

EXERCISE PREVIEW



EXERCISE OVERVIEW

The object is to create a poster with a unified color scheme by compositing artwork drawn in Illustrator with various effects and photographs.

DOWNLOADING THE FILES

1. To download the files you'll use in this exercise, please visit:
nobledesktop.com/goodies
2. Under **Advanced Adobe Illustrator Effects**, click the **Class Files** button to download the compressed files.





NOTE: These instructions are written for **CS6**. If you have an older version, instructions for CS5 and prior can be downloaded on the webpage where you downloaded the files.
3. Once the file is downloaded and uncompressed, you should have a folder named **seminarFiles-earthConference** containing two Illustrator files (.ai) and two photos (.tif).

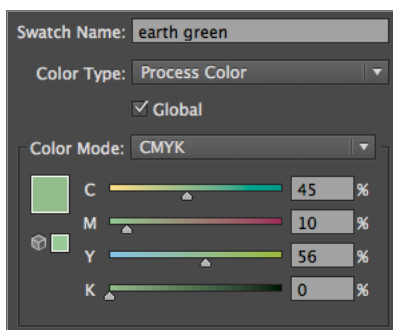
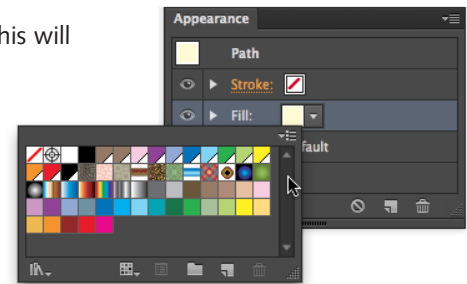
SETTING UP

1. In Illustrator, go to **File > Open**.
2. Navigate to the **seminarFiles-earthConference** folder you downloaded. Double-click **earth conference-begin.ai** to open it.

3. **(MAC)**: Go into the **Illustrator** menu and choose **Preferences > Units**.
(WINDOWS): Go into the **Edit** menu and choose **Preferences > Units**.
4. **General** should be set to **Points**. If it is not, change **General** to **Points** now.
5. Click **OK**.

COLORING THE BACKGROUND



1. Using the **Selection** () tool, select the large yellow rectangle that is the size of the page.
2. Open the **Appearance** panel. If you don't see it, go into the **Window** menu and choose **Appearance**.
3. In the **Appearance** panel, **double-click** the yellow box next to **Fill**. This will pop open the **Swatches** panel, as shown to the right.
4. In the **Swatches** panel, you'll see numerous colors. We want to use a particular green color throughout this graphic. Since we'll be reusing it, we'll make it a new color swatch. But first, we won't be using the default swatches, so let's get rid of them. At the top right of the **Swatches** panel, go into the **panel menu** () and choose **Select All Unused**.
5. At the bottom right of the **Swatches** panel, click the **Delete** () button to get rid of them. (It will ask you to confirm, click **Yes**.)
6. To create our color swatch, at the top right of the **Swatches** panel, go into the **panel menu** () and choose **New Swatch**.
7. In the window that opens, set the following options:

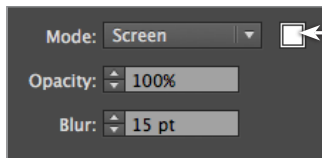


NOTE: Be sure that **Global** is **checked**! A global swatch will update in all of the places that we use it. So if we change the color of the swatch later, all places in the drawing will change with one simple action!

8. Click **OK**.
9. To close the **Swatches** panel press the **Esc** key. The yellow fill should now have changed to the green swatch you just created.

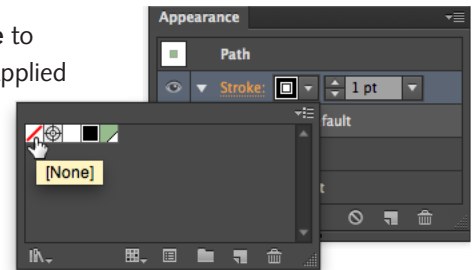
STYLING THE "SWOOSHES"



1. There are two white swooshes (with black outlines) going across the middle of the drawing. Using the **Selection** () tool, select the top swoosh.
2. Hold **Shift** and click on the bottom swoosh so both swooshes are now selected. Do NOT deselect or click off the swooshes until we say so!
3. Go to the **Appearance** panel, click on the **Fill color** and choose the same **earth green** swatch.
4. If the **Swatches** panel is still open, press **Esc** to close it.
5. With the swooshes still selected, at the bottom of the **Appearance** panel click the **Add New Effect** () button. From the first **Stylize** menu (listed under Illustrator Effects) choose **Outer Glow**.
6. Set the following as shown below and click **OK**:

