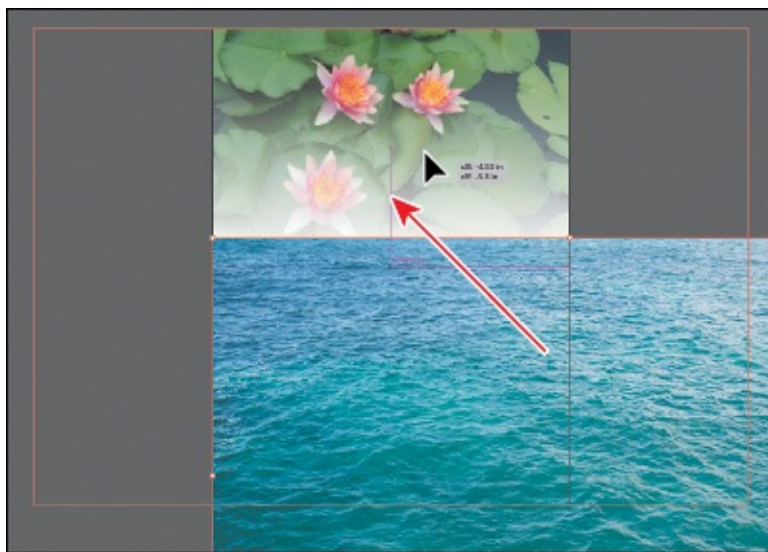
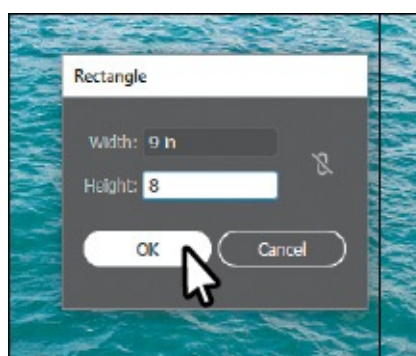


2. Choose View > Zoom Out.
3. With the Selection tool selected, drag the water image into the center of the artboard. Make sure the bottom of the image is aligned with the bottom of the artboard.



4. Select the Rectangle tool (▭) in the Tools panel, and click in the approximate center of the artboard. In the Rectangle dialog box, make sure the Constrain Width And Height Proportions is off (⌘), change Width to **9 in** and Height to **8 in**. Click OK. This will become the mask.

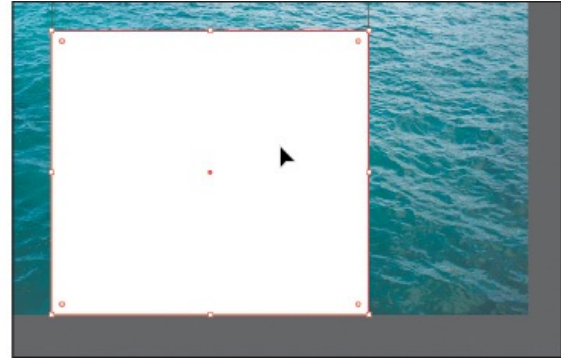
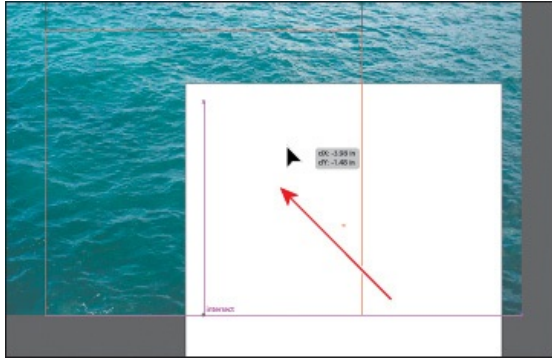


5. Press the D key to set the default stroke (black, 1 pt) and fill (white) for the new rectangle to more easily select and move it.

