroke panel.
3. In the Stroke panel, click the Align Stroke To Outside button ( ) to align the stroke to the outside edge of the circle.

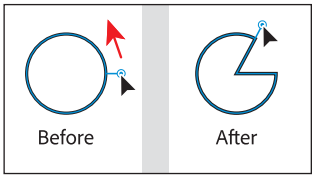


I hope you can see the difference when the stroke is aligned to the outside. Zoom in if you need. I made the eye a little smaller after aligning the stroke.

4. Choose Select > Deselect.

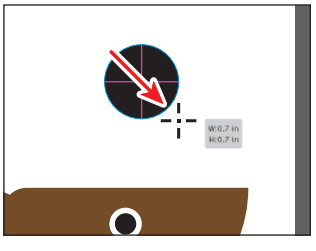
Creating a pie shape from an ellipse

Ellipses have a pie widget that you can drag to create a pie shape. Next, you'll make a new circle and turn it into an ear.



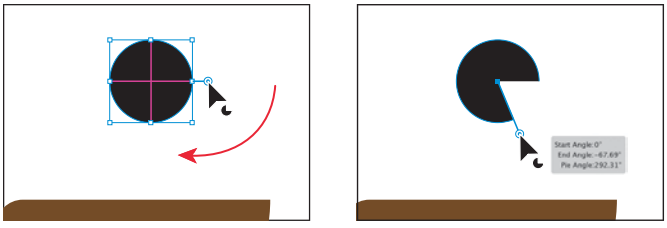
1. With the Ellipse tool ( ) still selected, change the Stroke Weight in the Properties panel to **0**.
2. Shift-drag to make another circle in an empty area of the artboard.

   This circle will become the ear of the bear—but you can make it bigger and scale it down later, if you want.



With it selected, *do you see the pie widget (⊙) on the right side of the shape?* You can drag that to make a pie shape.

3 Drag the pie widget clockwise around the bottom of the ellipse, and then release.



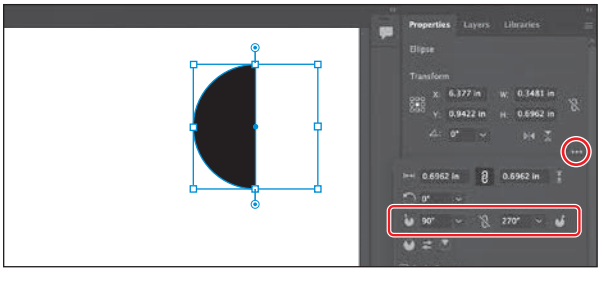
Notice that there is another pie widget in the same place from which you started dragging this one. The pie widget you just dragged is called the *pie start angle,* and the other pie widget is called the *pie end angle.*

4 Drag the other pie widget (the *pie end angle*) from the same place counterclockwise around the top of the ellipse. Don't worry about how far.

The ear shape you are making will look best if we see exactly half of it. That requires the two pie widgets you dragged to be at precise angles to each other—showing 180 degrees of the circle. You can adjust them with precision in the Properties panel.

5 In the Properties panel to the right, click More Options (•••) in the Transform section to show more options. Choose 90° from the Pie Start Angle (◔) menu.

6 Choose 270° from the Pie End Angle (◕) menu.



7 Press the Escape key to hide the panel.

8 Drag the half-circle ear on top of the bear head.

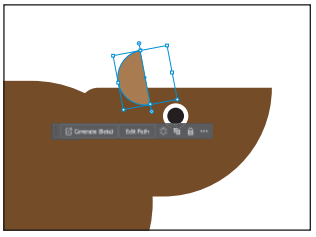
Tip: Need to remove the pie angle change and go back to a whole circle? Double-click either pie widget!

Note: The figure shows after choosing 270° from the Pie End Angle menu.

9 With the ear still selected, change the Fill color in the Properties panel to a lighter brown than the bear head.

10 Try adjusting the size of the ear if you need to make it look better, and rotate it slightly.

Want a little practice? You could make a new ear (or copy) to give the bear two ears! The new ear might look better if it were behind the bear head—so you can choose Arrange > Send To Back.



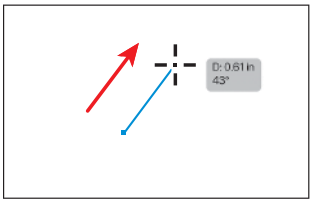
Drawing lines

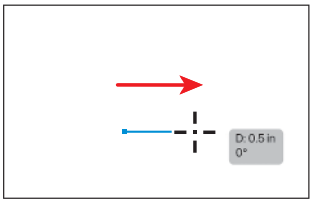
Lines created with the Line Segment tool are Live, and similarly to Live Shapes, they have many editable attributes after they are drawn. Next, you'll create a line with the Line Segment tool. This line will become a leg of the bear.

1 Press and hold on the Ellipse tool ( ) in the toolbar, and select the Line Segment tool ( ).

2 In an empty area of the artboard, press and drag in any direction to draw a line. *Don't release the mouse button yet.*

3 As you drag, press the Shift key to constrain the line to a multiple of 45 degrees. Notice the length and angle in the measurement label next to the pointer as you drag. Drag directly to the right until the line is around 0.5 inches in length. Release the mouse button and then the key.



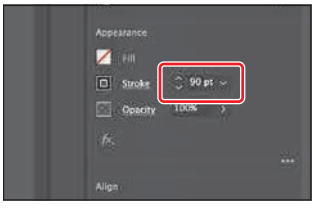


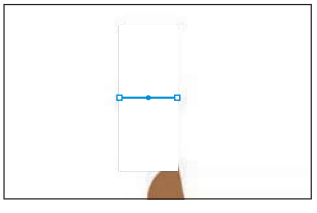
Editing a line

Now you'll rotate and change the stroke weight and color of the line.

Note: The stroke color is white, so the path will be challenging to see.

1 With the line selected, change the stroke weight to **90 pt** in the Properties panel to the right of the document.

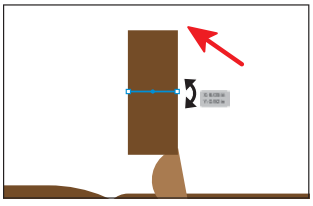


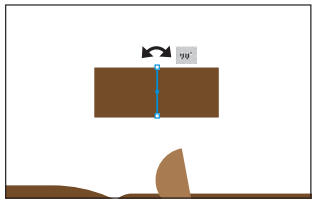


2 Click the Stroke color box in the Properties panel, and make sure that the Swatches option ( ) is selected in the panel that appears. Select the same brown color as the body of the bear.

Since this is a leg, and a bear leg is not horizontal, it needs to be rotated. Yes, you could have drawn it that way, but then we wouldn't explore rotating lines!

3 With the new line selected, move the pointer just off the right end. When the pointer changes to a rotate arrow ( ), press and drag up until you see an angle of 90° in the measurement label next to the pointer. That will make the line vertical.

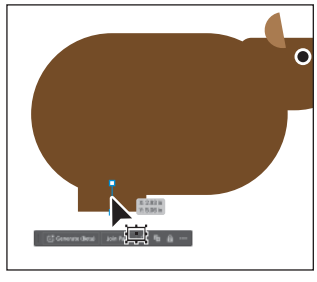




4 Choose View > Fit Artboard In Window.

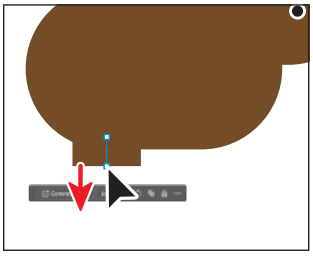
5 Select the Selection tool ( ) in the toolbar, and drag the line by the center point to make it a leg for the bear.

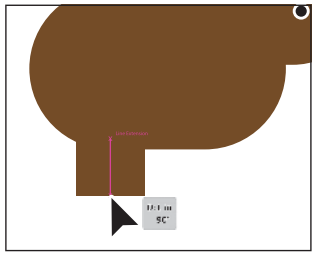
It's a little short—so let's make it longer. For the following figures, I moved the belly shape that was below the bear out of the way.

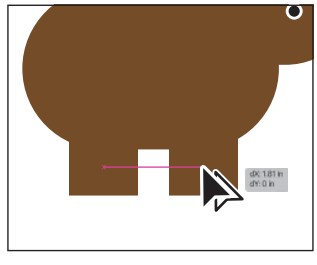


6 Drag the end of the line to make the leg longer.

7 Make a copy by Option-dragging (macOS) or Alt-dragging (Windows) the line to where the other leg should be. Release the mouse button and then the key.







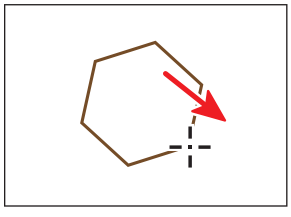
Note: If you resize a line in the same trajectory as the original path, it will snap to that same trajectory. You will also see the words "Line Extension" and "on" appear at opposite ends of the line. These appear because the Smart Guides are turned on.

