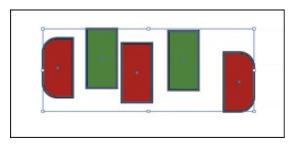
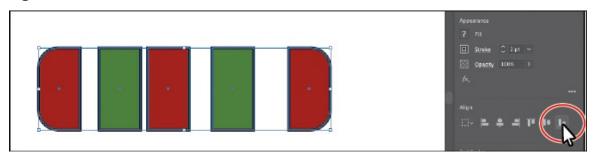
right) the red and green shapes to zoom in.



- **Note:** You can also simply click several times to zoom in.
- **4.** Click the Vertical Align Bottom button (**1**) in the Properties panel on the right.



Notice that the bottom edges of all the selected objects move to align with the lowest selected object.

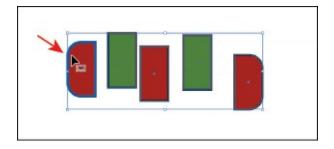
5. Choose Edit > Undo Align to return the objects to their original positions. Leave the objects selected for the next section.

Aligning to a key object

A *key object* is an object that you want other objects to align to. This can be useful when you want to align a series of objects, and maybe one of them is already in the perfect position. You specify a key object by selecting all the objects you want to align, including the key object, and then clicking the key object again. Next, you will align the red and green shapes using a key object.

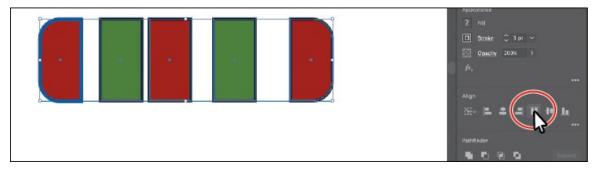
1. With the shapes still selected, click the leftmost shape with the Selection tool ().

When selected, the key object has a thick outline indicating that other objects will align to it.



Note: The key object outline color is determined by the layer color that the object is on.

2. Click the Vertical Align Top button () in the Properties panel.



Notice that all of the selected shapes move to align to the top edge of the key object.

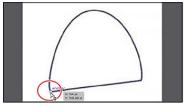
Note: To stop aligning and distributing relative to an object, click the object again to remove the blue outline.

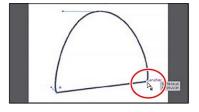
3. Choose Select > Deselect.

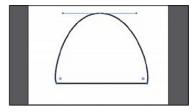
Aligning anchor points

Next, you'll align two anchor points to each other using the Align options. Like setting a key object in the previous section, you can also set a key anchor point that other anchor points will align to.

- **1.** Choose View > Fit Arthoard In Window.
- **2.** Select the Direct Selection tool (▶), and click the lower-left corner point of the white shape at the bottom of the artboard. Shift-click to select the lower-right point of the same shape (see the following figure).
 - The last selected anchor point is the key anchor point. Other points will align to this point.
- **3.** Click the Vertical Align Top button () in the Properties panel to the right of the document. The first anchor point selected aligns to the second anchor point selected.







Select the first point.

Select the second point.

After aligning the points.

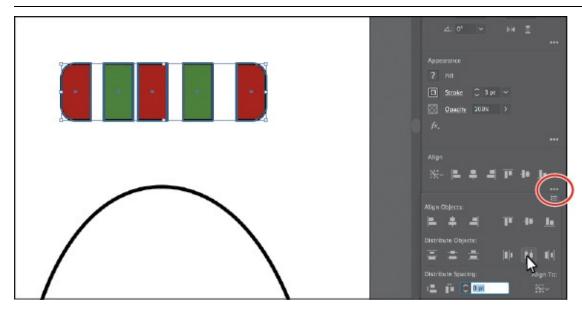
4. Choose Select > Deselect.

Distributing objects

Distributing objects using the Align panel enables you to select multiple objects and distribute the spacing between the centers or edges of those objects equally. Next, you will make the spacing between the red and green shapes even.

- **1.** Select the Selection tool () in the Tools panel.
- **2.** Choose Select > Scarf to reselect all of the red and green shapes on the second arthoard.
- **3.** Click More Options (in the Align section of the Properties panel (circled in the following figure). Click the Horizontal Distribute Center button (in the panel that appears.

Note: When distributing objects horizontally, make sure that the leftmost and rightmost objects are where you want them and then distribute the objects between them. For vertical distribution, position the topmost and bottommost objects and then distribute the objects between them.