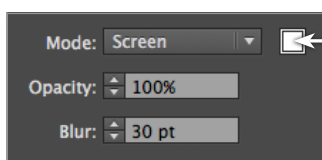


CLICK THIS BOX AND CHOOSE WHITE

7. In the **Appearance** panel on the left side of the **Fill**, click on the **triangle** to expand the fill's attributes. Notice that the Outer Glow effect you just applied is listed here.
8. To get rid of the black outlines around the swooshes, in the **Appearance** panel **double-click** on the **Stroke color** and choose **None**, as shown to the right.


**ADDING A GLOW TO THE GLOBE**

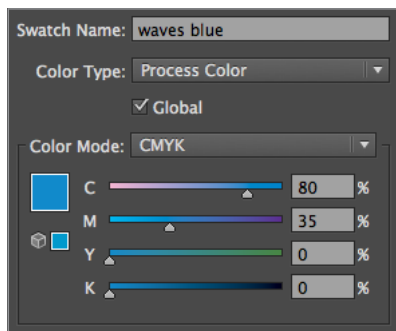
1. Using the **Selection** () tool, select the blue gradient globe. Be sure NOT to select the countries on top of it, just select the circle.
2. We're going to add a glow, but to make sure it isn't added to just the stroke, at the top of the **Appearance** panel select the top row that says **Path**.
3. At the bottom of the **Appearance** panel click the **Add New Effect** () button. From the first **Stylize** menu (listed under Illustrator Effects) choose **Outer Glow**.
4. Set the following as shown below and click **OK**:





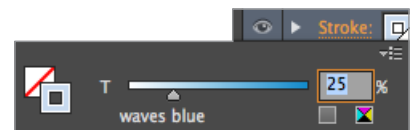
CLICK THIS BOX AND CHOOSE WHITE

ENHANCING THE CIRCLE "ORBITING" THE GLOBE

1. **Zoom in** closer on the globe.
2. Select the black line that looks like it's orbiting the globe.
3. We'll be making this stroke and other elements in this image the same blue. Since we'll be reusing the color, let's make it a swatch. In the **Appearance** panel, double-click the **Stroke color** to open the **Swatches** panel.
4. At the top right of the **Swatches** panel go into the **panel menu** () and choose **New Swatch**.
5. In the window that opens, set the following options and click **OK** when done:



6. Hit **Esc** on the keyboard to close the swatches panel. The line is now blue! That's because this swatch was automatically applied to the selected stroke.
7. In the **Appearance** panel, set the **Stroke weight** to **5pt** as shown here: 
8. To make the line more interesting, let's add a dotted portion to it. Once upon a time, we needed multiple paths for this effect, but the **Appearance** panel makes it easy to do with just one path. With the line selected, at the bottom left of the **Appearance** panel click the **Add New Stroke** () button.
9. Notice in the **Appearance** panel that a new stroke has been added on top of the previous stroke. This means it is visually in front of the other.
10. So it doesn't completely block the other stroke, let's make the top stroke thinner. In the **Appearance** panel, change its weight to **2pt**.
11. To lighten it, in the **Appearance** panel, **Shift-click** on the **stroke color** to open the **Color** panel.
12. Reduce the **T** (tint) to **25**, as shown on the right.
13. In the **Appearance** panel, click once on the underlined word **Stroke** to open the **Stroke** panel. Make sure you're editing the **light blue** 2pt stroke!
14. Near the middle of the **Stroke** panel check **Dashed Line**.



15. As shown to the right, make the first dash **7pt** and the first gap **4pt** (hit **Return** (MAC) or **Enter** (WINDOWS) to apply the change).



16. Let's add an arrowhead to the end of the line.

17. In the **Appearance** panel, in the **darker blue 5pt stroke** (that's the bottom stroke) click on the underlined word **Stroke** to open the **Stroke** panel.

18. As shown below, in the **second** dropdown menu next to **Arrowheads**, click () to bring up a list of arrows.



19. From the list that appears, scroll down and choose **Arrow 10**.

20. Notice that the dashed light blue stroke now extends beyond the newly added arrowhead. Let's fix this.

21. In the **Appearance** panel, in the **dark blue stroke**, click on the underlined word **Stroke** to open the **Stroke** panel.

22. In the **Arrowheads** section next to **Align**, click () to **extend the arrow tip beyond the end of the path**. Sweet!