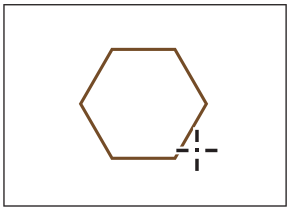
Creating polygons

Using the Polygon tool (), you can create shapes with multiple straight sides. By default, the Polygon tool draws hexagons (six-sided shapes). What's different about polygons is that they are drawn from the center. Polygons are also Live Shapes, which means attributes such as size, rotation, number of sides, and more remain editable after you create them.

Now you'll create several polygons to make the claws of the bear.

1. Press and hold the Line Segment tool () in the toolbar, and select the Polygon tool ().
2. Choose View > Smart Guides to turn them off.
3. Choose Select > Deselect.
4. Press the letter D on your keyboard to apply the default of a white fill and black stroke. Otherwise, the stroke will be a rather large 90 point!
5. Move the pointer into an empty area of the artboard. Drag to the right to draw a polygon. As you drag, press the Shift key to straighten the shape. Release the mouse button and then the key.



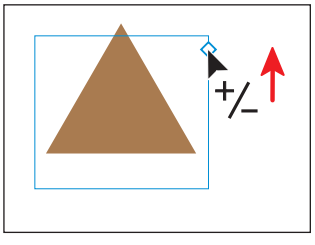


Notice that you didn't see the gray measurement label (the tool tip), since it's part of the Smart Guides that you turned off. Smart Guides can be helpful in certain situations, such as when more precision is necessary—maybe you want to know how large the shape is—and can be toggled on and off when needed.

6. Click the Fill color box () in the Properties panel, make sure that the Swatches option () is selected, and change the color to a lighter brown.
7. Change the Stroke Weight in the Properties panel to 0 (zero).
8. Choose View > Smart Guides to turn them back on.

Now you'll make it look more like a claw, by turning the shape into a triangle.

9. With the Polygon tool still selected, drag the little side widget () on the right side of the bounding box up to change the number of sides to 3—making a triangle.
10. Choose File > Save.



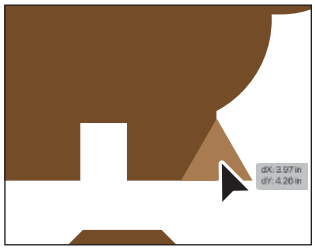
Editing a polygon

Now you'll change the size of the polygon and create a nail from it.

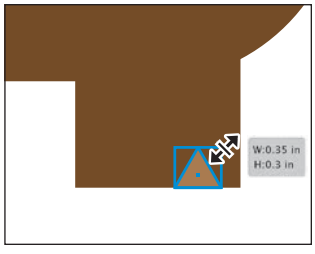
1 Select the Selection tool (▶) in the toolbar.

2 Drag the polygon to the bottom of one of the legs. See the figure for where.

3 Zoom in to the claw shape by pressing Command and + (macOS) or Ctrl and + (Windows) a few times.



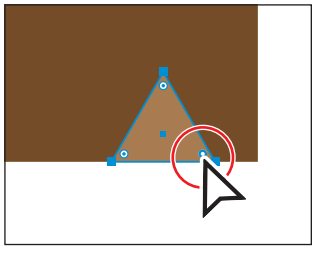
4 To make it smaller, press the Shift key and drag a corner to change the width and height proportionally (together). When it looks like the size of a proper claw, release the mouse button and then the key.



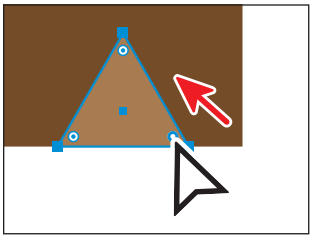
With the polygon shape now created, you'll round one of the corners so the claw is a little less sharp. We need to round only one of the corners, so you will select the corner you want to round.

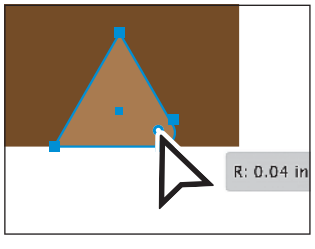
With the Selection tool selected, a polygon shows only a single Live Corner widget, so you can't round just one corner with the Selection tool. To round only one corner, you will use the Direct Selection tool.

5 Select the Direct Selection tool in the toolbar. Click the Live Corners widget (◎) in the corner showing in the figure.



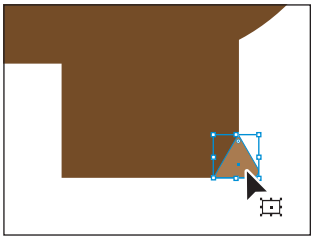
6 Drag the selected Live Corners widgets toward the center of the triangle to round the one corner a little.





● **Note:** Depending on how big your polygon was to start, you made it either larger or smaller in this step to match the height we suggest.

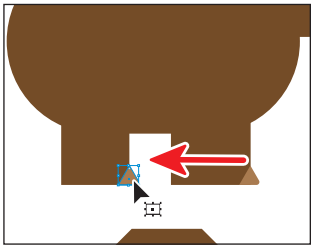
7 Select the Selection tool (▶) and drag the triangle into position like you see in the figure.



8 To make a copy, choose Edit > Copy and then Edit > Paste In Front.

A copy is placed directly on top of the original.

9 Drag it into place on the other leg, like you see in the figure.



Creating a star

Next, you'll use the Star tool (☆) to create a star that will become the tail of the bear. Currently, the Star tool doesn't create Live Shapes, so editing the star after the fact can be challenging.

When drawing with the Star tool, you use keyboard modifiers to get the number of points you want and to change the radius of the star's arms (the length of the arms). Here are the keyboard modifiers you'll use in this section when drawing the star:

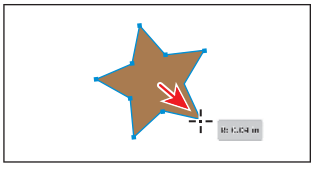
- **Arrow keys:** Pressing the Up Arrow key adds arms to the star as you draw it, and the Down Arrow key removes them.
- **Shift:** This straightens the star (constrains it).
- **Command (macOS) or Ctrl (Windows):** Pressing this key and dragging while creating a star allows you to change the radius of the arms of the star (make the arms longer or shorter).

Creating a star will take a few keyboard commands, so *don't release the mouse button* until you are told. This section may take a few tries!

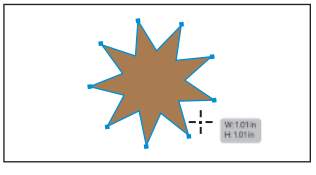
1 Press and hold the Polygon tool (⬡) in the toolbar, and select the Star tool (☆).

▶ **Tip:** You can also click in the Document window with the Star tool (☆) and edit the options in the Star dialog box instead of drawing it.

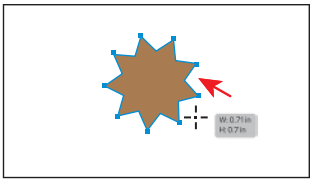
2 In an empty area of the artboard, press and drag to create a star shape. Drag until the measurement label shows a width of about 1 inch and then stop dragging. *Don't release the mouse button!*



3 Press the Up Arrow key a few times to increase the number of points on the star to eight. *Don't release the mouse button!*



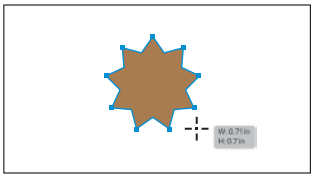
4 Press Command (macOS) or Ctrl (Windows), and start dragging again, toward the center of the star a short distance, as you see in the figure, and then stop dragging *without releasing the mouse button*. Release Command or Ctrl but *not the mouse button*.



Pressing Command/Ctrl when drawing a star keeps the inner radius constant, making the arms longer or shorter, depending on how you drag.

5 Press the Shift key. When the star straightens out, release the mouse button and then the key.

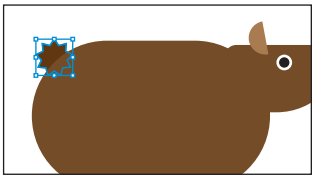
6 Select the Selection tool (▶), and drag the star onto the back end of the bear like you see in the following figure.



7 Click the Fill color box (■) in the Properties panel, make sure that the Swatches option (▦) is selected, and change the color to a darker brown.

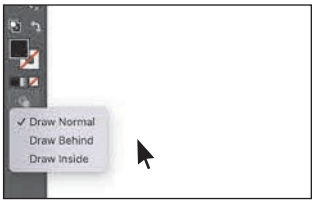
8 Click the Arrange button in the Properties panel and choose Send To Back to send the star behind the rest of the bear.

9 Drag it into position as you see in the figure.



Working with drawing modes

Illustrator has three different drawing modes that allow you to draw shapes in different ways. They are found near the bottom of the toolbar: Draw Normal, Draw Behind, and Draw Inside.



- **Draw Normal mode:** Every document starts by drawing in Normal mode, which stacks shapes on top of each other.
- **Draw Behind mode:** This allows you to draw behind all artwork on a layer if no artwork is selected. If artwork is selected, the new object is placed beneath the selected object.
- **Draw Inside mode:** This mode lets you draw objects or place images inside other objects, automatically creating a clipping mask of the selected object.