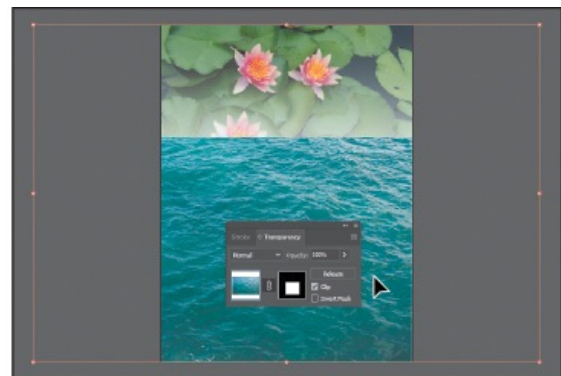
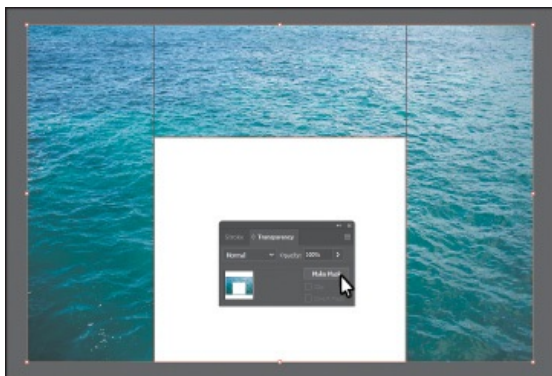
● **Note:** The object that is to become the opacity mask (the masking object) needs to be the top selected object on the artboard. If it is a

single object, like a rectangle, it does not need to be a compound path. If the opacity mask is to be made from multiple objects, they need to be grouped.

6. Select the Selection tool (▢), and drag the rectangle to align it into the bottom center of the artboard.



7. Press the Shift key, and click the Water.jpg image to select it as well.
8. Choose Window > Transparency to open the Transparency panel. Click the Make Mask button, and leave the artwork selected.



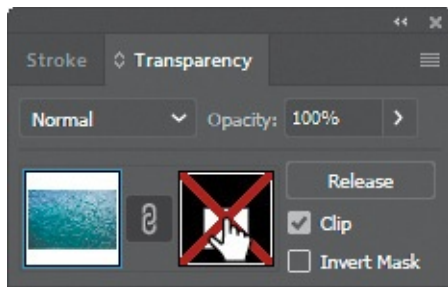
After clicking the Make Mask button, the button now shows as “Release.” If you were to click the button again, the image would no longer be masked.

► **Tip:** You can also click the word “Opacity” in the Properties panel to reveal the Transparency panel.

● **Note:** If you wanted to create a mask that was the same dimensions as the image, instead of drawing a shape, you could have simply clicked the Make Mask button in the Transparency panel.

Editing an opacity mask

Next, you’ll adjust the opacity mask that you just created.

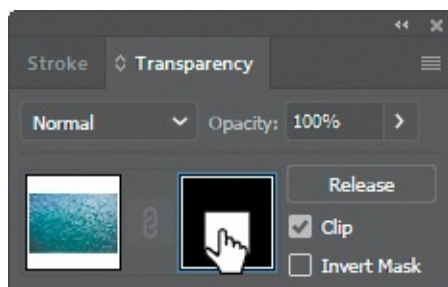


► **Tip:** To disable and enable an opacity mask, you can also choose Disable Opacity Mask or Enable Opacity Mask from the Transparency panel menu.

1. In the Transparency panel, Shift-click the mask thumbnail (as indicated by the white rectangle on the black background) to disable the mask.

Notice that a red X appears on the mask in the Transparency panel and that the entire Water.jpg image reappears in the Document window.

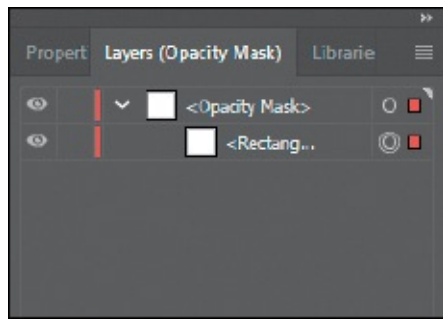
2. In the Transparency panel, Shift-click the mask thumbnail to enable the mask again.