23. One final touch is to round the other end of this dark blue line. In the **Appearance** panel, in the **dark blue stroke** click on the underlined word **Stroke** to open the **Stroke** panel, then click the **Round Cap** () button.

24. It's a subtle effect, but the end should now look rounded as shown below.

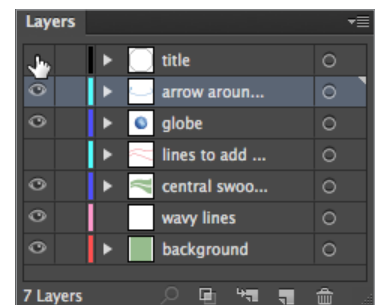


ADDING A TITLE AROUND THE GLOBE

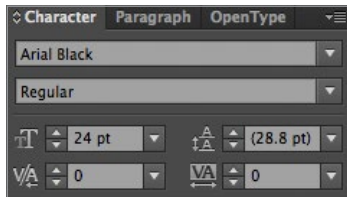
1. If you can't see the whole globe, zoom in or out so you can.
2. Go to the **Layers** panel (**Window > Layers**).
3. In the **Layers** panel there is a hidden layer named **title**. As shown on the right, click in the empty box on the far left of that layer to show it.



You should now see a black circle path around the globe.

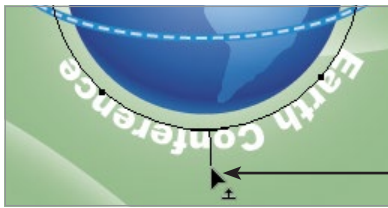
4. Choose the **Type on a Path** () tool. To get to it, you might need to click and hold on the **Type** () tool, then choose the **Type on a Path** () tool.
5. Position the cursor at the top of the black circle (above the globe) and click once.





6. Type out the following text: **Earth Conference**
7. Select the text. In the **Appearance** panel, change the **Fill** color to **white**.
8. With the text still selected, in the **Character** panel (**Window > Type > Character**) set the options as shown below.





9. Go to the **Paragraph** panel (**Window > Type > Paragraph**) and **Center** () the text.
10. The text will flip to the bottom of the circle. To move it back to the top, choose the **Selection** () tool.
11. Find the line protruding from the text (as shown below) and drag it to the top of the circle. Center it on the top of the circle so the type looks good.








Drag this line (notice the cursor changes to tell you when you are over this line)
NOTE: The text may start acting weird while you drag, parts of it disappearing, etc. Just keep dragging around to different areas until the text settles down.

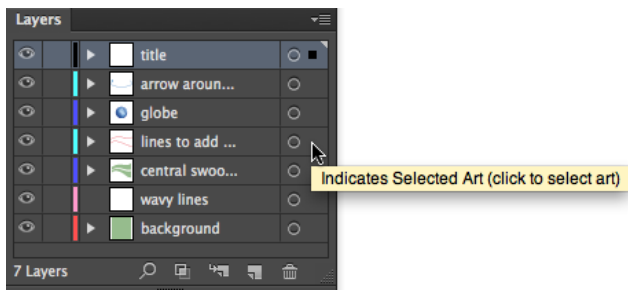
12. Stay in the **Selection** () tool and keep the type selected.
13. In the **Appearance** panel, click on the **Add New Effect** () button and choose **Stylize > Scribble**.
14. From the **Settings** menu at the top choose **Tight** and click **OK**.

CREATING A LINE OF CIRCLES

1. Go to **View > Fit Artboard in Window** so you can see the whole page.
2. In the **Layers** panel there is a hidden layer named **lines to add circles to**. Show that layer.
3. Two red lines will appear in the "swooshes." They are only red so you can find them easily. We want a series of white circles to follow these lines. We'll create one of these circles and let Illustrator repeat it for us. To create the circle, choose the **Ellipse** () tool (it may be hidden under another tool, like the **Rectangle** () tool).
4. Anywhere in the empty green space of the drawing **click once** (do NOT drag).

5. In the dialog that opens set the following:
 Width: **17 pt**
 Height: **17 pt**
6. Click **OK**.
7. In the **Appearance** panel, give the circle a **1pt white stroke** and **no fill**.
8. We can turn this circle into a **scatter brush**, which will allow us to make the circles follow the line. To do this open the **Brushes** panel (**Window > Brushes**).
9. First let's get rid of the default brushes so they don't confuse us. At the top right of the **Brushes** panel go into the **panel menu** () and choose **Select All Unused**.
10. At the bottom right of the panel click the **Delete** () button to get rid of them. (It will confirm that you want to delete them; just click **Yes**.)