Using Draw Inside mode

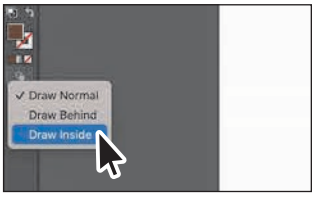
Now you'll add a nose to the bear (and a few other things) by drawing and pasting inside of shapes using the Draw Inside drawing mode. This can be useful if you want

Note: A clipping mask is a shape that hides parts of other artwork. You will learn more about clipping masks in Lesson 15, "Placing and Working with Images."

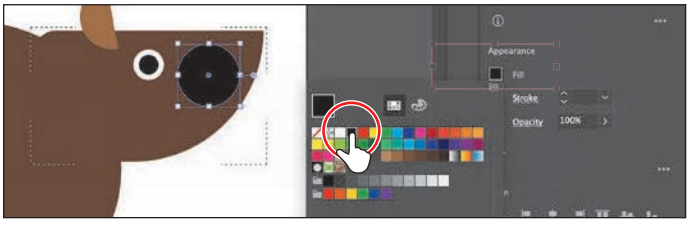
to hide (mask) part of the artwork. You can draw, place, or paste content into a shape with Draw Inside mode active. Let's add a nose to the bear, and a few other things.

Note: If the toolbar you see is displayed as a double column, you will see all three of the drawing modes as buttons toward the bottom of the toolbar.

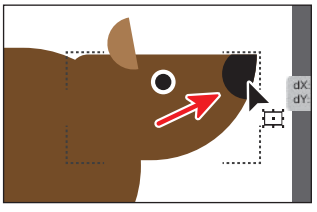
1. Click to select the bear's head.
2. Choose Draw Inside from the Drawing Modes menu (), near the bottom of the toolbar.



3. Press and hold on the Star tool () in the toolbar and select the Ellipse tool (). Draw a circle on the bear head that will become a nose. See the following figure.
4. Change the fill color to black.



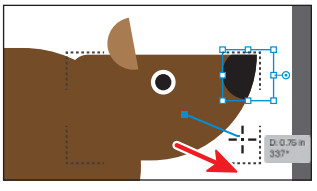
5. With the Selection tool selected, drag the circle into position where the nose might go.



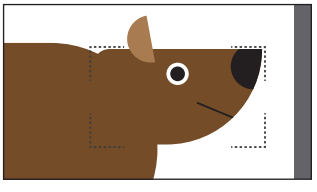
If you drag the circle so it extends beyond the edges of the bear's head, you will see that part is hidden because it is inside of the bear head.

Now you'll draw a line to give the bear a smile.

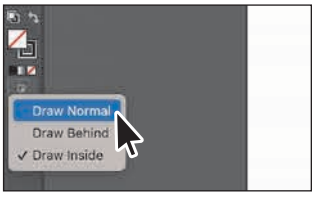
6. Press and hold on the Ellipse tool in the toolbar and select the Line Segment tool. Draw a straight line that will be the mouth of the bear.



7. Change the Stroke Weight to 2 pt and the Stroke Color to black.
8. Click the Drawing Modes button () toward the bottom of the toolbar. Choose Draw Normal.



When you're finished adding content inside a shape, you can choose Draw Normal so that any new content you create will be drawn normally (stacked rather than drawn inside).



Practicing with Draw Inside mode

Now you'll take the brown chamfered corner rectangle and paste it into the body of the bear to make the belly.

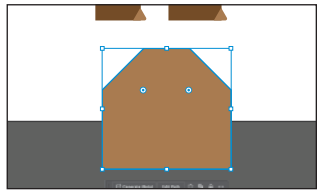
1 With the Selection tool (▶), click the rectangle with chamfered edges to select it.

2 Change the fill color to a lighter brown.

3 Choose Edit > Cut to cut it from the artboard.

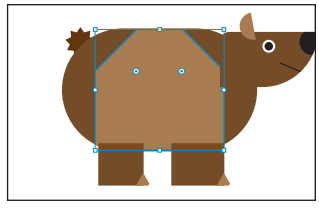
4 Select the body of the bear.

5 Choose Draw Inside from the Drawing Modes menu (), near the bottom of the toolbar.



6 Choose Edit > Paste.

The artwork is pasted within the bear body shape. You'll get it into place in the next section.



7 Click the Drawing Modes button () toward the bottom of the toolbar. Choose Draw Normal.

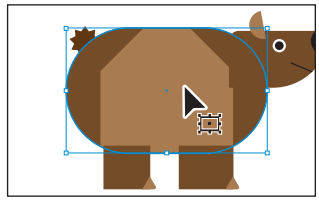
8 Choose Select > Deselect, and then choose File > Save.

Note: If the toolbar you see is displayed as a double column, you will see all three of the drawing modes as buttons toward the bottom of the toolbar.

Editing content drawn inside

Next you'll make adjustments to the bear's belly to see how you can edit an object inside another object after you create it.

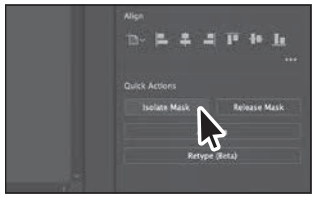
1 With the Selection tool (▶) selected, try clicking the lighter bear belly shape. You'll wind up selecting the darker brown bear body that it's inside of.

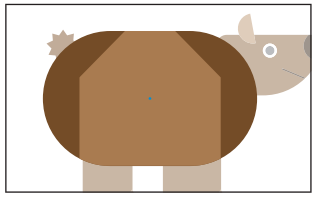


The bear body is now a mask (called a *clipping path)*. The bear body and the belly artwork you pasted inside make a *clip group*. Looking at the top of the Properties panel, you will see "Clip Group."

2 With the clip group selected, click the Isolate Mask button in the Properties panel to enter Isolation mode. Now you can select either the clipping path (the brown bear body shape) or the lighter brown artwork pasted within.

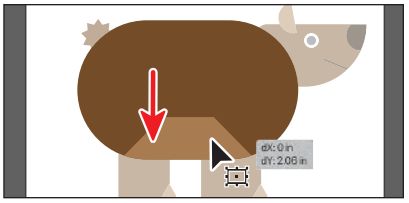
Tip: As with a group, you can also double-click the clip group to enter Isolation mode.





Note: If you accidentally drag the whole thing, choose Edit > Undo Move. Make sure you are in Isolation mode. You should see a bar along the top edge of the document window and the rest of the artwork dimmed. Refer to the previous step.

3 Drag the lighter brown belly shape to look more like you see in the figure. You can use the arrow keys to move it, make it smaller, and perform any other type of transformation as well.

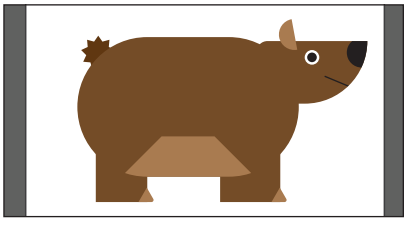


4 Press the Escape key to exit Isolation mode.

You'll probably see that the legs are in front of the bear body. Let's put them behind.

5 Drag across both the legs and the claws (triangles). Choose Object > Arrange > Send To Back.

I moved my legs up and farther apart.



6 Choose Select > Deselect.

Working with Draw Behind mode

To learn about drawing behind existing content, check out the video *Working with Draw Behind mode*, which you'll find in the Web Edition. For more information, see the "Web Edition" section of "Getting Started" at the beginning of the book.

Pasting artwork between documents

Next you'll paste the bear logo you've created so far into another Illustrator document that contains a flyer design.

1 To select all of the bear artwork, choose Select > All On Active Artboard.

2 Copy it by choosing Edit > Copy.

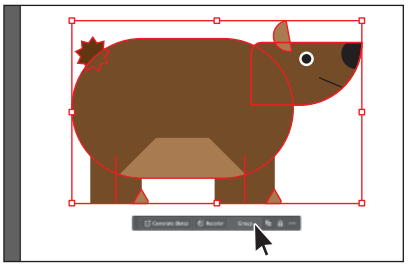
3 Choose File > Open. In the Open dialog box, select the L3_flyer.ai file in the Lessons > Lesson03 folder on your hard disk, and click Open.

4 Click in the blank artboard on the right to make it active and fit the artboard in the window by pressing Command+0 (macOS) or Ctrl+0 (Windows).

5 Choose Edit > Paste to paste the bear logo.

6 Click the Group button in the Task bar below (or above) the artwork to group it.

7 Choose Select > Deselect.



Using Image Trace to convert images into editable vector art

In this part of the lesson, you'll learn how to work with the Image Trace command, which converts a raster image, like a JPEG, into editable vector artwork. Tracing can help turn something you drew on paper—for instance, a logo, a pattern or texture, or hand-drawn type—into editable vector art. In this section, you'll trace hand-drawn text that is part of the logo type.