► **Tip:** To show the mask by itself (in grayscale if the original mask had color in it) on the artboard, you can also Option-click (macOS) or Alt-click (Windows) the mask thumbnail in the Transparency panel.

3. Click to select the mask thumbnail on the right side of the Transparency panel. If the mask isn't selected on the artboard, click to select it with the Selection tool (▢).

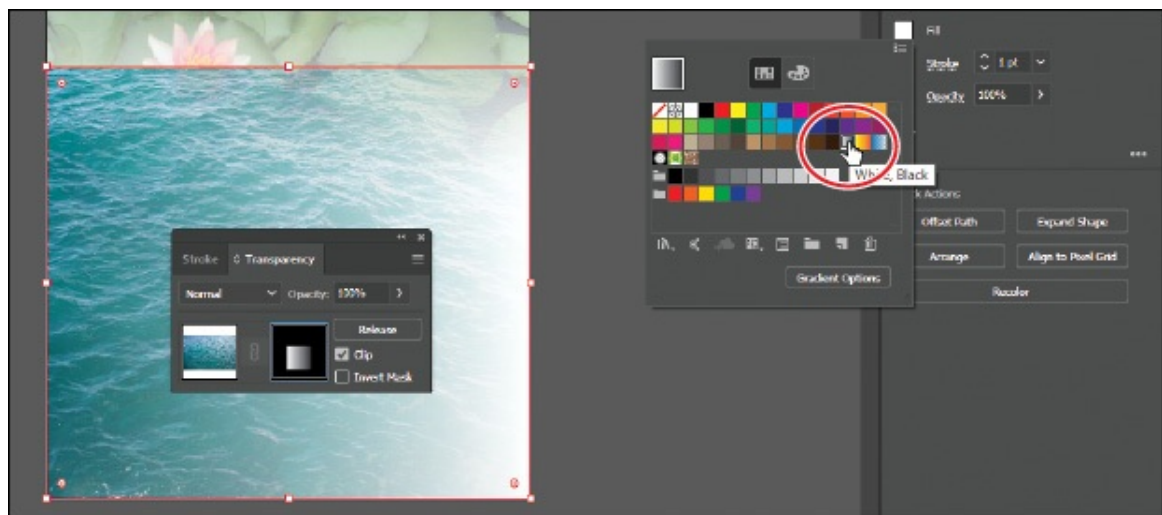
Clicking the opacity mask in the Transparency panel selects the mask (the rectangle path) on the artboard. With the mask selected, you can't edit other artwork on the artboard. Also, notice that the document tab shows (<Opacity Mask>/Opacity Mask), indicating that you are now editing the mask.



4. Click the Layers panel tab and click the disclosure triangle (▢) for the <Opacity Mask> layer to reveal the contents, if necessary.

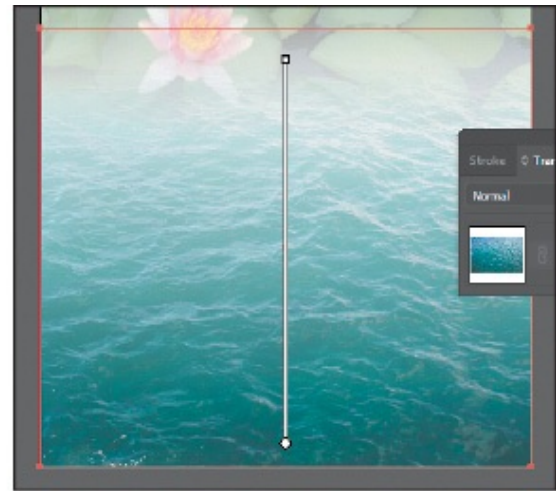
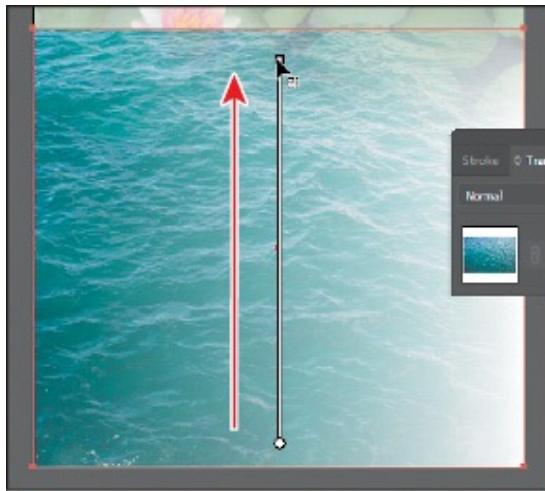
In the Layers panel, notice that the layer <Opacity Mask> appears, indicating that the mask—rather than the artwork that is being masked—is selected.

