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 **Creative Effects with Illustrator**, download the **Class Files**.

   NOTE: These instructions are written for **CC 2017**. Instructions for CS6 can be downloaded on this webpage.

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. Choose **File > Document Setup**.

4. Set **Units** to **Points** and click **OK**.

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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 (**Window > 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. We'll be reusing it, so we'll make it a new color swatch. But first, let's get rid of the default swatches that we won't be using. 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:
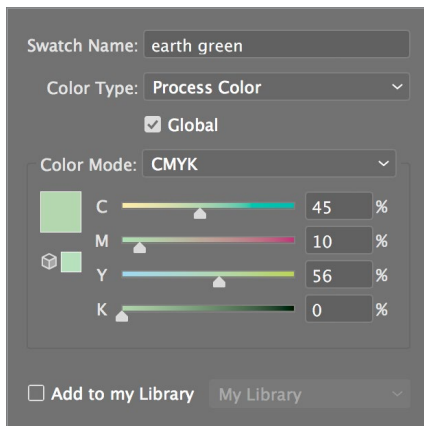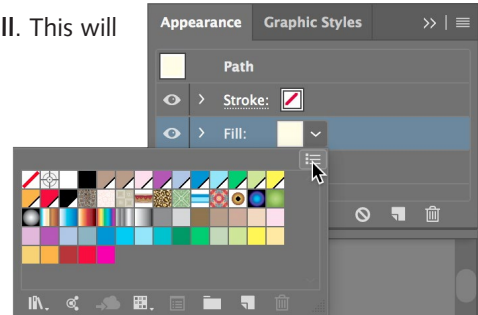
   NOTE: Be sure that **Global is checked**! A global swatch will update in all of the places that we use it. So if we change the color of the swatch later, all places in the drawing will change with one simple action!

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 (*fx.*). From the first **Stylize** menu (listed under Illustrator Effects) choose **Outer Glow**.

6. Set the following options:

> Mode: Screen   ← CLICK THIS BOX & CHOOSE WHITE
> Opacity: 100%
> Blur: 15 pt
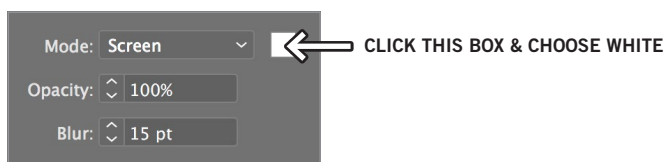
7. Click **OK**.

8. In the **Appearance** panel, click on the **triangle** to the left of **Fill** to reveal the its attributes.

9. Notice that the **Outer Glow** effect you just applied is listed here.

10. 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.

> Appearance | Graphic Styles
> Path
> Stroke: 1 pt
> [None]
> Glow
> Default
> fault
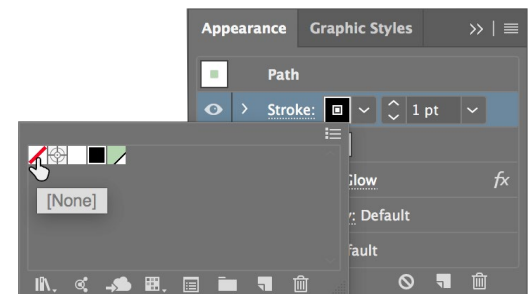
ADDING A GLOW TO THE GLOBE

1. Using the **Selection** (▷) tool, select the blue gradient globe. Be sure NOT to select the continents 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** (*fx.*) button. From the first **Stylize** menu (listed under Illustrator Effects) choose **Outer Glow**.

4. Set the following as shown below and click **OK**:

> Mode: Screen   ← CLICK THIS BOX & CHOOSE WHITE
> Opacity: 100%
> Blur: 30 pt
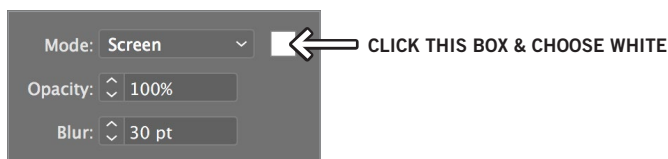
ENHANCING THE CIRCLE "ORBITING" THE GLOBE

1. **Zoom in** closer on the globe.