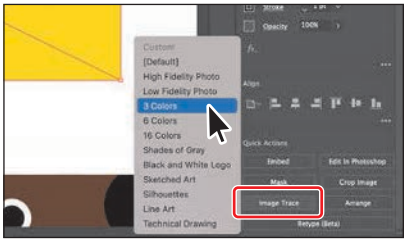
1 Choose File > Place. In the Place dialog box, select the hand-drawn-text.jpg file in the Lessons > Lesson03 folder on your hard disk, leave all options at their defaults, and click Place.

2 Click in the artboard to place the image.

3 If you need to, drag the image you just placed and the bear so they don't overlap.

4 Select the TREK image, and to center the image in the Document window, choose View > Zoom In a few times.

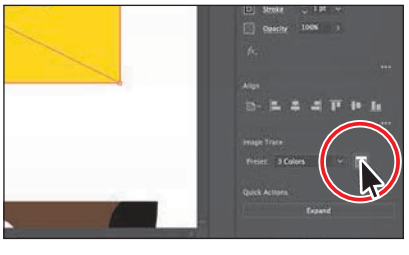
5 With the image selected, click the Image Trace button in the Properties panel to the right of the document, and choose 3 Colors from the menu.



This image is converted into vector and is now called an *image tracing object*. You can't edit the vector content yet, but you can still try other tracing settings.

An image tracing object comprises the source image and the tracing result, which is the vector artwork. By default, only the tracing result is visible. However, you can change the display of both the original image and the tracing result.

6 Click the Open The Image Trace Panel button (▤) in the Properties panel.



The buttons at the top of the Image Trace panel are for converting the image to grayscale, black and white, and more.

Below the buttons at the top, you'll see the Preset menu. This menu has the same options that you saw in the Properties panel.

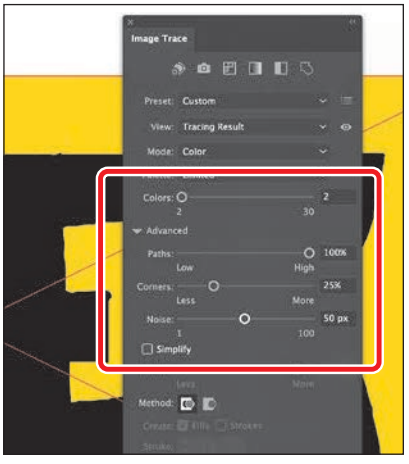
Note: You can also choose Object > Image Trace > Make, with raster content selected, or begin tracing from the Image Trace panel (Window > Image Trace).

Tip: The Image Trace panel can also be opened by choosing Window > Image Trace.

The Mode menu allows you to change the color mode of the resulting artwork (color, grayscale, or black and white). The Palette menu is also helpful in limiting the color palette or assigning colors from a color group.

Tip: You can deselect Preview at the bottom of the Image Trace panel when modifying values so Illustrator won't apply the trace settings to what you are tracing every time you make a change.

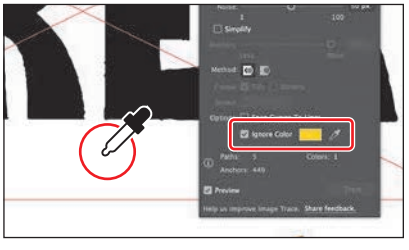
7 In the Image Trace panel, click the triangle to the left of the Advanced options to reveal them. Change the following options in the Image Trace panel, using these values as a starting point:



- Colors: **2**
- Paths: **100%** (For path fitting. A higher value means a tighter fit. We get to keep some of the rough edge on the letters.)
- Corners: **25%** (A higher value means more corners.)
- Noise: **50 px** (Reduce noise by ignoring areas of a set pixel size. A higher value means less noise.)

8 In the panel still, select Ignore Color. This lets you sample a color that will be excluded from the tracing.

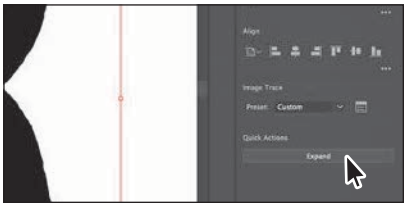
9 Click the Eyedropper icon ( ) next to the Ignore Color option and click to sample the yellow color in the text background.



There are a lot of options in the Image Trace panel for you to explore. You will see an option for Simplify. I'm pointing that out because you will learn about a Simplify command with more options in the next section.

10 Close the Image Trace panel.

11 With the text still selected, click the Expand button in the Properties panel.



The text is no longer an image tracing object but is composed of shapes and paths that are grouped together.

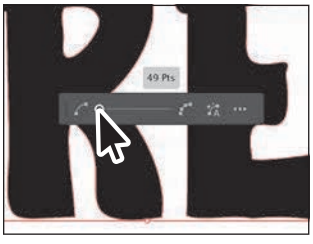
Cleaning up traced artwork

Since the text image has been converted to shapes using the Image Trace command, you can refine the shapes to make the text look better. You'll apply the Simplify command to make the edges a bit smoother. The Simplify command reduces the number of anchor points the path is made of without affecting the overall shape much. It can be used to remove imperfections in the traced path when using Image Trace.

1 With the text selected, choose Object > Path > Simplify.

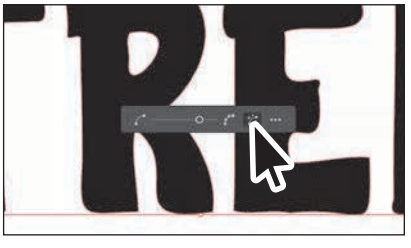
In the Simplify options that appear, the Reduce Anchor Point slider is set to an auto-simplified value by default.

2 Drag the slider all the way to the left to remove a lot of points and see what the text looks like.



Dragging the slider to the left reduces the anchor points and simplifies the path. The closer the slider is to the minimum value on the left, the fewer the anchor points there are, but the path will most likely look different. The closer the slider is to the maximum value, the more it will look like it did before you applied the Simplify command.

3 Click the Auto-Simplify button ( ) in the Simplify options bar to set the default amount again.



4 Click More Options ( ) in the Simplify options bar to open a dialog box with more options. In the dialog box that opens, make sure Preview is selected to see the changes happen.

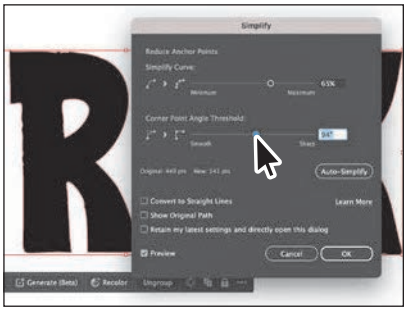
You can see the original number of anchor points (Original) of the text and the number of anchor points after applying the Simplify command (New).

5 In the Simplify dialog box, drag the Simplify Curve slider all the way to the right (Maximum).

This is a great starting point, and the artwork will look like it did before you applied the Simplify command.

6 Drag the same Simplify Curve slider to the left until you think it looks smoother on the edges. I set the Simplify Curve option to around 65%. See the following figure.

7 Do the same for the Corner Point Angle Threshold. Drag the slider until there are fewer ripples in the edge of the text. I set it to 94°.



For the Corner Point Angle Threshold, if the angle of a corner point is less than the angle threshold, the corner point is not changed. This option helps keep corners sharp, even if the value for Curve Precision is low.

8 Click OK.

9 Choose View > Fit All In Window.

10 Select the Eyedropper tool ( ) from the toolbar and click in the "OUTDOORS" text in the flyer to sample the color and apply it to the "TREK" text.

Adding the text and bear logo to the flyer

Now you'll move the bear logo artwork and the text into place.

1 With the Selection tool ( ) selected, drag the bear logo and the text into the flyer and arrange them however you like. Refer to the figure for how I did it.

If you want to resize either, do so with the Selection tool, pressing the Shift key to maintain proportions.

2 Choose File > Save.

Using Text to Vector Graphic (Beta)

This feature is going to be super useful for some of us! Using Text to Vector Graphic, you can generate all kinds of vector content based on a simple everyday language text prompt. Be aware that as of the writing of this book, this feature is still in beta and is the first iteration, *so it will change over time*. Keep that in mind as you go through this section. We will use Text to Vector Graphic to create a compass icon for our flyer.

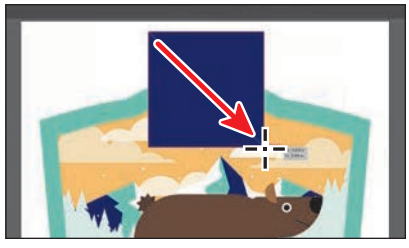
1 Choose View > Fit Artboard In Window to fit the flyer in the Document window.

To generate artwork with Text to Vector Graphic, you can either select a placeholder shape—like a rectangle—and replace it or generate artwork that is added to your design. You'll add a rectangle to the flyer so it is used as a placeholder and sized roughly as we need it to be.