5. With the mask selected in the Transparency panel and on the artboard, change the fill color to a white-to-black linear gradient, called White, Black, in the Properties panel.

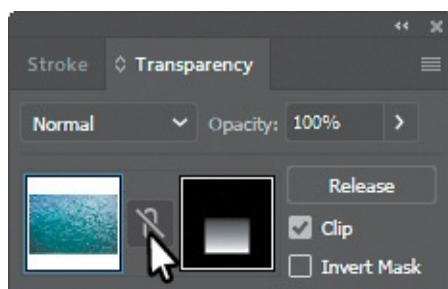


You'll now see that where there is white in the mask, the Water.jpg image is showing, and where there is black, it is hidden. The gradient mask gradually reveals the image.

6. Make sure that the Fill box toward the bottom of the Tools panel is selected.
7. Select the Gradient tool (▢) in the Tools panel. Holding down the Shift key, position the pointer close to the bottom of the Water.jpg image. Click and drag up to just below the top of the mask shape, as shown in the figure. Release the mouse button and then release the Shift key.



Notice how the mask has changed appearance in the Transparency panel. Next, you'll move the image but not the opacity mask. With the image thumbnail selected in the Transparency panel, both the image and the mask are linked together by default so that if you move the image, the mask moves as well.



● **Note:** You have access to the link icon only when the image thumbnail, not the mask thumbnail, is selected in the Transparency panel.

8. In the Transparency panel, click the image thumbnail so that you are no longer editing the mask. Click the link icon (🔗) between the image thumbnail and the mask thumbnail. This allows you to move just the image or the mask but not both.



● **Note:** The position of Water.jpg does not have to match the figure exactly.

9. With the Selection tool, drag the Water.jpg image down. After dragging a little, release the mouse button to see where it's positioned.
0. In the Transparency panel, click the broken link icon (🔗) between the image thumbnail and the mask thumbnail to link the two together again.
1. Choose Object > Arrange > Send To Back to send the Water.jpg image behind the Lilypads.psd image.

It probably won't look like anything has changed on the artboard, but later you will attempt to select the Lilypads.psd image, and it will need to be on top of the Water.jpg image.

2. Choose Select > Deselect and then choose File > Save.

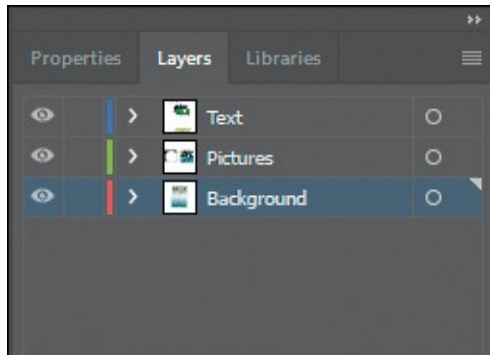
Working with image links

● **Note:** Learn about working with links and Creative Cloud library items, in [Lesson 13](#), “[Creating Artwork for a T-Shirt](#).”

When you place images in Illustrator and either link to them or embed them, you can see a listing of these images in the Links panel. You use the Links panel to see and manage all linked or embedded artwork. The Links panel displays a small thumbnail of the artwork and uses icons to indicate the artwork's status. From the Links panel, you can view the images that have been linked to and embedded, replace a placed image, update a linked image that has been edited outside of Illustrator, or edit a linked image in the original application, such as Photoshop.

