



Adobe Illustrator

2022
release



Classroom in a Book[®]

The official training workbook from Adobe

Brian Wood



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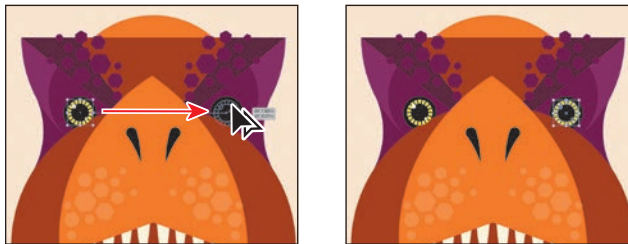
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- 5 Click the yellow circle around the eye, and to resize it, press the Shift key, and drag a corner. Release the mouse button and then the key. Drag it into place.



- 6 To make a copy, Option-drag (macOS) or Alt-drag (Windows) the eye to the other side. Release the mouse button and then the key.



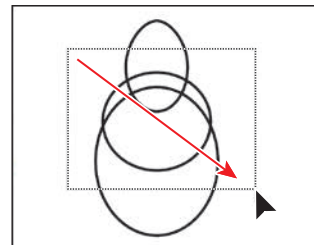
- 7 Choose Select > Deselect, and then choose File > Save.

Combining objects using Pathfinder effects

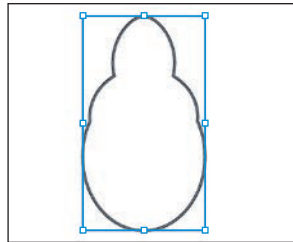
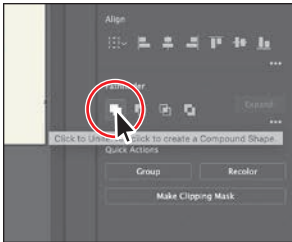
Pathfinder effects, found in the Properties panel or the Pathfinder panel (Window > Pathfinder), are another way to combine shapes in a variety of ways. By default, when a Pathfinder effect such as Unite is applied, the original objects selected are *permanently* transformed.

- 1 Choose 3 Dino 3 from the Artboard Navigation menu in the lower-left corner of the Document window.
- 2 With the Selection tool (▸) selected, drag across the three ellipses with the black strokes to select them all.

You need to create a combined shape for the dinosaur head to the right. You will use the Properties panel and those shapes to create the final artwork.



- 3 With the shapes selected, in the Pathfinder section of the Properties panel on the right, click the Unite button (☐) to *permanently* combine the three shapes into a path.



● **Note:** The Unite button in the Properties panel produces a similar result as the Shape Builder tool by combining multiple shapes into one.

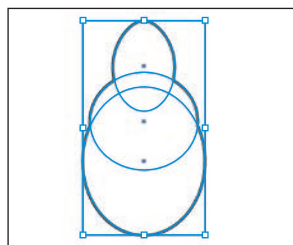
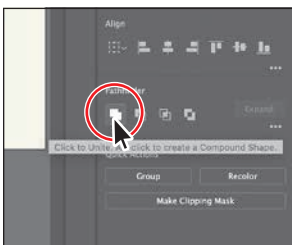
- 4 Choose Edit > Undo Add to undo the Unite command and bring all of the shapes back. Leave them selected.

► **Tip:** Clicking More Options (⋮) in the Pathfinder section of the Properties panel will reveal the Pathfinder panel, which has more options.

Understanding shape modes

In the previous section, the pathfinders made a permanent change to the shapes. With shapes selected, Option-clicking (macOS) or Alt-clicking (Windows) any of the default set of pathfinders showing in the Properties panel creates a compound shape rather than a standard shape (path). The original underlying objects of compound shapes are preserved. As a result, you can still select each original object within a compound shape. Using a shape mode to create a compound shape can be useful if you think that you may want to retrieve the original shapes at a later time.

- 1 With the shapes still selected, press the Option (macOS) or Alt (Windows) key, and click the Unite button (☐) in the Properties panel.



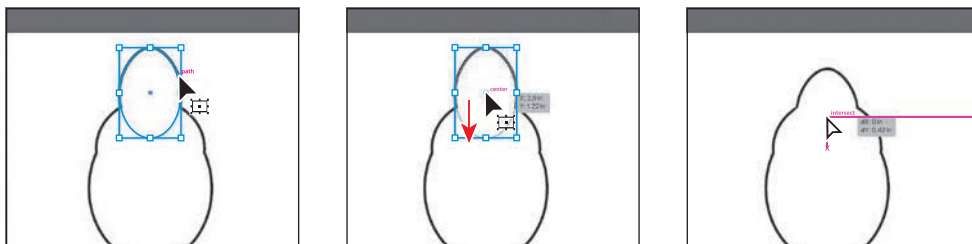
This creates a compound shape that traces the outline of what's left after the shapes are combined. You'll still be able to edit the original shapes separately.

- 2 Choose Select > Deselect to see the final shape.
- 3 With the Selection tool, double-click the black stroke of the shape to enter Isolation mode.

You double-clicked the stroke of the shape and not anywhere in the shapes because they do not have a fill.