 There is one pesky brush that won't let itself be deleted since it claims that a graphic style depends on it. Oh well, it won't hurt anything.
11. With the white circle still selected, click the **New Brush** () button at the bottom of the **Brushes** panel.
12. Choose **Scatter Brush** and click **OK**.
13. Name it **circles** and click **OK**.
14. At the top right of the **Brushes** panel go into the **panel menu** () and choose **List View**. You should now see your brush listed there.
15. We're done with the circle artwork that is on your page. **Select** and **delete** it.
16. Choose the **Selection** () tool.
17. We're ready to apply this brush to those two red lines. As shown below, to select both lines, go to the **Layers** panel and click in the empty space to the right of the layer.



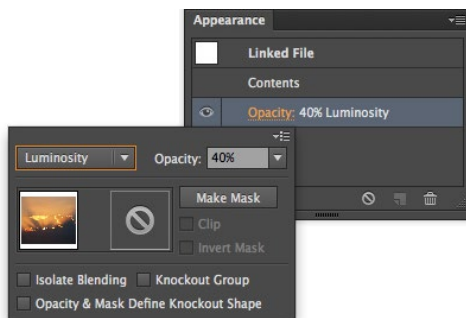
18. In the **Brushes** panel click the **circles** brush to apply it.
19. The circles are a bit big and close together. With the lines still selected, **double-click** the **circles** brush in the **Brushes** panel.

20. At the bottom, check on **Preview** so you can see the changes and:
 - reduce the **Size** to **75%**
 - change the **Spacing** to **110%**
21. Click **OK**. When you click OK, Illustrator will ask if you want to apply these changes to existing strokes. Click **Apply to Strokes** to confirm.
22. To finish them off, let's make them not quite so bright. In the **Appearance** panel, find the last underlined **Opacity:** at the bottom of the panel and click it to open the **Transparency** panel. Then change the **Opacity** to **50%**.

IMPORTING AND STYLING THE SKY / CLOUD PHOTO

We have two images that were shot on a digital camera that we want to use in this image. They've already been converted to CMYK in Photoshop and are ready to import into Illustrator.


1. In the **Layers** panel select the **background** layer.
2. Go to **File > Place**.
3. In the **seminarFiles-earthConference** folder you downloaded, click **once** on the file named **sun-clouds.tif** to select it, but do NOT hit Place yet!
4. At the bottom of the window make sure **Link** is checked on, then click **Place**.
5. Position the image so the placement of the clouds looks good in the empty area at the top of the page (above the swooshes). Don't worry when parts of the image hang off the page or fall under the swooshes.
6. As you can see, the image is full color and too big, but not to worry, all will be fixed. In the **Appearance** panel, click on **Opacity** to open the **Transparency** panel.
7. Choose **Luminosity** blending mode and **40%** Opacity, as shown below.

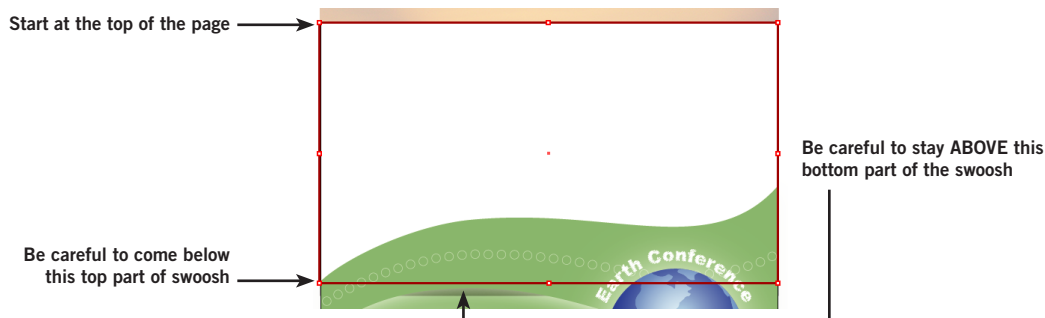



NOTE: Luminosity blend mode takes the light/dark values from the image and blends them with the color(s) behind the image. It only takes the photo's lightness/darkness, NOT its color.

MASKING THE SKY / CLOUD PHOTO




To remove the undesired parts of the picture we'll hide those parts using a **clipping mask** to "mask" away the undesired areas. The idea is that the masking object is in front of the artwork being masked. Anything inside the masking object will be visible, while anything outside of the masking object will be hidden.

1. Since anything inside the masking object will be revealed, we need to draw a box to define the area where we want to see this photo. Anything outside the box will be hidden. Make sure nothing is selected (**Select > Deselect**).
2. Select the **Rectangle** () tool. Don't worry about the fill and stroke color, they won't matter at all.
3. As shown below, draw a box that fills out the whole top of the page, and extends down into the swooshes, but doesn't come below the top swoosh.