Finding link information

When you place an image, it can be helpful to see where the original image is located, what transformations have been applied to the image (such as rotation and scale), and more information. Next, you'll explore the Links panel to discover image information.

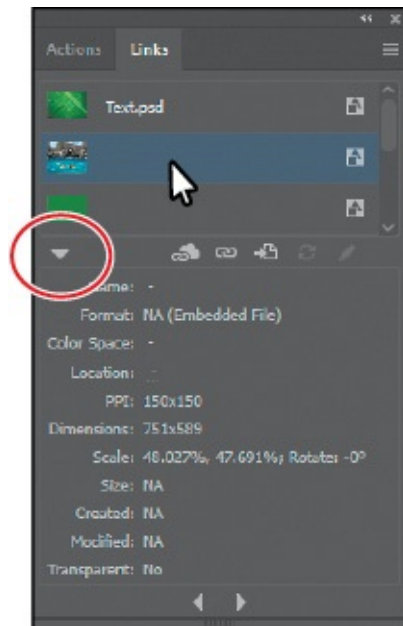


1. In the Layers panel, make sure that all of the layers are collapsed and then click the visibility column to the left of the Text and Pictures layers to show the layer contents on the artboard.
2. Choose Window > Workspace > Reset Essentials.
3. Choose Window > Links to open the Links panel.

▶ **Tip:** You can also double-click the image in the Layers panel list to see the image information.

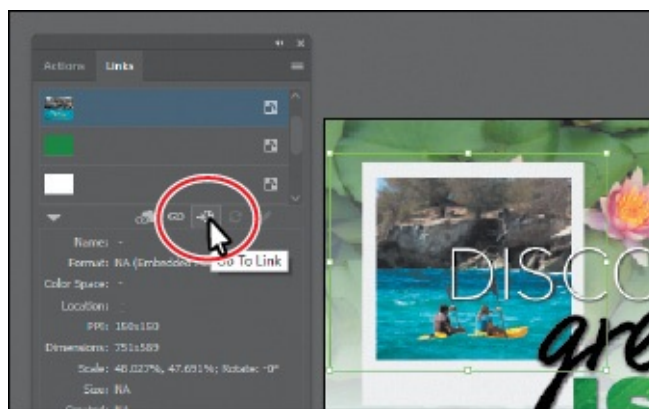
● **Note:** The link information you see may be different than what you see in the figure, and that's okay.

4. Select the Kayak.jpg image in the Links panel. Click the toggle arrow in the lower-left corner of the Links panel to reveal the link information at the bottom of the panel.



Looking in the Links panel, you'll see a listing of all the images you've placed. You can tell whether an image has been embedded by the embedded icon (📎). You'll also see information about the image, such as the fact that it's embedded (Embedded File), the resolution, transformation information, and more.

5. Click the Go To Link option (📎) below the list of images.



The Kayak.jpg image will be selected and centered in the Document window.

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

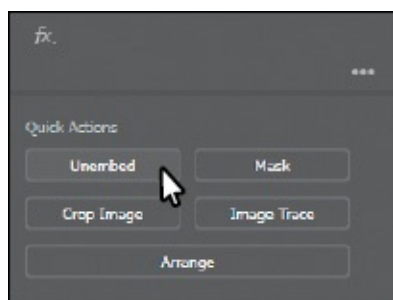
Embedding and unembedding images

As was mentioned previously, if you choose not to link to an image when placing it, the image is embedded in the Illustrator file. That means that the image data is stored within the Illustrator document. You can choose to embed an image later, after placing and linking to it, if you choose. Also, you might want to use embedded images outside of Illustrator or to edit them in an

image-editing application like Photoshop. Illustrator allows you to unembed images, which saves the embedded artwork to your file system as a PSD or TIFF file (you can choose) and automatically links it to the Illustrator file. Next, you will unembed an image in the document.