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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. Because we'll reuse 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:
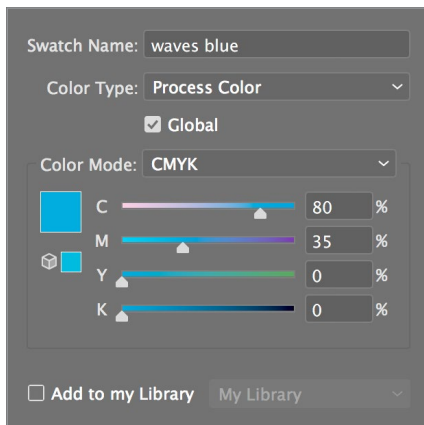
6. Click **OK**.

7. 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.

8. In the **Appearance** panel, set the **Stroke** weight to **5 pt** as shown here:

9. 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 (▫).

10. Notice in the **Appearance** panel that a new stroke has been added below the current stroke. The top stroke in the panel is visually in front of the bottom stroke.

11. So it doesn't completely block the other stroke, let's make the top stroke thinner. In the **Appearance** panel, change its weight to **2 pt**.

12. To lighten it, in the **Appearance** panel, **Shift–click** on the **stroke color** to open the **Color** panel.

13. Reduce the **T** (tint) to **25**, as shown on the right.

14. In the **Appearance** panel, click once on the underlined word **Stroke** to open the **Stroke** panel. Make sure you're editing the **light blue** 2 pt stroke!
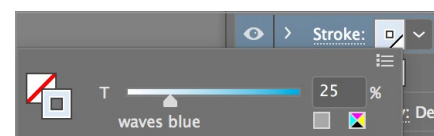
15. Near the middle of the **Stroke** panel check **Dashed Line**.

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

17. Let's add an arrowhead to the end of the thick stroke.

18. In the **Appearance** panel, click once on the bottom stroke's **5 pt** thickness to select that stroke.

19. On this **5 pt** stroke, click on the underlined word **Stroke** to open the **Stroke** panel.

20. As shown below, in the **second** dropdown menu next to **Arrowheads**, click the arrow (⌄) to open the menu.
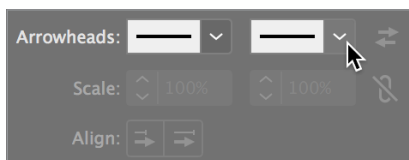
21. In the list that appears, scroll down and choose **Arrow 10**.

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

NOTE: Keep the **Stroke** panel open. If you closed it, in the **Appearance** panel, click on the underlined word **Stroke** for the **dark blue** stroke.

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

24. One final touch is to round the other end of this dark blue line. Click the **Round Cap** button (⊏) .

**25.** 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 (T), then choose the **Type on a Path** tool (✎).
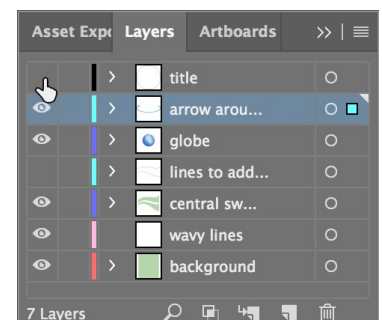
5. Position the cursor at the top of the black circle (above the globe) and click once.

6. Type out the following text: **Earth Conference**

7. Select the text.

8. In the **Appearance** panel, change the **Fill** color to **white**.

9. With the text still selected, in the **Character** panel (**Window > Type > Character**) set the options as shown below.
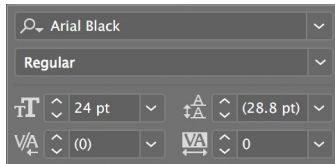
10. Open the **Paragraph** panel (**Window > Type > Paragraph**) and **Center** (▤) the text.