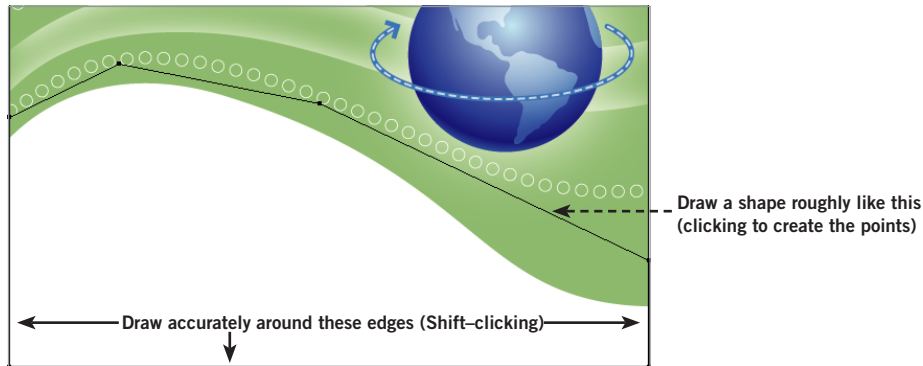


4. Choose the **Selection** () tool.
5. With the new rectangle still selected, hold **Shift** and click on the sky part of the photo that peeks out above the new rectangle.
6. Go into the **Object** menu and choose **Clipping Mask > Make**.
7. The photo should now be visible only inside that rectangle.

CREATING THE BLUE BACKGROUND FOR THE WAVES PHOTO


1. Below the swooshes, we want some blue waves. Since the section is currently green we need to create a blue shape to fill out the area. To start, go to the **Layers** panel and make sure the **background** layer is still selected.
2. At the bottom right of the **Layers** panel click the **Create New Layer** () button.
3. The new layer should have been created just above the **background** layer. **Double-click** its name and rename it **blue waves**.
4. To prevent our work from interfering with any other layers, select the **blue waves** layer, go into the **Layers panel menu** () and choose **Lock Others**.
5. Choose the **Pen** () tool.

6. As shown below, click points to draw a shape that goes around the left, bottom and right side, and roughly follows the swooshes.
 - Do NOT drag to create curves!
 - Don't concern yourself with tracing the swooshes too closely. This color will be hidden behind the swoosh so as long as you fill through the edge of the swoosh that is what matters.
 - TIP: Holding **Shift** when you click will draw a straight 90° or 45° angled line.

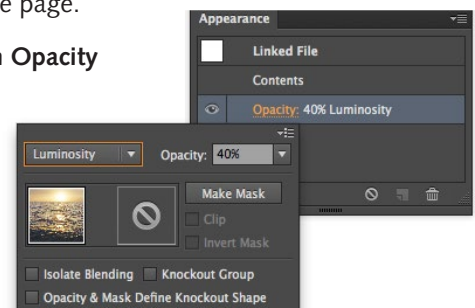


7. With the shape still selected, go to the **Appearance** panel and:
 - Fill it with the **waves blue** swatch.
 - Set the **Stroke** to **none**.

IMPORTING AND STYLING THE WAVES PHOTO


1. Choose the **Selection** () tool.
2. Go to **File > Place**.
3. In the **seminarFiles-earthConference** folder you downloaded, click **once** on the file named **waves.tif** to select it, but **DON'T** hit **Place** yet!
4. At the bottom of the window, make sure **Link** is checked on, then click **Place**.
5. The image comes in on top of the color so it may cover over the blue shape you just created. Don't worry, we'll deal with that in a moment. Position the image so the placement of the waves looks good filling that empty area at the bottom of the page (under the swooshes):
 - Don't let any of the sky in this picture show below the swooshes.
 - Don't worry if parts of the image hang off the bottom of the page.
6. To properly color the image, in the **Appearance** panel, click on **Opacity** to open the **Transparency** panel. Choose **Luminosity** blending mode and **40% Opacity**, as shown on the right.

The waves should now be the proper blue color.





MASKING THE WAVES PHOTO

Like we did with the sky photo, to remove the undesired parts of the picture we'll hide them using a clipping mask. Remember that anything **inside** the masking object will be **revealed**, and anything **outside** will be **hidden**.