1. Choose View > Fit Artboard In Window.
2. Click to select the water image at the bottom of the artboard.

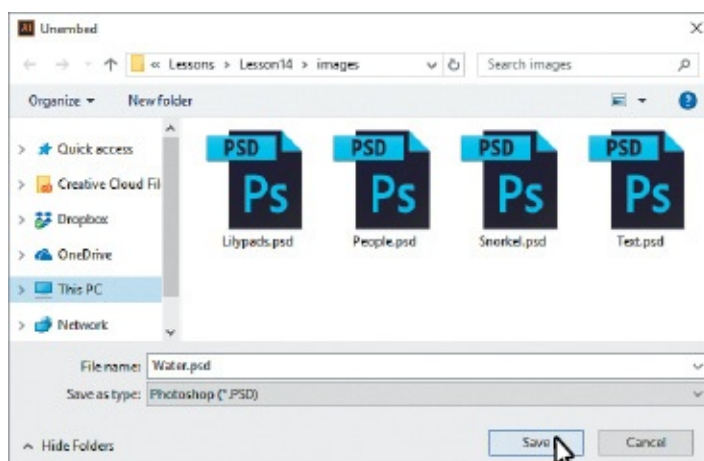
The water image was embedded when you originally placed it. With an image embedded, you may realize that you need to make an edit to that image in a program like Adobe Photoshop. You can just as easily unembed an image, which is what you'll do next to the water image.



► **Tip:** You can also choose Unembed from the Links panel menu (☰).

● **Note:** The embedded Water.jpg image data is unembedded from the file and saved as a PSD file in the images folder. The water image on the artboard is now linked to the PSD file.

3. Click the Unembed button in the Properties panel.
4. In the Unembed dialog box, navigate to the Lessons > Lesson14 > images folder (if you are not already there). Make sure Photoshop (*.PSD) is chosen in the File Format menu (macOS) or the Save As Type (Windows) menu, and click Save.



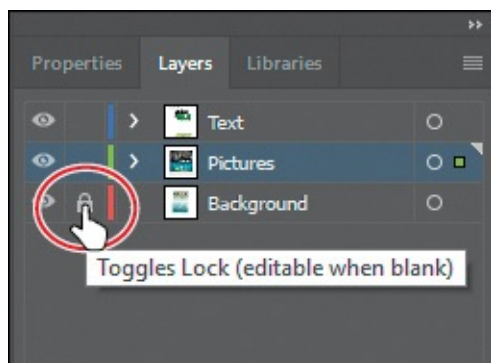
5. Choose Select > Deselect.

Replacing a linked image

You can easily replace a linked or embedded image with another image to update the artwork. The replacement image is positioned exactly where the original image was, so no adjustment should be necessary if the new image is of the same dimensions. If you scaled the image that you are replacing, you may need to resize the replacement image to match the original. Next, you'll replace an image.



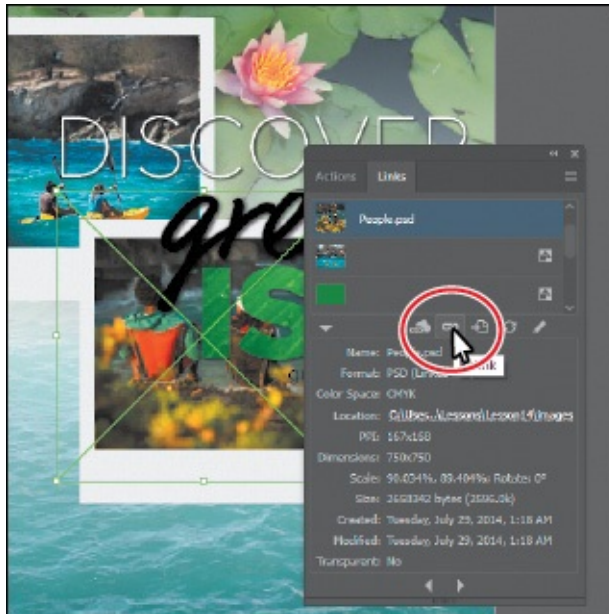
1. Select the Selection tool (⬮) and drag the gradient-filled rectangle off the left edge of the artboard on top of the Kayak.tif image, centering it on the image using the Smart Guides.
2. Choose Object > Arrange > Bring To Front to bring the gradient-filled rectangle on top of the image.