2 Select the Rectangle tool ( ) from the shape tools in the toolbar.

3 Draw a rectangle at the top of the design. Use the figure for guidance.

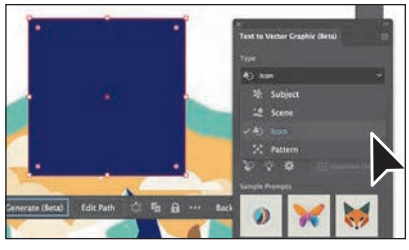
4 Choose Window > Text To Vector Graphic (Beta) to open the panel.



Tip: You can also click the Generate button in the taskbar beneath the artwork or generate content in the Properties panel.

5 Choose Icon from the Type menu.

Right now, there are four types of artwork that you can generate:

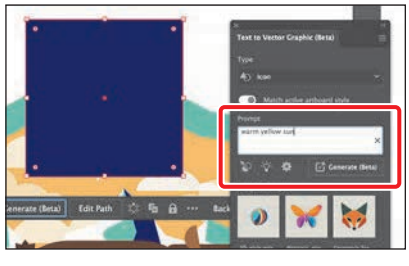


- **Subject:** This option creates artwork without a background. Choose it if you want to add something to an existing scene or design.
- **Scene:** An entire artwork scene is generated with this chosen.
- **Icon:** Creates simpler artwork (usually) that is more icon-like in appearance.
- **Pattern:** This option creates repeatable artwork patterns.

Note: You currently need an internet connection to generate artwork with Text to Vector Graphic (Beta).

6 Now type in a prompt to make the sun. I typed **warm yellow sun**.

Most of the time you want to be more descriptive with your prompts to get the desired artwork. But this prompt worked well for me.



7 Click Generate in the panel.

The first time you generate, a dialog box may appear asking you to agree with the user guidelines. Then, after a short time, the rectangle will be replaced with generated artwork. The generated artwork is vector—which means it is completely editable!

Note: The sun artwork that you see will definitely be something different when you generate your own artwork. Every time you generate, brand new artwork is created!

8 In the Text To Vector Graphic (Beta) panel, click one of the other variation thumbnails to replace the selected compass artwork in the flyer.

9 Click the Generate button again to generate more artwork based on the same text prompt.

10 If you want, try changing your prompt text and click Generate again!

There are other options to explore related to the Text to Vector Graphic feature, but I just wanted to give you a taste of what is to come. As time goes on, this feature will only get better!

11 Close the Text To Vector Graphic (Beta) panel.

12 Choose File > Save, and then choose File > Close for all open files.

See the latest Text to Vector Graphic feature

To see the latest version of the Text to Vector Graphic feature, check out the video *Exploring Text to Vector Graphic*, which you'll find in the Web Edition. For more information, see the "Web Edition" section of "Getting Started" at the beginning of the book.

Review questions

1. When creating a new document, what is a document category?
2. What are the basic tools for creating shapes?
3. What is a Live Shape?
4. Describe what Draw Inside mode does.
5. How can you convert a raster image into editable vector shapes?

Review answers

1. You can set up a document for different kinds of output, such as print, web, video, and more, by choosing a category. For example, if you are designing a web page mockup, you can select the Web category and select a document preset (size). The document will be set with the units in pixels, the color mode as RGB, and the raster effects to Screen (72 ppi)—all optimal settings for a web design document.
2. There are five shape tools in the Essentials workspace: Rectangle, Ellipse, Polygon, Star, and Line Segment (the Rounded Rectangle and Flare tools are not in the toolbar in the Essentials workspace).
3. After you draw a rectangle, ellipse, or polygon (or a rounded rectangle, which wasn't covered) using a shape tool, you can continue to modify its properties, such as width, height, rounded corners, corner types, and radii (individually or collectively). This is what is known as a Live Shape. The shape properties, such as corner radius, are editable later in the Transform panel, in the Properties panel, or directly on the art.
4. Draw Inside mode lets you draw objects or place images inside other objects, including live text, automatically creating a clipping mask of the selected object.
5. You can convert a raster image into editable vector shapes by selecting it and then clicking the Image Trace button in the Properties panel. To convert the tracing to paths, click Expand in the Properties panel, or choose Object > Image Trace > Expand. Use this method if you want to work with the components of the traced artwork as individual objects. The resulting paths are grouped.

INDEX

3D and Materials panel, 376–378
3D objects, 376–378

A

Adobe add-ons, 5
Adobe Authorized Training Partners, 5
Adobe Creative Cloud, 83
Adobe Firefly, 7, 233
Adobe Fonts, 250–252
Adobe Illustrator. See Illustrator
Adobe Stock, 404, 405
Adobe Substance 3D, 377, 378
alignment guides, 60, 63, 191
Anchor Point tool, 208
anchor points, 61
  adding, 22, 206
  aligning, 70–71
  constraining handles on, 202
  converting, 180, 207–208
  deleting, 206
  editing, 205–207
  key, 71
  paths made of, 169
  reducing number of, 107
  selecting, 61–62, 206
  shapes and, 13, 84
  size adjustment, 62
  smooth vs. corner, 173
  undoing, 195, 200, 203
Android export options, 442
Angle Threshold option, 108
appearance attributes, 360–368
  adding multiple, 362–367
  copying, 226
  deleting, 362, 381
  editing, 361–362
  graphic styles as, 379–383
  reordering, 367–368
  text with, 364–367
  viewing hidden, 362
Appearance panel, 360–368
  attributes edited in, 361–362
  effects edited in, 371–372
  formatting options in, 367
  multiple attributes added in, 362–367
  overview of options in, 360
  patterns applied in, 322–323, 325
  reordering attribute rows in, 367–368
Application bar, 32
Apply Filter button, 295
area type, 244–245, 246, 258–259, 260
arrowheads on paths, 182
Art Brush Options dialog box, 341–343
Art brushes, 339–343, 355
  applying existing, 339–340
  creating from existing artwork, 340–341
  editing options for, 341–343
Artboard Editing mode, 142–143, 144–145, 148, 165
Artboard Options dialog box, 149, 165
Artboard tool, 142, 144, 145, 146, 147, 165
artboards, 11, 31, 141–149
  adding to documents, 141–143
  aligning content to, 71–72

arranging and aligning, 147–148
copying between documents, 146–147
creating new, 143–144
deleting, 145
exporting, 439–440, 447
fitting in window, 31
moving, 144–145
navigating, 52–54, 55
options for, 149
renaming, 149
reordering, 149
resizing, 145, 165
artwork
aligning, 27
Art brush created from, 340–341
combining vector and raster, 411
creating with Pen tool, 200–204
editing colors in, 229–231
erasing parts of, 121–123
exporting, 440–443
file formats for exporting, 439
fills added to, 362–363, 364
generating from, 109–110
gradient applied to, 309–310
masking, 420–428
Outline mode for, 51, 288–289, 290
pasting between documents, 104
positioning, 151–152
previewing, 51–52
recoloring, 18–19, 229–231, 233–235
rotating, 155
scaling, 153–154, 156
shearing, 156–157
traced, 105–108
transforming, 17–18, 152–158
viewing, 45–52
warping, 161–164
See also objects
aspect ratio, 311–312
Asset Export panel, 440–443, 447
assets
CC library, 399–403
exporting, 440–443, 447
asynchronous editing, 443
attribute rows, 362, 367–368
auto sizing area type, 246
automatic masking, 423
Auto-Simplify button, 107

B

bitmap images, 30
bleed, document, 82
blend objects, 318–321
Blend Options dialog box, 319, 321
Blend tool, 320, 321
blends, 318–321
creating, 318–319
modifying, 319–320, 321
smooth color, 320–321
See also gradients
Blob Brush tool, 352–354, 355
bounding box, 60, 152–153
Break Link to Symbol button, 397
Bristle brushes, 350–352
changing options for, 350
grouping paths made with, 352
painting with, 351
brushes, 328–355
applying, 23, 332–333, 339–340, 347–348
Art, 339–343
Blob Brush tool, 352–354
Bristle, 350–352
Calligraphic, 331–338
creating new, 340–341, 345–347
editing, 333–334, 341–343, 348–349
libraries of, 335, 339, 344, 350
Paintbrush tool, 331, 334–337, 351
Pattern, 344–349
previewing changes to, 334
removing strokes made by, 338

brushes *(continued)*
resizing, 353, 354
types of, 331
Brushes panel, 331, 332, 333, 338, 339
bullet character, 246
bullet lists, 265–266
Bullets and Numbering dialog box, 266