11. The text will flip to the bottom of the circle. To move it back to the top, choose the **Selection** tool (▷).

12. 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.
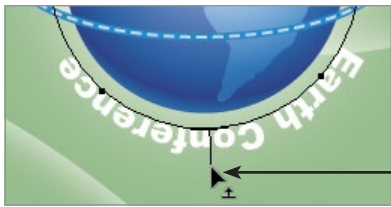
Drag this line. (Notice the cursor changes to tell you when you are over this line.)
NOTE: The text may start acting weird while you drag, parts of it disappearing, etc. Just keep dragging around to different areas until the text settles down.

13. Stay in the **Selection** tool (▷) and keep the type selected.

14. In the **Appearance** panel, click on the **Add New Effect** button (*fx.*) and choose **Stylize > Scribble**.

15. 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 **1 pt 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 named **lines to add circles to**.
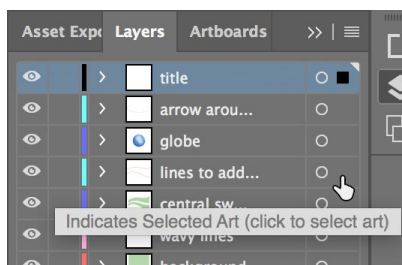

18. In the **Brushes** panel click the **circles** brush to apply it.

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**. Illustrator will then 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 photos that we want to use in this image. They were 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. (Mac users may need to click the **Options** button to see this.)

5. Click **Place**.

6. The photo is loaded into your cursor. Position the cursor at the top left of the page and click once to place it onto the page.

7. Drag the photo up so the clouds look good in the empty area at the top of the page (above the swooshes). Don't worry that parts of the image hang off the top of the page or fall under the swooshes.

8. The photo is full color (not the green we want) and too tall, so let's fix it. In the **Appearance** panel, click on **Opacity** to open the **Transparency** panel.

9. As shown below, choose the **Luminosity** blending mode and **40%** Opacity:
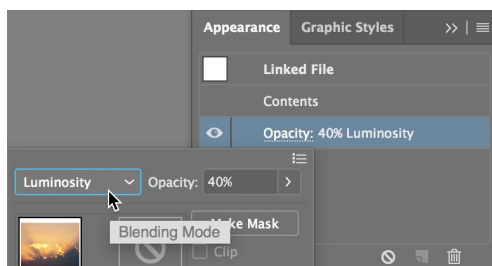
NOTE: The Luminosity blending mode takes the light/dark values from the image and blends them with the color(s) behind the image. It only takes the photo's lightness/darkness, NOT its color.

MASKING THE SKY / CLOUD PHOTO

To remove the undesired parts of the photo, we'll hide those parts using a **clipping mask** to "mask" away the undesired areas. Anything inside the mask will be visible, while anything outside the mask will be hidden.
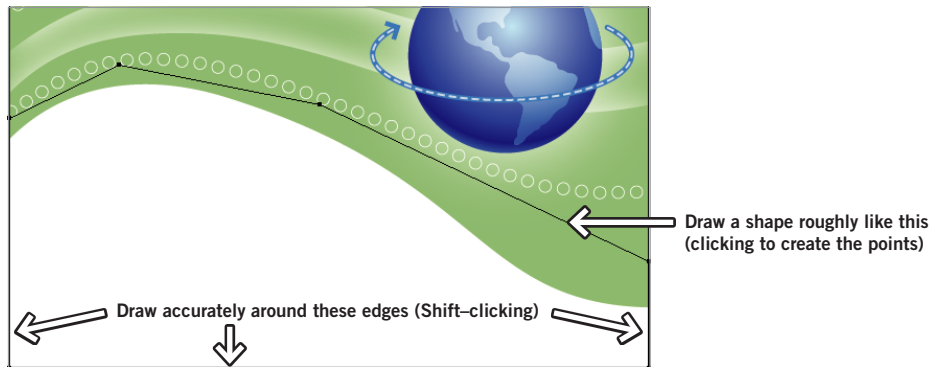
1. Scroll/zoom so you can see the entire photo on screen (the top and the bottom).