3. In the Layers panel, click the edit column to the left of the Background layer to lock the layer content on the artboard.



4. Drag across the kayak image, the gradient-filled rectangle, and the light gray rectangle beneath it to select the artwork. Make sure not to select the text.
5. Choose Object > Group.
6. Choose Edit > Copy and then choose Edit > Paste to paste a copy.



● **Note:** The figure shows the image already replaced. The pointer is simply pointing to the Relink button for reference.

7. In the Links panel, with one of the kayak images selected, click the Relink button () below the list of images. In the Place dialog box, navigate to the Lessons > Lesson14 > images folder, and select another image like People.psd. Make sure that the Link option is selected. Click Place to replace the kayak image with the People.psd image.



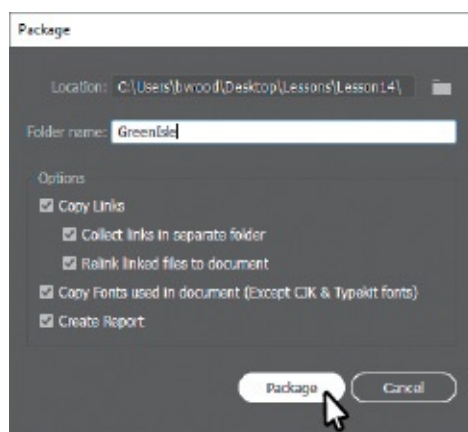
8. Drag the kayak image group and the image group with the people into position like you see in the figure.
9. Position the pointer just off the upper-right corner, and when you see the rotate arrows (↻), click and drag to rotate. Alternate the rotation like you see in the figure.
0. Choose File > Save.

Packaging a file

When you *package* a file, you create a folder that contains a copy of the Illustrator document, any necessary fonts, copies of the linked graphics, and a report that contains information about the packaged files. This is an easy way to hand off all necessary files for an Illustrator project. Next, you'll package the poster file.

● **Note:** If the file needs to be saved, a dialog box will appear to notify you.

1. Choose File > Package. In the Package dialog box, set the following options:
 - Click the folder icon (📁), and navigate to the Lesson14 folder, if you are not already there. Click Choose (macOS) or Select Folder (Windows) to return to the Package dialog box.
 - Folder name: **GreenIsle** (remove “_Folder” from the name)
 - Options: Leave at default settings.



2. Click Package.

● **Note:** The Create Report option, when selected, will create a package report (summary) in the form of a .txt (text) file, which is placed in the package folder by default.

The Copy Links option *copies* all the linked files to the new folder it creates. The Collect Links In Separate Folder option creates a folder called Links and copies the links into there. The Relink Linked Files To Document option updates the links within the Illustrator document to link to the new copies.

3. In the next dialog box that discusses font-licensing restrictions, click OK.

Clicking Back would allow you to deselect Copy Fonts Used In Document (Except CJK & Typekit fonts).

4. In the final dialog box to appear, click Show Package to see the package folder.

In the package folder should be a copy of the Illustrator document and a folder named Links that contains all the linked images. The GreenIsle Report (.txt file) contains information about the document contents.