C

Calligraphic brushes, 331–338
applying to artwork, 332–333
editing options for, 333–334
libraries of, 335
Paintbrush tool and, 334–337
removing strokes made by, 338
canvas, rotating, 50–51
Caps Lock key, 119, 120, 177, 187
center point widget, 84
Chamfer corners, 91
Character panel, 255–256
character styles, 261, 264, 273
characters
formatting applied to, 255–257
spacing between, 24
styles applied to, 261, 264, 273
circles, creating/editing, 92–93
Classroom in a Book training series, 1
Clear Filter button, 253
clip groups, 103, 421–422
clipping masks, 101, 103, 295–296, 297, 420
closed paths, 84, 172
Cloud Document dialog box, 11, 83, 438
cloud documents/files, 83, 420, 443–444, 445, 447
cloud icon, 429
CMYK color mode, 213, 214, 226
color groups, 227, 228, 233
Color Guide panel, 227–228
color harmonies, 228, 230, 239
Color Mixer panel, 215–216, 225
color modes, 213
Color panel, 215
Color Picker, 221–223
color spectrum, 215
color stops, 302
freeform gradient, 314–316
linear gradient, 305
Lines mode for applying, 317
radial gradient, 310
stroke gradient, 308–309
color swatches, 216–221
applying colors with, 16
creating copies of, 217
editing, 16–17, 218–221
global, 217, 218, 220, 239
libraries of, 223–224
non-global, 219–221
saving colors as, 216–217, 222–223, 239
Color Theme Picker, 231
color variations, 233–235
color wheel, 229–230, 232
colors, 214–235
applying, 16, 214–215, 228
blending, 320–321
Color Picker for, 221–223
converting between modes, 226
copying with Eyedropper, 226
creating custom, 215–216
editing, 16–17, 18–19, 229–231
gradient, 307–309, 310–311, 316
grouping, 227, 228, 233
guidance for choosing, 227–228
layer, 205–206, 279, 297
naming, 217
preset, 223–224
sampling, 106, 108, 231–232
shape, 87
stroke, 21, 97
swatches for, 216–221
text or type, 255

tints of, 224–225, 239
variations of, 233–235
columns, text, 259–260
combining shapes, 15, 126–130
compound paths, 123–124
Content Aware feature, 315, 414
context-sensitive menus, 43–44
contextual Task bar, 7, 35
Control panel, 42
convert-point icon, 196, 197, 199
Copy Links option, 436
corner points, 173, 188
converting between smooth and, 207–208, 209
creating with Curvature tool, 173–174
smooth points distinguished from, 173, 174, 209
corner radius widgets, 13
corners
changing type of, 90, 91
creating, 173–174
Pattern brush, 345, 347
rounding, 13–14, 88–90, 99
Create New Layer button, 278, 279
Create New Style button, 261, 263
Creative Cloud desktop app, 250, 251, 444, 445, 446
Creative Cloud libraries, 399–403
adding assets to, 399–401
updating assets in, 402–403
using assets in, 401
See also libraries
cropping images, 414–416
Curvature tool, 22–23, 169–174
creating corners with, 173–174
drawing paths with, 169–171
editing paths with, 172–173
curves
combining straight lines and, 198–199
Pen tool for drawing, 192–195, 209
cutting shapes
Knife tool for, 118–120
Scissors tool for, 115–116

D

dashed lines, 175–176
default preferences, 4
Delete Selection icon, 381
deselecting paths, 194, 204
Desktop Illustrator home screen, 445
Direct Selection tool
rounding corners with, 13–14, 15, 99
selecting and editing with, 61–62, 63, 189, 194, 393
direction lines, 192, 193–194, 195, 196–197, 208
direction points, 192, 194
Discover panel, 30
distorting artwork, 161
distributing objects, 69–70
docking panels, 40
Document Setup button, 82
Document window, 32
documents
adding artboards to, 141–143
arranging multiple, 54
categories for, 80, 111
cloud, 83, 443–444
copying artboards between, 146–147
creating new, 10, 80–81
inviting others to edit, 443–445
panning in, 49
pasting artwork between, 104, 291–293
presets for, 10, 81, 213
saving, 11, 81–82, 83
sharing links to, 444, 445–446
Draw Behind mode, 101, 104
Draw Inside mode, 101–103, 111
Draw Normal mode, 101, 102, 103
drawing

drawing *(continued)*
Blob Brush tool for, 352–353
Curvature tool for, 22–23, 169–171
curves, 192–195, 209
lines, 96, 178–179, 187–188, 190–191
modes for, 101–104
Paintbrush tool for, 334–336
paths, 169–171, 177–178, 189–190
Pen tool for, 187–192, 193–195
Pencil tool for, 177–179
shapes, 12
Drawing Modes button, 102, 103
Drop Shadow effect, 370–371
dynamic symbols, 393–394, 407

E

Edit Artboards button, 142
Edit Clipping Path button, 424
Edit Contents button, 269, 424
Edit Envelope button, 270
editing
anchor points, 205–207
appearance attributes, 361–362
artboards, 142–143, 144–145
asynchronous, 443
blends, 319–320, 321
brushes, 333–334, 341–343, 348–349
color swatches, 16–17, 218–221
colors in artwork, 16–17, 18–19, 229–231
effects, 371–372
ellipses, 92–93
envelope warp, 269–270
Eraser tool for, 121–123, 354
global, 405–406
gradients, 302–303, 307–309
groups in Isolation mode, 73
inside content, 103–104
invitations to, 443–445
lines, 96–97
lists, 265–266
mirror repeats, 160–161
nested groups, 74–75
opacity masks, 427–428
paragraph styles, 263–264
paths, 172–173, 189–190, 204–207, 336–337
patterns, 326
polygons, 99–100
rectangles, 85–87
shapes, 13, 115–126
strokes, 21
symbols, 392–393, 396, 407
text, 373–374
educator resources, 5
Effect menu, 369, 375
effects, 26, 369–378
3D effects, 376–378
applying, 369–371, 375–378, 385
Drop Shadow effect, 370–371
editing in Appearance panel, 371–372
Pathfinder effects, 128–130
Photoshop effects, 369, 375–376
scaling, 154, 165, 383–384
temporarily disabling, 373–374
text styling with, 372–373
vector vs. raster, 369
Warp effect, 372–373
Zig Zag effect, 26
Ellipse tool, 26, 92
ellipses, 92–96
email invitations, 444, 445
embedded images, 412, 415, 416, 429–430, 431
endpoints, 84
envelope warp, 269–270
Eraser tool
Blob Brush tool and, 354
erasing parts of artwork with, 121–123, 155
shortcut for resizing, 354
straight line erasures using, 122–123, 137

Escape key, 22, 69, 175, 219, 416
Essentials workspace, 31, 42, 82
Export for Screens dialog box, 439–440, 443, 447
Export Selection option, 440
exporting, 439–443
  3D objects, 378
  artboards, 439–440, 447
  assets, 440–443, 447
  file formats for, 7, 439, 447
eye icon, 205, 287, 288, 290, 291, 363
Eyedropper tool, 106, 108, 226, 231–232, 262, 309

F

Fidelity slider, 177, 337
files
  formats for exporting, 439
  importing plain-text, 247
  packaging, 436–437
Fill color box, 16
fills
  adding multiple, 362–363, 364–365
  color of, 16, 214
  gradient, 301, 304–306
  shape, 87
  text, 364–365
Filter Fonts icon, 251
Filter Gallery dialog box, 375–376
filtering layers, 294
Fit All In Window view, 108
Fit Artboard In Window view, 45, 145, 146
flipping content, 18, 396, 414, 424
folder icon, 436, 440
fonts
  activating, 114, 140, 212, 250–252
  applying to text, 252–253
  fixing missing, 253, 276
  outline-protected, 270
  Retype feature, 271–272
  sizing/resizing, 254
  used in this book, 2
  See also text
Fonts icon, 251, 358
formatting
  sampling with Eyedropper, 262
  type or text, 250–259
Free Transform tool, 158
freeform gradients, 301, 314–316
freeform paths, 169, 177

G

Generate button, 109, 110
Generative Recolor feature, 7, 233–235
global editing, 405–406
global swatches, 217, 218, 220, 239
glyphs, 258, 259
Go To Link button, 429, 435
GPU performance, 48
gradient annotator, 305, 308, 310
Gradient panel, 20–21, 302, 303, 304–305, 307, 312
gradient slider, 308, 309, 327
Gradient tool, 304, 305–306, 310, 311, 313, 315
gradients, 20, 301–317, 327
  adjusting, 304–306, 311–312
  applying, 20–21, 312–313
  artwork utilizing, 309–310
  aspect ratio of, 311–312
  color stops in, 302, 305, 308–309, 310, 314–317
  editing, 302–303, 307–309
  fill, 301, 304–306
  freeform, 301
  linear, 301, 304–307
  multiple object, 312–313
  opacity mask, 427–428
  radial, 301, 309–312
  resizing, 311, 312

gradients *(continued)*
rotating, 309
saving, 303–304
stroke, 306–309
transparency added to, 313–314
See also blends
Grain effect, 375–376
graphic styles, 379–383, 385
grid repeats, 158, 161
Group button, 72
Group Selection tool, 74, 77
groups
clip, 103, 421–422
color, 227, 228, 233
isolated, 73
Live Paint, 235–238
nested, 74–75
object, 17, 72–75
panel, 40
path, 352
guides
alignment, 60, 63, 191
creating, 150–151
Smart, 13, 60, 63, 98

H

Hand tool, 49, 141, 193, 330
handles
anchor point, 202
bounding box, 60
color wheel, 229–230
width point, 132, 133
harmony rules, 227–228
Help resources, 5, 234
horizontal alignment, 27, 71, 72
horizontal distribution, 69–70