► **Tip:** To edit the original shapes in a compound shape like this one, you can also select them individually with the Direct Selection tool (↩).

- 4 Click the edge of the ellipse at the top or drag across the path to select it.
- 5 Drag the selected ellipse straight down from the blue dot in the center, if you see it, or from the path stroke. As you drag, press the Shift key. When in position, release the mouse button and then the Shift key.



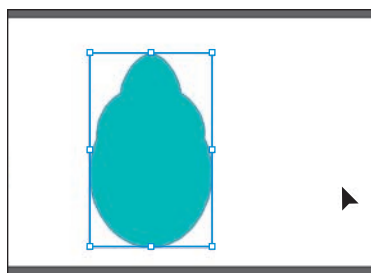
- 6 Press the Escape key to exit Isolation mode.

You will now expand the artwork appearance. Expanding the appearance of a compound shape maintains the shape of the compound object, but you can no longer select or edit the original objects. You will typically expand an object when you want to modify the appearance attributes and other properties of specific elements within it.

- 7 Click away from the shape to deselect it and then click to select it again. That way the entire object is selected, and not just the one shape.
- 8 Choose Object > Expand Appearance.

The Pathfinder effect is now *permanent* and the shapes are a single shape.

- 9 Change the Fill color in the Properties panel to an aqua.
- 10 Change the stroke weight to 0.

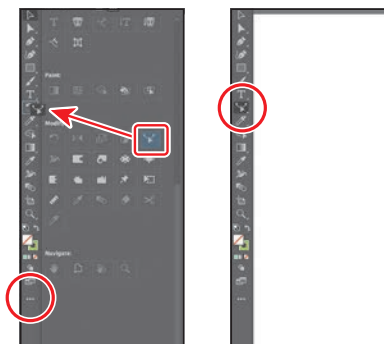


Reshaping a path

In Lesson 3 you learned about creating shapes and paths (lines). You can use the Reshape tool to stretch parts of a path without distorting its overall shape. In this section, you'll change the shape of a line, giving it a bit of curve, so you can finish the nose of one of the dinosaurs.

- 1 Make sure the Smart Guides are on (View > Smart Guides).
- 2 With the Selection tool (▢) selected, click the light green path in the middle of the artboard.
- 3 To make it easier to see, press Command and + (macOS) or Ctrl and + (Windows) a few times to zoom in.

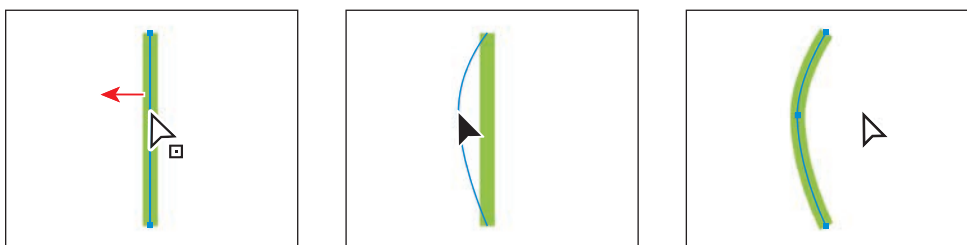
- 4 Click Edit Toolbar (⋮) at the bottom of the toolbar. Scroll in the menu that appears, and drag the Reshape tool (↶) onto the Rotate tool (⤵) in the toolbar on the left to add it to the list of tools.



Note: You may want to press the Escape key to hide the extra tools menu.

- 5 With the Reshape tool (↶) selected, move the pointer over the middle of the path. When the pointer changes (↷), drag to the left to add an anchor point and reshape the path.

Note: You can use the Reshape tool on a closed path, like a square or circle, but if the entire path is selected, the Reshape tool will add anchor points and move the path.




The Reshape tool can be used to drag an existing anchor point or path segment. If you drag from an existing path segment, an anchor point is created.

Note: Only selected anchor points are adjusted when dragging with the Reshape tool.



- 6 Move the pointer over the top anchor point of the path, and drag it to the left a little. Leave the path selected.

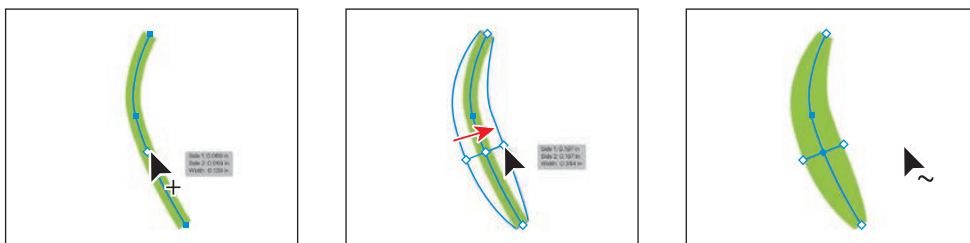


Using the Width tool

Not only can you adjust the weight of a stroke, as you did in Lesson 3, but you can alter regular stroke widths either by using the Width tool () or by applying width profiles to the stroke. This allows you to create a variable width along the stroke of a path. Next, you will use the Width tool to adjust the path you just reshaped.