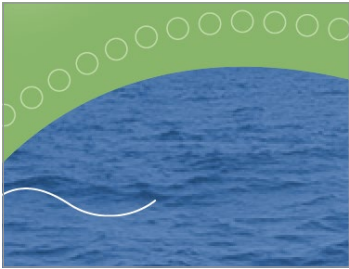
1. We need to draw a shape to define the area where we want to see this photo. We should reuse the same shape we drew for the blue background so we don't have to draw it again! Since it is behind the picture, it'll be a bit trickier to select.
2. Go to **Select > All**. (Since all the other layers are locked, only the blue shape and picture on this unlocked layer are selected.)
3. Hold **Shift** and click on the picture to deselect it. You now have only the blue shape selected (though you'll just see its outline).
4. Go to **Edit > Copy**. Do NOT deselect it yet!
5. To prevent us from accidentally selecting this blue shape go to **Object > Lock > Selection**.
6. We need to put a copy in the same position on top of the picture. Click once on the waves photo to select it.
7. Go to **Edit > Paste in Front**.
8. Do a **Select > All**.
9. Go into the **Object** menu and choose **Clipping Mask > Make**. The waves should now look like they are behind the swoosh and don't appear in any areas we don't want them.
10. So we can continue working on other layers, go into the **Layers panel menu** () and choose **Unlock All Layers**.
11. Deselect everything (**Select > Deselect**).

ADDING GRAPHIC WAVE LINES: DRAWING THE FIRST WAVE

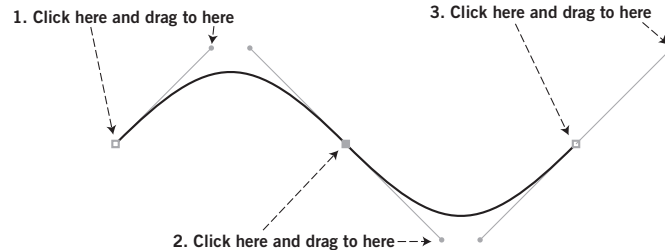
1. In the **Layers** panel click on the layer named **wavy lines**.
2. To prevent ourselves from accidentally selecting things on other layers, go into the **Layers panel menu** () and choose **Lock Others**.
3. This is an empty layer on which we'll create some graphic-looking "waves." Select the **Pen** () tool.
4. In the **Appearance** menu, make sure the **Fill** is set to **none** and **Stroke** is **white 1 pt**.


5. Towards the bottom left of the page, just below the swoosh we want to draw one portion of a wave, as shown below. We'll let Illustrator repeat it for us in a few steps, but for now, draw a wave.

FINAL LINE SHOULD LOOK LIKE THIS:




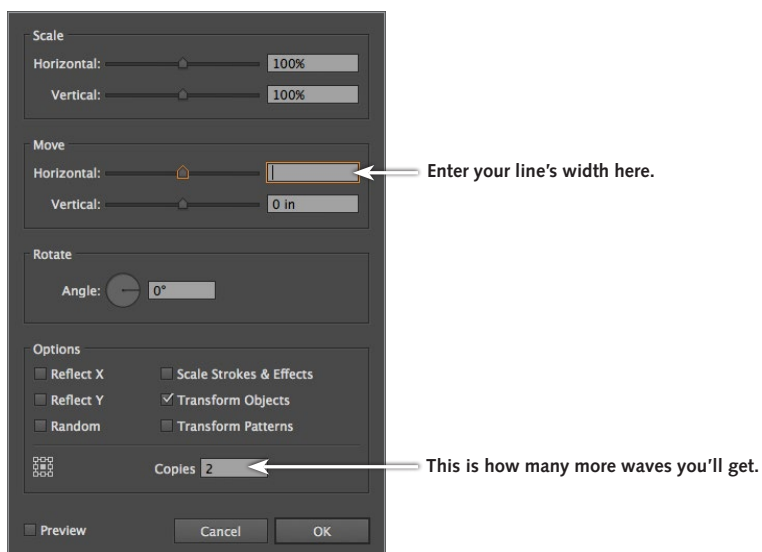
TIPS ON HOW TO DRAW THE LINE:




6. Choose the **Selection** () tool.
7. Click once on the wavy white line to select it entirely.

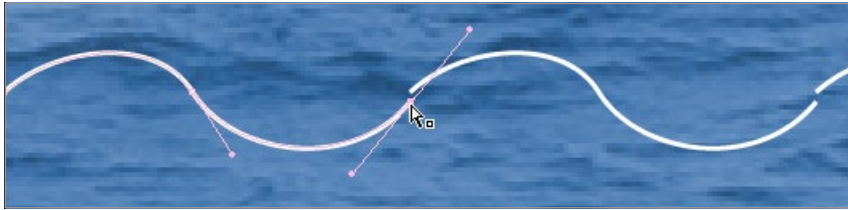
MAKING THE WAVE LINE REPEAT TO THE RIGHT

1. Before we have Illustrator repeat the line for us, we must find out the wave's width (W) and height (H). If you have a large enough screen, you can see this info in the **Control** panel at the top of the screen. Otherwise, go to the **Transform** panel (**Window > Transform**) and write the info here:
W: _____
H: _____
2. In the **Appearance** panel, select **Path**, then click on the **Add New Effect** () button and choose **Distort & Transform > Transform**.
3. In the dialog box that opens, set the following options:

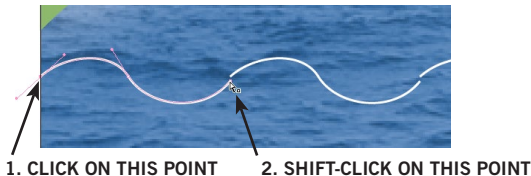



4. Click **OK** when done.
5. The wave should now repeat more to the right, but unless you are extremely lucky, the lines are not connecting to form one continuous line. Illustrator can fix this, though. Choose the **Direct Selection** () tool.
6. Deselect everything (**Select > Deselect**).
7. The trick is that you must select both of the end points of the line without selecting anything else, including the middle point of the line. Click once on the original wave line you drew so you can see its anchor points.

NOTE: For the next several steps, we'll be talking about this segment of the line. You can only work directly with this section of the wave, not the other parts that the Transform effect has added. The effect will be updated with whatever you do to this first segment of the line.




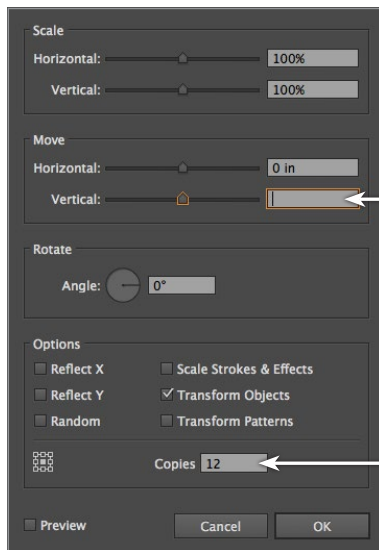
8. Click once on the left-most anchor point. It will become a solid color which means it is selected (hollow white points mean they are NOT selected).
9. Hold **Shift** and click on the right-most anchor point to add it to the selection.



10. Go to **Object > Path > Average**.
11. Choose **Horizontal** and click **OK**.
12. Deselect everything (**Select > Deselect**).
13. The line should no longer have gaps, but might not look smooth. Still using the **Direct Selection** () tool, click on the right-most point so the direction handle becomes visible.
14. Adjust the direction handle as needed to smooth out the line. Notice how the adjustment happens to all copies of the wave since we did this using an effect! (You may need to adjust the left-most direction handle as well.)

MAKING ADDITIONAL ROWS OF WAVE LINES DOWN THE PAGE

1. If the wavy line isn't still selected, select it now. In the **Appearance** panel, make sure the **Path** is highlighted.
2. To make the line repeat in rows going down, in the **Appearance** panel click on the **Add New Effect** () button and choose **Distort & Transform > Transform**.
3. A message may ask if you want to apply this new effect; click **Apply New Effect**.
4. In the dialog box that opens, set the following options:



Enter your line's height here. Check on Preview to see what the effect will do. You may need to adjust this height to make it look good.

Depending on the height of the wave, you may need to adjust the number of copies. Make sure you have enough so your waves continue off the bottom of the page.

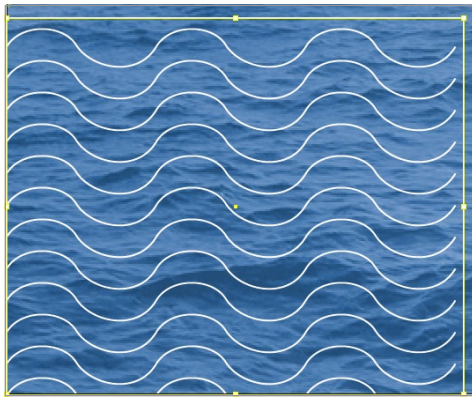
5. Click **OK** when done.