I

Ignore Color option, 106
Illustrator
installing, 2
native format, 82
new features, 6–7
preferences file, 4
resources, 5
UI scaling, 41
Illustrator Options dialog box, 11, 82
Image Trace panel, 105–106
images
combining with artwork, 411
creating Art brushes from, 340
cropping, 414–416
embedded, 412, 415, 416, 429
importing, 416–418
linked, 412, 415, 428–430, 435–436
masking, 420–428
Photoshop, 416–418, 420
placing, 411–412, 416–420
replacing, 430, 431
resizing, 413
resolution of, 413, 414, 415
tracing, 105–106
transforming, 413–414
importing
Photoshop images, 416–418
plain-text files, 247
installing Illustrator, 2
instances, symbol, 389, 390, 391–392, 396–397
Intertwine feature, 134–135
invitations to edit, 443–445, 447
iOS export options, 442
Isolate Mask button, 424
Isolation mode, 73, 103, 104, 270, 423, 424

J

Join tool, 117, 180–181, 183
joining paths, 117, 180–181

K

key anchor points, 71
key objects, 68–69
keyboard shortcuts
  displayed in tool tips, 33
  modifying on macOS, 48
Knife tool, 36, 118–120, 137

L

layer comps, 417
Layer Options dialog box, 279
layers, 274–297
  arranging content on, 289
  clipping masks for, 295–296, 297
  colors for, 205–206, 279, 297
  creating new, 278–279
  dragging content between, 283–286
  graphic styles on, 381–382, 385
  locking/unlocking, 287
  merging, 293
  naming/renaming, 278
  Outline mode for, 290–291
  pasting, 291–293, 297
  Photoshop files with, 418
  reordering content and, 288–290, 297
  scenarios for using, 277
  searching and filtering, 7, 294
  sublayers and, 280
Layers panel
  eye icon, 205, 287, 288, 290, 291
  locating content in, 281–282, 286
  opening and working in, 278–279
  search feature, 7, 294
  target icon, 381, 382
leading, text, 256
lesson files, 2, 3
libraries
  brush, 335, 339, 344, 350
  graphic style, 379
  swatch, 223–224
  symbol, 389–390
  See also Creative Cloud libraries
Libraries panel, 399–401, 402
Line Segment tool, 96
linear gradients, 301, 304–307
lines
  dashed, 175–176
  direction, 192, 193–194, 195, 196–197, 208
  editing, 96–97
  Line Segment tool for drawing, 96
  Pen tool for drawing, 187–188, 190–191
  Pencil tool for drawing, 178–179
  rotating, 97, 175
  See also straight lines
Lines mode, 317
Link Harmony Colors icon, 230
link icon, 19, 428, 430, 436
linked images, 412, 428–430
  cropping of, 415
  embedded images vs., 412, 429, 431
  finding information about, 428–429
  fixing missing, 435–436
links
  image, 412, 428–430, 435–436
  library asset, 402
  opacity mask, 428
  sharing document, 444, 445–446
  symbol, 389, 396–397
  text, 248
Links panel, 402, 413, 428–430, 435
list creation, 265–266
Live Corners widget, 88, 89, 99
Live Paint Bucket tool, 236–237
Live Paint groups, 235–238, 239
Live Shapes, 85, 98, 111
loaded graphics cursor, 412, 417, 419–420
Locate Object button, 281, 286, 294, 418, 422

M

macOS commands, 2
magenta alignment guides, 60, 63, 191
magnification level, 45
Make Mask button, 426
markers, editing, 19
marquee selections, 62–63
masks, 420–428, 431
  automatic, 423
  clipping, 101, 103, 295–296, 297, 420
  editing images and, 422–423, 424–425
  opacity, 425–428
  shape, 421
  text, 425
measurement labels, 60, 84, 191
measurement units, 81, 142, 150, 154
mirror repeats, 158–161
Missing Fonts dialog box, 114, 140, 212, 276, 358, 399
Mockup feature, 6, 403–405
Mop brush, 350, 351, 352
Move Artwork with Artboard option, 143, 146
Move dialog box, 157

N

native format, 82
Navigator panel, 49
nested groups, 74–75
New Artboard button, 143
New Brush dialog box, 340, 346
New Document dialog box, 10, 80–81, 213
New Swatch dialog box, 217, 222, 224, 303
New Symbol button, 394
non-global swatches, 219–221

O

objects
  3D effects on, 376–378
  aligning, 68–72
  arranging, 76
  blended, 318–321
  coloring, 214
  distributing, 69–70
  exporting 3D, 379
  gradients applied to, 312–313
  grouping, 17, 72–75
  image tracing, 105
  Intertwine, 134–135
  key, 68–69
  locating, 281, 286
  locking, 64–65
  painting, 236–237
  repeat, 158–161
  rotating, 155
  scaling, 153–154, 156
  selecting, 59–67
  shearing, 156–157
  similar, 65–66
  stacking order of, 76, 288
  text or type, 244, 246
  unlocking, 65, 148
  wrapping text around, 266–267
  See also artwork
online content, 2–3
opacity
  appearance attribute, 365
  gradient, 314
  pattern, 323
opacity masks, 425–428
open paths, 84, 267
Options of Selected Object button, 344
Outline mode
  artwork viewed in, 51, 288–289, 290
  layers or objects displayed in, 290–291
  selecting artwork in, 67
outlines
  stroke, 125–126, 137
  text, 270–271, 273

overflow text, 248, 273
overset text icon, 263

P

Package dialog box, 436
packaging files, 436–437, 447
Paintbrush tool, 331, 334–337, 351, 355
painting objects. See Live Paint groups
panels, 32, 38–41
  groups of, 40
  menu options in, 43
  moving and docking, 40–41
  working with, 38–39
panning documents, 49
Pantone colors, 224
Paragraph panel, 257
paragraph styles, 261–264, 273
paragraphs
  changing formatting of, 257–258
  styles applied to, 261–264, 273
Paste in Place option, 18
Paste Remembers Layers option, 292, 297
Pathfinder effects, 128–130, 137
Pathfinder panel, 128
paths
  arrowheads on, 182
  changing direction of, 196–197
  closed, 84, 172
  compound, 123–124
  curved, 192–195
  deselecting, 194, 204
  dragging across, 180–181
  drawing, 169–171, 177–178, 189–190
  editing, 172–173, 189–190, 204–207, 336–337
  freeform, 169, 177
  grouping, 352
  joining, 117, 180–181
  open, 84, 267
  reshaping, 131, 206–207
  segments of, 61
  selecting, 189
  simplifying, 107–108
  text on, 267–268
Pattern brushes, 344–349
  applying, 344–345, 347–348
  corners for, 345, 347
  creating, 345–347
  editing, 348–349
Pattern Editing mode, 323, 326
Pattern Options panel, 323–325
patterns, 322–326
  applying, 322–323
  creating your own, 323–325
  editing, 326
  saving a copy of, 325
  swatches for, 322, 325, 346, 348
  tiling, 324–325, 346–347, 349
PDF file creation, 438
Pen tool, 186–204
  artwork created with, 200–204
  curves drawn with, 192–195
  practicing with, 190, 192, 194, 195, 197, 199–204
  reasons for learning about, 186
  straight lines drawn with, 187–188, 190–191
Pencil tool, 177–179
  paths drawn with, 177–178, 183
  setting options for, 177, 183
  straight lines drawn with, 178–179
Photoshop effects, 369, 375–376, 385
Photoshop images
  cloud files as, 420
  placing in documents, 416–418, 420
Photoshop Import Options dialog box, 416–417, 418
pie widget, 94, 95
pins
  adding, 161–163
  rotating, 163–164

Pixel Preview mode, 51–52
Place dialog box, 105, 411, 416, 417, 419
placeholder text, 24, 243, 244, 268
placing images, 411–412, 416–418, 419–420
PNG files, 442–443
point type, 243–244, 246
points
  corner, 173–174
  direction, 192, 194
  smooth, 173
  width, 132–133
  See also anchor points
Points mode, 315–316
Polygon tool, 98
polygons, 98–100
positioning artwork, 151–152
PPI (pixels per inch), 414, 415
preferences file, 4
presets
  Adobe PDF, 438
  color, 223–224
  document, 10, 81, 213
  text warp, 269
Preview mode, 51
previews
  brush edit, 334
  Pen tool, 188, 192
  pixel, 51–52
profiles, stroke, 133
prominent colors, 232
Properties panel
  changing corner type in, 90–91
  overview on working with, 34–35
  positioning artwork using, 151–152
  scaling artwork using, 153–154, 383–384
Puppet Warp tool, 161–164, 165