► **Tip:** You can drag one width point on top of another width point to create a discontinuous width point. If you double-click a discontinuous width point, the Width Point Edit dialog box allows you to edit both width points.

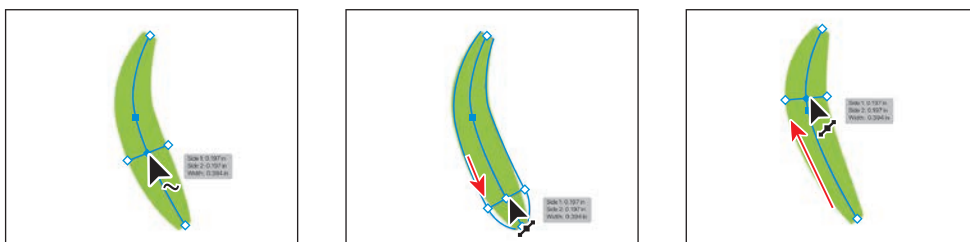
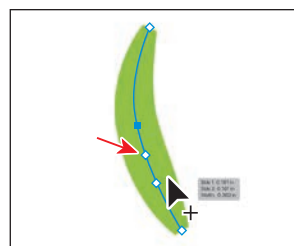
- 1 Select the Width tool () in the toolbar. Move the pointer over the middle of the path you just reshaped, and notice that the pointer has a plus symbol next to it () when it's positioned over the path. If you were to drag, you would edit the width of the stroke. Drag away from the line, to the right. Notice that, as you drag, you are stretching the stroke to the left and right equally. Release the mouse button when the measurement label shows Width at approximately 0.4 in.



You just created a variable stroke on a path, not a shape with a fill. The new point on the original path is called the *width point*. The lines extending from the width point are the *handles*.

► **Tip:** If you select a width point by clicking it, you can press Delete to remove it. When there is only one width point on a stroke, removing that point removes the width completely.

- 2 Click in an empty area of the artboard to deselect the point.
- 3 Move the pointer anywhere over the path, and the width point you just created will appear (an arrow is pointing to it).
- 4 Move the pointer over the original width point, and when you see lines extending from it and the pointer changes () drag it up and down to see the effect on the path. See the last part of the following figure for where it should approximately land.



In addition to dragging to reposition a width point, you can double-click and enter values in a dialog box. That's what you'll do next.

- 5 Move the pointer over the top anchor point of the path, and notice that the pointer has a wavy line next to it (⤿) and the word “anchor” appears (see the first part of the following figure). Double-click the point to create a new width point and to open the Width Point Edit dialog box.
- 6 In the Width Point Edit dialog box, change Total Width to **0 in**, and click OK.

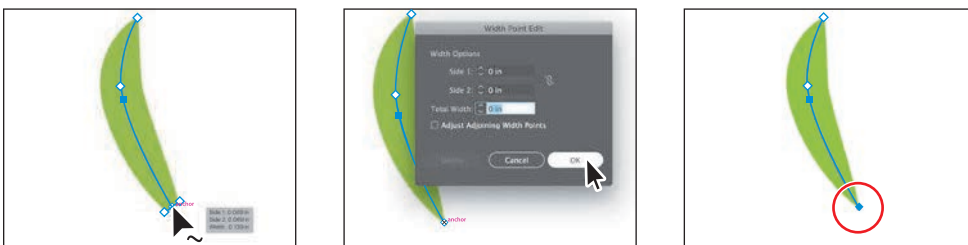
► **Tip:** You can select a width point and Option-drag (macOS) or Alt-drag (Windows) one of the width point handles to change one side of the stroke width.

► **Tip:** After defining the stroke width, you can save the variable width as a *profile* that you can reuse later from the Stroke panel or the Control panel. To learn more about variable-width profiles, search for “Apply stroke on an object” in Illustrator Help (Help > Illustrator Help).

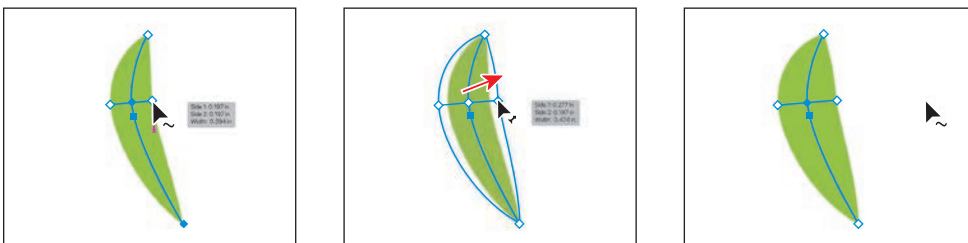


The Width Point Edit dialog box allows you to adjust the length of the width point handles, together or separately, with more precision. Also, if you select the Adjust Adjoining Width Points option, any changes you make to the selected width point affect neighboring width points as well.

- 7 Move the pointer over the bottom anchor point of the path, and double-click. In the Width Point Edit dialog box, change Total Width to **0 in**, and click OK.



- 8 Move the pointer over the original width point. When the width point handles appear, drag one of them away from the center of the path to make it a little wider. Leave the path selected for the next section.



- 9 Change the Stroke color in the Properties panel to black.