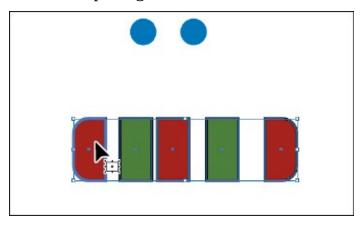


Distributing moves all the selected shapes so that the spacing between the

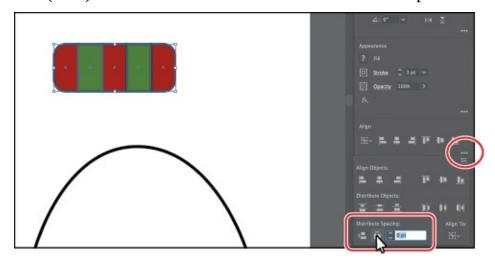
● **Note:** Using the Horizontal Distribute Center or Vertical Distribute Center button distributes the spacing equally between the *centers* of the objects. If the selected objects are not the same size, unexpected results may occur.

- **4.** Choose Edit > Undo Align.
- **5.** With the shapes still selected, click the leftmost shape (red shape) to make it the key object.

You have to define a key object before you are able to enter a value for distribute spacing, next.



6. Click More Options (in the Align section of the Properties panel (circled in the following figure). Ensure that the Distribute Spacing value is 0 (zero) and then click the Horizontal Distribute Space button ().



Distribute Spacing distributes the spacing *between* selected objects, whereas the Distribute Objects alignments distribute the spacing between the centers of selected objects. The value you can set is a great way to set a *specific* distance between objects.

7. Choose Select > Deselect.

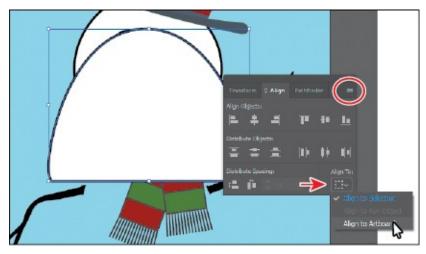
Aligning to the artboard

You can also align content to the active artboard (page) rather than to a selection or a key object. Aligning to the artboard aligns each selected object separately to the artboard. Next, you'll align the white half-circle shape to the artboard with the snowman.

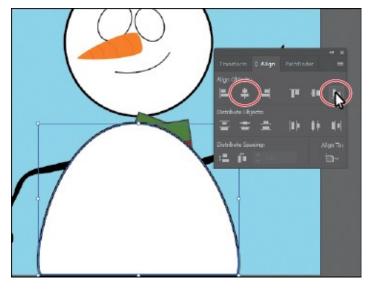
- **1.** With the Selection tool () selected, click the white half-circle shape at the bottom of the righthand artboard to select it. Choose Edit > Cut.
- **2.** Click the Previous artboard button (■) in the lower-left corner of the Document window to navigate to the first (left) artboard in the document, which contains the snowman.
- **3.** Choose Edit > Paste to paste the white half-circle.
- **4.** Choose Window > Align to open the Align panel.

As of the writing of this book, there is no option in the Properties panel to align a single selected object to the artboard. That is why you are opening the Align panel.

- **5.** Choose Show Options from the Align panel menu (■) (circled in the following figure).
- **6.** Click the Align To Selection button () in the Align panel, and choose Align To Artboard in the menu that appears. Any content you align will now align to the artboard.



7. Click the Horizontal Align Center button () and then click the Vertical Align Bottom button () in the Align panel, to align the white half-circle to the horizontal center and vertical bottom of the artboard.



- **8.** Choose Select > Deselect.
- **9.** Click the X at the top of the Align panel group to close it.

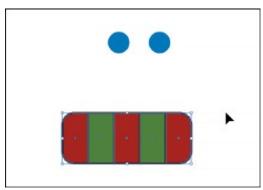
Working with groups

You can combine objects into a group so that the objects are treated as a single unit. This way, you can move or transform a number of objects without affecting their individual attributes or positions relative to each other. It can also make selection of artwork easier later.

Grouping items

Next, you'll select multiple objects and create a group from them.

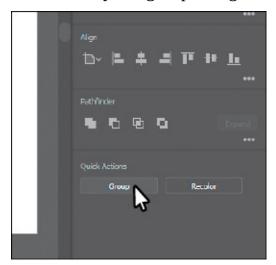
- **1.** Choose View > Fit All In Window to see both artboards.
- **2.** Choose Select > Scarf to select the series of red and green shapes.