5. Return to Illustrator.

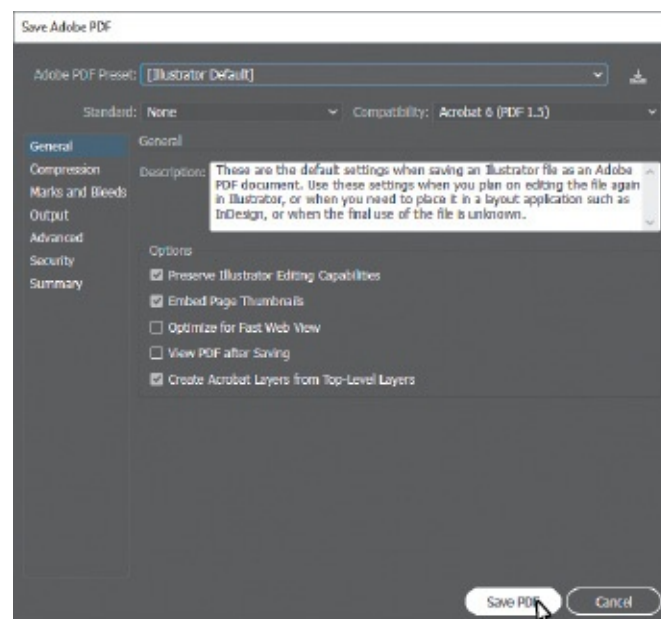
Creating a PDF

Portable Document Format (PDF) is a universal file format that preserves the fonts, images, and layout of source documents created on a wide range of applications and platforms. Adobe PDF is the standard for the secure, reliable distribution and exchange of electronic documents and forms around the world. Adobe PDF files are compact and complete and can be shared, viewed, and printed by anyone with software such as the free Adobe Reader.

You can create different types of PDF files from within Illustrator. You can create multipage PDFs, layered PDFs, and PDF/x-compliant files. Layered PDFs allow you to save one PDF with layers that can be used in different contexts. PDF/X-compliant files ease the burden of color, font, and trapping issues in printing. Next, you'll save this project as a PDF so that you can send it to someone else to view.

1. Choose File > Save As. In the Save As dialog box, choose Adobe PDF (pdf) from the Format menu (macOS) or Adobe PDF (*.PDF) from the Save As Type menu (Windows). Navigate to the Lessons > Lesson14 folder, if necessary. Notice that you have the option, at the bottom of the dialog box, to save all of the artboards in the PDF or a range of artboards. Click Save.
2. **Note:** If you want to learn about the options and other presets in the Save Adobe PDF dialog box, choose Help > Illustrator Help and search for "Creating Adobe PDF files." In the Save Adobe PDF dialog box, click the

Adobe PDF Preset menu to see all of the different PDF presets available. Ensure that [Illustrator Default] is chosen, and click Save PDF.



There are many ways to customize the creation of a PDF. Creating a PDF using the [Illustrator Default] preset creates a PDF in which all Illustrator data is preserved. PDFs created with this preset can be reopened in Illustrator without any loss of data. If you are planning on saving a PDF for a particular purpose, such as viewing on the Web or printing, you may want to choose another preset or adjust the options.

● **Note:** You may notice that the file currently open is the PDF (GreenIsle.pdf).


3. Choose File > Save, if necessary, and then choose File > Close.


Review questions

1. Describe the difference between *linking* and *embedding* in Illustrator.
2. What kinds of objects can be used as masks?
3. How do you create an opacity mask for a placed image?
4. Describe how to replace a placed image with another image in a document.
5. Describe what *packaging* does.

Review answers

1. A *linked file* is a separate, external file connected to the Illustrator file

by a link. A linked file does not add significantly to the size of the Illustrator file. The linked file must accompany the Illustrator file to preserve the link and to ensure that the placed file appears when you open the Illustrator file. An *embedded file* is included in the Illustrator file. The Illustrator file size reflects the addition of the embedded file. Because the embedded file is part of the Illustrator file, no link can be broken. You can update linked and embedded files using the Relink button () in the Links panel.

2. A mask can be a simple or compound path, and masks (such as an opacity mask) may be imported with placed Photoshop files. You can also create layer clipping masks with any shape that is the topmost object of a group or layer.
3. You create an opacity mask by placing the object to be used as a mask on top of the object to be masked. Then you select the mask and the object(s) to be masked, and either click the Make Mask button in the Transparency panel or choose Make Opacity Mask from the Transparency panel menu.
4. To replace a placed image with a different image, select the image in the Links panel. Then click the Relink button () and locate and select the replacement image. Click Place.
5. *Packaging* is used to gather all of the necessary pieces for an Illustrator document. Packaging creates a copy of the Illustrator file, the linked images, and the necessary fonts (if desired), and it gathers the copies into a folder.