R

radial gradients, 301, 309–312
radial repeats, 158, 161
raster effects, 369, 375–376
raster images, 30
  combining with vector artwork, 411
  creating Art brushes from, 340
  tracing and converting, 105–106, 111
  See also images
Ray Tracing option, 378
Rearrange All Artboards dialog box, 148
Recolor Artwork dialog box, 7, 18–19, 229–235, 239
Rectangle tool, 12, 84–85, 109, 426
rectangles, 84–91, 109
Relink button, 431, 435
Remove Brush Stroke button, 338
repeats, 158–161
Reset Essentials command, 31, 39, 42, 82
Reset Preferences button, 4
Reset Rotate View command, 51
Reshape tool, 131
resizing. See sizing/resizing
resolution
  image, 413, 414, 415
  raster effect, 376
resources, Illustrator, 5
Retype feature, 7, 271–272, 273
Reverse Gradient button, 310
review, sharing for, 445–446
RGB color mode, 213
Rotate tool, 155, 175
Rotate View tool, 50–51, 55
rounding corners, 88–90
  changing corner type and, 90–91
  Direct Selection tool for, 13–14, 15, 99
  Live Corners widget for, 88, 89
rubber bands, 188, 202
ruler origin, 150, 152, 165
rulers, working with, 149–152

S

sampling
  appearance attributes, 226
  colors, 106, 108, 231–232
  text formatting, 262
Save a Copy option, 325
Save To Creative Cloud dialog box, 444
saving
  colors as swatches, 216–217, 222–223
  documents, 11, 81–82, 83
  gradients, 303–304
  patterns, 325
  PDF files, 438
  selections, 66, 77
  workspaces, 42
Scale Strokes & Effects option, 136, 154, 165, 383
scaling
  effects, 154, 165, 383–384
  exported assets, 442
  objects, 153–154, 156
  patterns, 326
  strokes, 154, 156, 165, 383–384
  user interface, 41
  See also sizing/resizing
Scatter brushes, 331
Scissors tool, 115–116, 137
scrubbing across paths, 180–181
searching/filtering layers, 7, 294
segments, path, 61, 173, 188, 204
selected-art indicator, 282, 285
Selection Indicator, 34
Selection tool, 59–60, 62–63, 270, 398
selections
  bounding box of, 60
  exporting, 440
  marquee, 62–63
  Outline mode, 67
  rotating view to, 50
  saving, 66, 77
  similar object, 65–66
  tools for making, 59–63
Shape Builder tool, 15, 126–128, 137, 176
shape modes, 129–130, 137
shapes, 84–101
  color of, 87
  combining, 15, 126–130
  copying, 14
  creating, 12
  deleting, 127
  editing, 13, 115–126
  ellipses, 92–96
  lines and, 96–97
  Live, 85, 98, 111
  masking with, 421
  polygons, 98–100
  rectangles, 84–91
  rotating, 86
  stars, 100–101
  stroke alignment for, 94
  widgets for, 84, 88, 89, 99
Share button, 445
Share for Review feature, 445–446
shared library assets, 399
sharing
  files for review, 445–446
  links to documents, 444, 445–446
shearing objects, 156–157
shortcuts. *See* keyboard shortcuts
Show Activated Fonts button, 252
Show Rulers button, 150
Simplify command, 107–108, 125
sizing/resizing
  anchor points, 62
  artboards, 145, 165
  brushes, 353, 354
  fonts, 254
  gradients, 311, 312
  images, 413

sizing/resizing *(continued)*
lines, 97
See also scaling
Smart Guides, 60, 63, 98
components of, 84, 191
turning on/off, 13, 98, 175, 187, 191, 389
smooth color blends, 320–321
smooth points, 173, 192
converting between corner and, 207–208, 209
corner points distinguished from, 173, 174, 209
spine of blends, 319
splitting direction lines, 196, 203
spot colors, 226
spread of gradients, 311
stacking order, 76, 277, 288
stars, creating, 100–101
Status bar, 32, 54
straight lines
combining curves and, 198–199
cutting in, 119
erasing in, 122–123, 137
Pen tool for drawing, 187–188, 190–191, 209
Pencil tool for drawing, 178–179
See also lines
Stroke panel, 94, 175, 182
strokes
aligning, 21, 94
color of, 21, 97, 214
dashed line, 175–176
editing, 21
gradients on, 306–309
outlining, 125–126, 137
scaling, 154, 156, 165, 383–384
text, 366–367
variable-width, 132–133
styles
character, 261, 264
graphic, 379–383
paragraph, 261–262, 263–264
subfolders, 440
sublayers, 280
SVG files, 442–443
Swatch Conflict dialog box, 146–147, 292
Swatch Options dialog box, 17, 218, 220
swatches
color, 16–17, 216–221
gradient, 303–304
pattern, 322, 325, 346, 348
Swatches panel, 16, 216, 217, 219, 222, 223, 303–304
Symbol Options dialog box, 393, 394–395
Symbol Sprayer tool, 397
symbols, 389–398
adding default, 389–390
benefits of using, 407
breaking links to, 396–397
creating, 394–395
dynamic, 393–394, 407
editing, 392–393, 396, 407
instances of, 389, 390, 391–392, 396–397
libraries of, 389–390
reordering, 395
replacing, 397–398
selecting instances of, 396
spraying onto artboard, 397
transforming instances of, 391–392
viewing names of, 390
Symbols panel, 389, 390, 394

T

target icon, 381, 382
Task bar, 35
text, 24–25, 240–273
adding, 24, 26–27, 243–245
aligning, 258–259
area type as, 244–245
auto sizing, 246

character formatting, 255–257
color applied to, 255
converting between types of, 246
creating columns of, 259–260
disabling effects to edit, 373–374
fills added to, 364–365
fonts used for, 250–254
generating artwork from, 109–110
importing from files, 247
library assets as, 401
list creation, 265–266
masking content with, 425
outlines created from, 270–271
paragraph formatting, 257–258
path-based, 267–268
placeholder, 24, 243, 244, 268
point type as, 243–244
Retype feature, 271–272
sampling attributes of, 262
strokes added to, 366–367
styles applied to, 261–264
threading, 248–249
type objects and, 244, 246, 260
warping, 25, 269–270, 372–373
wrapping, 266–267
See also fonts
Text Import Options dialog box, 247
Text to Vector Graphic feature, 6, 109–110
Text Wrap Options dialog box, 267
threading text, 248–249, 273
tiling patterns, 324–325, 346–347, 349
tints, color, 224–225, 239
Tool Options dialog box
Eraser tool, 121, 122
Paintbrush tool, 337
Pencil tool, 177, 183
tool tips, 33
toolbar, 32, 33
appearance of, 102, 103, 214
moving and customizing, 37
tools
finding additional, 36–37
selecting in toolbar, 33
traced artwork, 105–108
tracking, text, 24
Transform Each dialog box, 156
transforming artwork, 17–18, 152–158
bounding box for, 152–153
Free Transform tool for, 158
menu commands for, 157–158
placing images and, 413–414
rotating objects, 155
scaling objects, 153–154, 156
shearing objects, 156–157
transparency
gradient, 313–314
pattern, 323
Transparency panel, 323, 365, 425, 427–428
tutorials, Illustrator, 5
type objects, 244, 246, 260
Type tool, 24, 243, 244, 250, 257, 269, 273

U

Undo Cut command, 189
Undo Move command, 104
Undo Pen command, 188, 200, 203
unembedding images, 429–430
Ungroup button, 72
Unite button, 128, 130
Update Content button, 446
Update Link button, 402
updating
graphic styles, 380–381
library assets, 402–403
symbol instances, 392–393
user interface, 41, 44

V

variable-width strokes, 132–133
vector effects, 369
vector graphics, 30, 411
vertical alignment, 68, 72, 147–148, 258–259
videos
  on area type auto sizing, 246
  on arranging multiple documents, 54
  on blending with Blend tool, 321
  on character styles, 264
  on color groups, 227
  on customizing the toolbar, 37
  on document settings, 82
  on Draw Behind mode, 104
  on editing the ruler origin, 152
  on fixing missing fonts, 253
  on Free Transform tool, 158
  on glyph snapping, 259
  on Glyphs panel, 258
  on grid and radial repeats, 161
  on masking with text, 425
  on moving the toolbar, 37
  on panning with Navigator panel, 49
  on placing Creative Cloud files, 420
  on reordering artboards, 149
  on replacing images, 430
  on rounding corners, 90
  on scaling the user interface, 41
  on Symbol Sprayer tool, 397
  on Text to Vector Graphic feature, 110
viewing artwork, 45–52
  modes for, 51–52
  panning for, 49
  rotating the canvas for, 50–51
  view commands for, 45–46
  Zoom tool for, 46–48

W

Warp effect, 372–373
Warp Options dialog box, 25, 269, 373
warping
  artwork, 161–164
  text, 25, 269–270, 372–373
Web Edition of book, 3
WebP export option, 7
weight, stroke, 92, 93, 96
widgets
  center point, 84
  corner radius, 13
  Live Corners, 88, 89, 99
  pie, 94, 95
Width Point Edit dialog box, 133
width points, 132–133
Width tool, 132–133
Windows commands, 2
workspaces, 32–37
  overview of, 32
  panel features in, 38–40, 43
  Properties panel in, 34–35
  resetting, 11, 31, 39, 42
  saving custom, 42
  switching, 41–42
  Task bar in, 35
  toolbar in, 33, 36–37
wrapping text, 266–267

Z

Zig Zag effect, 26
Zoom tool, 46–48
zooming in/out, 45, 46–48