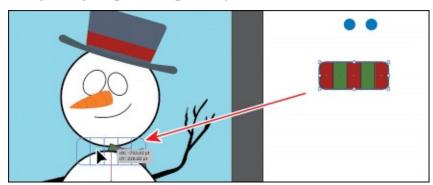
- **3.** Click the Group button in the Quick Actions section of the Properties panel on the right, to group the selected artwork together.
 - **Tip:** You can also choose Object > Group to group content.

- **4.** Choose Select > Deselect.
- **5.** With the Selection tool (▶) selected, click one of the shapes in the new group.

Because they are grouped together, all are now selected.



6. Drag the group of shapes to just beneath the snowman's head.



This will become part of the snowman's scarf. Right now, the group you dragged onto the snowman is behind other artwork. You'll fix it shortly.

7. Choose Select > Deselect.

Editing a group in Isolation mode

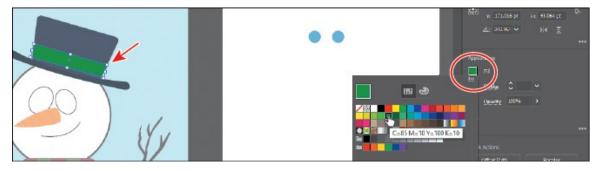
Isolation mode isolates groups (or sublayers) so that you can easily select and edit specific objects or parts of objects without having to ungroup the objects. When in Isolation mode, all objects outside of the isolated group are locked and dimmed so that they aren't affected by the edits you make. Next, you will edit a group using Isolation mode.

- With the Selection tool (▶), click the snowman's hat.
 You will see that it selects a group of shapes.
- **2.** Double-click a shape in the hat to enter Isolation mode.

Notice that the rest of the content in the document appears dimmed (you can't select it). At the top of the Document window, a gray bar appears with the words "Layer 1" and "<Group>." This indicates that you have isolated a group of objects that is on Layer 1. You will learn more about layers in Lesson 9, "Organizing Your Artwork with Layers."



3. Click to select the red shape in the hat. Click the Fill color box in the Properties panel on the right, and making sure the Swatches option () is selected in the panel that appears, click to select another color. I chose a green.



When you enter Isolation mode, groups are temporarily ungrouped. This enables you to edit objects in the group or to add new content without having to ungroup.

Note: You will need to hide the panel to continue, and can do so by pressing the Escape key. I won't always tell you to hide these panels, so it's a good habit to get into.

- **4.** Choose Select > Deselect.
- **5.** Double-click outside of the shapes within the group to exit Isolation mode.
- **6.** Click to select the same shape in the hat.

Notice that it is once again grouped with the rest of the shapes in the hat, and you can also select other objects.

> **Tip:** To exit Isolation mode, you can also click the gray arrow in the

upper-left corner of the Document window, press the Escape key when in Isolation mode, or double-click a blank area of the Document window.

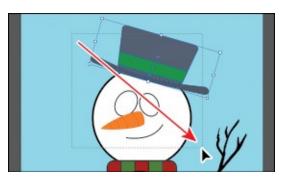
Creating a nested group

Groups can also be *nested*—grouped within other objects or grouped to form larger groups. Nesting is a common technique used when designing artwork. It's a great way to keep associated content together. In this section, you'll explore how to create a nested group.

1. With the Selection tool (▶), drag a marquee across the hat and head of the snowman. Choose Object > Group.

You have created a *nested group*—a group that is combined with other objects or groups to form a larger group.

After grouping, you may notice that the scarf group is now behind the head shape. This is because of the stacking order of objects, which you will learn about in the next section.



- **2.** Choose Select > Deselect.
- **3.** With the Selection tool, click the hat to select the nested group again.
- **4.** Double-click the hat to enter Isolation mode. Click to select the hat again, and notice that the shapes that make up the hat are still grouped. This is a nested group.

▶ **Tip:** Instead of either ungrouping a group or entering Isolation mode to select the content within, you can select with the Group Selection tool (). Nested within the Direct Selection tool () in the Tools panel, the Group Selection tool lets you select an object within a group, a single group within multiple groups, or a set of groups within the artwork.







Select the group.

Enter Isolation mode.

Select the nested group.

5. Press the Escape key to exit Isolation mode; then click a blank area of the artboard to deselect the objects.

Exploring object arrangement

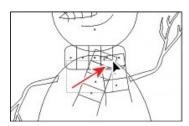
As you create objects, Illustrator stacks them in order on the artboards, beginning with the first object created. This ordering of objects, called *stacking order*, determines how they display when they overlap. You can change the stacking order of objects in your artwork at any time, using either the Layers panel or Arrange commands.