FADING OUT THE GRID OF WAVE LINES USING AN OPACITY MASK

We want the waves to slowly fade away as they go into the center of the picture. We'll create this effect using an **opacity mask** to hide the undesired parts. Unlike the **clipping** masks we did earlier, **opacity** masks work similar to masks in Photoshop. The idea is that the mask object is **black & white**. Where the mask is **black** the artwork is **hidden**, and where the mask is **white** the artwork is **shown**. Any shade of **gray** will **partially hide** the artwork, making it semi-transparent. When creating a mask, the artwork you want to show/hide must be underneath and the black/white masking object must be on top.

1. To start, select the **Rectangle** () tool.

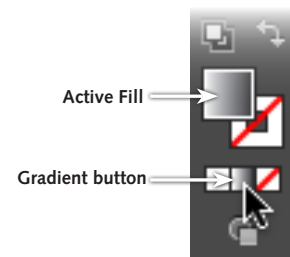
2. Drag a rectangle over the entire area of the waves. It should completely cover the waves and extend just beyond their edges.



KEEP THE RECTANGLE CLOSE TO,
BUT BEYOND THE SIZE OF THE WAVES

3. In the toolbar make sure **Fill** is active (in front of stroke) as shown on the right:
4. As shown at right, click the **Gradient** button to apply a gradient.

You may get the default **white to black linear** gradient (as shown) but you also might get some other gradient you have used in the past. If you already have the default **white to black linear** gradient, move on to the next step. Otherwise, do the following sidebar to set the proper gradient:

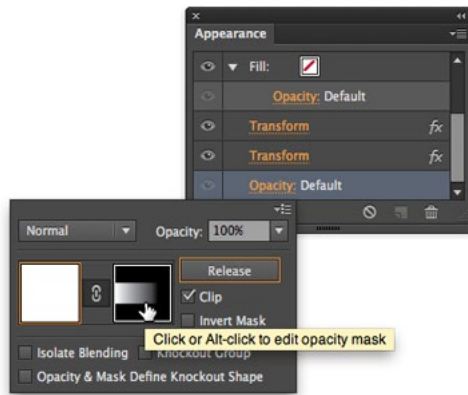



MAKING A WHITE TO BLACK LINEAR GRADIENT

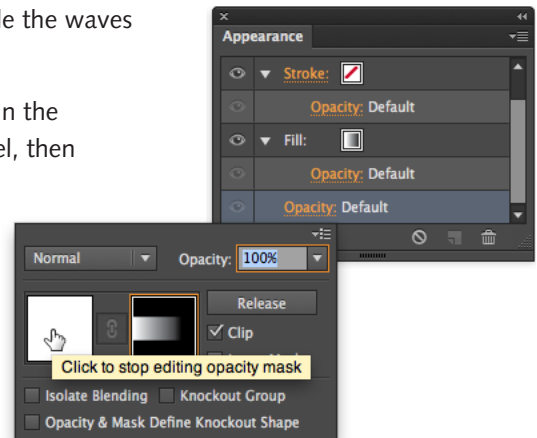
1. Open the **Gradient** panel (**Window > Gradient**).
2. You only want **two** color stops (), **one** on the **far left** and **one** on the **far right**. If you have any extra color stops () remove them by dragging them off the bottom of the panel.
3. Double-click on the far **left** color stop () and choose **white**.
4. Double-click on the far **right** color stop () and choose **black**.
5. Change the **Type** to **Linear**.
(If you don't see it, go into the **panel menu** () and choose **Show Options**.)


5. You should have a **white to black linear** gradient filling the box (white on the left to show the waves and black on the right to hide the waves).
6. Select both the gradient mask shape and the waves that are behind it by choosing **Select > All**.
(NOTE: The other layers are locked, so only these two objects are selected.)
7. To create the mask, go to the **Appearance** panel and click **Opacity** to open the **Transparency** panel.
8. At the top right of the **Transparency** panel, go into the **panel menu** () and choose **Make Opacity Mask**.

9. If you aren't happy with how the waves fade out (ie: you want them to fade out faster), as shown below, click on the mask icon in the **Transparency** panel.



10. Choose the **Gradient** () tool.
11. Drag from left to right across the waves to change how they fade away. If you want to experiment, dragging in other directions will fade the waves out differently.
12. Now that we are done with the mask we must stop editing it. In the **Appearance** panel click **Opacity** to open the **Transparency** panel, then click the thumbnail to the left of the mask to return to the regular artwork.
13. Go to **Select > Deselect**.
14. To see the completed art, go to **View > Fit Artboard In Window**.
15. Congratulations, you are on the way to saving the Earth and mastering Illustrator.



NOTE: If there were any other changes you want to make you'd have to unlock the layers first. Go into the **Layers panel menu** () and choose **Unlock All Layers**.