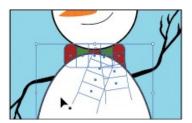
Tip: To learn more about objects and stacking order, see the PDF "Stack_order.pdf" in the Lessons > Lesson_extras folder

Arranging objects

Next, you will work with the Arrange commands to change how objects are stacked.

- **1.** Choose View > Outline to more easily select artwork.
- **2.** With the Selection tool (▶) selected, drag a marquee across the three parts of the scarf. Drag carefully so as not to select other content.
- **3.** Choose View > GPU Preview or View > Preview On CPU (or Preview) if GPU Preview is not available to display the painted artwork.
- **4.** Shift-click the white half-circle to deselect it, if necessary.
- **5.** Choose Object > Arrange > Bring To Front to bring the scarf shapes in front of the snowman's body shapes.



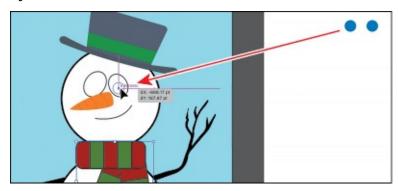




Selecting objects behind

When you stack objects on top of each other, sometimes it becomes difficult to select objects that are underneath. Next, you'll learn how to select an object through a stack of objects.

1. Drag either of the blue circles on the right artboard, on top of the smaller eye for the snowman. Release the mouse.



The circle disappears but is still selected. It went behind the ellipse (the eye) because it was created before the eye shape, which means it is lower in the stacking order.

- **2.** With the circle still selected, choose Object > Arrange > Bring To Front. This brings the blue circle to the front of the stack, making it the topmost object.
- **3.** With the Selection tool (), select the other blue circle on the right artboard, and drag it onto the larger eye shape on the left artboard.
 - This circle disappears like the other, but this time, you will deselect the circle and then reselect it using another method.
- **4.** Choose Select > Deselect. Because it is behind the larger eye shape, you can no longer see the blue circle.
- 5. With the pointer positioned over the location of the blue circle you just deselected, the one behind the eye shape, hold down the Command (macOS) or Ctrl (Windows) key, and click until the circle is selected again (this may take several clicks).
 - **Note:** To select the hidden blue circle, make sure that you click where the circle and the eye overlap. Otherwise, you won't be able to select the blue circle.
- **6.** Choose Object > Arrange > Bring To Front to bring the circle on top of the eye.

● **Note:** You may see an angle bracket displayed with the pointer ().







7. Choose File > Save and then File > Close.



Review questions

- 1. How can you select an object that has no fill?
- **2.** Explain how you can select an item in a group without choosing Object > Ungroup.
- **3.** Of the two Selection tools (Selection [▶] and Direct Selection [▶]), which allows you to edit the individual anchor points of an object?
- **4.** What should you do after creating a selection that you are going to use repeatedly?
- **5.** To align objects to the artboard, what do you need to first change in the Properties panel or Align panel before you choose an alignment option?
- **6.** Sometimes you are unable to select an object because it is underneath another object. Explain two ways to get around this issue.

Review answers

1. You can select an object that has no fill by clicking the stroke or by

- dragging a marquee across any part of the object.
- 2. You can double-click the group with the Selection tool selected, to enter Isolation mode, edit the shapes as needed, and then exit Isolation mode by pressing the Escape key or by double-clicking outside of the group. Read Lesson 9, "Organizing Your Artwork with Layers," to see how you can use layers to make complex selections. Also, using the Group Selection tool (), you can click once to select an individual item within a group (not discussed in the lesson). Click again to add the next grouped items to the selection.
- **3.** Using the Direct Selection tool (), you can select one or more individual anchor points and make changes to the shape of an object.
- **4.** For any selection that you anticipate using again, choose Select > Save Selection. Name the selection so that you can reselect it at any time from the Select menu.
- **5.** To align objects to an artboard, first select the Align To Artboard option.
- 6. If your access to an object is blocked, you can choose Object > Hide > Selection to hide the blocking object. The object is not deleted. It is just hidden in the same position until you choose Object > Show All. You can also use the Selection tool (▶) to select an object that's behind other objects by pressing the Command (macOS) or Ctrl (Windows) key and then clicking the overlapping objects until the object you want to select is selected.