2. With the photo selected, click the **Mask** button in the Control panel at the top of the screen.

3. The resize handles you see are now for the mask. To get a final cropping like the one shown below:

    • Drag the **top middle** handle down to crop off the extra top part.

    • Drag the **bottom middle** resize handle up to crop off the extra bottom part.

CREATING THE BLUE BACKGROUND FOR THE WAVES PHOTO

1. Below the swooshes, we want some blue waves. Because 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. Make sure the **blue waves** layer is still selected.

5. To prevent our work from interfering with any other layers, go into the **Layers panel menu** (☰) and choose **Lock Others**.

6. Choose the **Pen** tool (✐).

7. 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 just make sure to fill past the swoosh's edge.

- TIP: Holding **Shift** when you click will draw a straight 90° or 45° angled line.

Draw a shape roughly like this
(clicking to create the points)

Draw accurately around these edges (Shift–clicking)

8. 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**. (Mac users may need to click the **Options** button to see this.)

5. The photo is loaded into your cursor. Position the cursor around the middle left of the page and click once to place it.

6. The photo comes in on top, so it should cover over the blue shape you just created. Don't worry, we'll deal with that in a moment. Position the photo 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 (we only want waves).

- Don't worry if parts of the image hang off the bottom of the page.

7. To properly color the photo, in the **Appearance** panel, click on **Opacity** to open the **Transparency** panel.

8. As shown on the right, choose the **Luminosity** blending mode and **40% Opacity**.

The waves should now be the proper blue color.

MASKING THE WAVES PHOTO

We'll hide the undesired parts of the photo using a clipping mask.
The Mask button we used on the sky photo gives us a rectangular mask, which won't work for this custom shaped area. This time we'll need to create a custom clipping mask. As we do this, keep in mind that anything **inside** the masking object will be **revealed**, and anything **outside** will be **hidden**.

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! It is behind the photo, so it'll be a bit trickier to select.

1. Go to **Select > All**. (Since all the other layers are locked, only the blue shape and picture on this unlocked layer are selected.)

2. 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).

3. Go to **Edit > Copy**. Do NOT deselect it yet!

4. To prevent us from accidently selecting this blue shape go to **Object > Lock > Selection**.

5. We need to put a copy in the same position on top of the picture. Click once on the waves photo to select it.

6. Go to **Edit > Paste in Place**.

7. Do a **Select > All**.

8. 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.

9. So we can continue working on other layers, go into the **Layers panel menu** (▤) and choose **Unlock All Layers**.
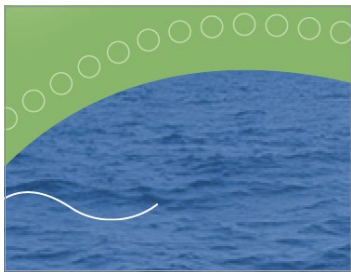
10. Deselect everything (**Select > Deselect**).

ADDING WAVY LINES: DRAWING THE FIRST WAVE

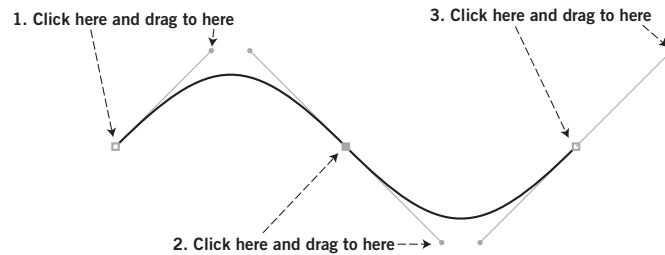1. In the **Layers** panel click on the layer named **wavy lines**.
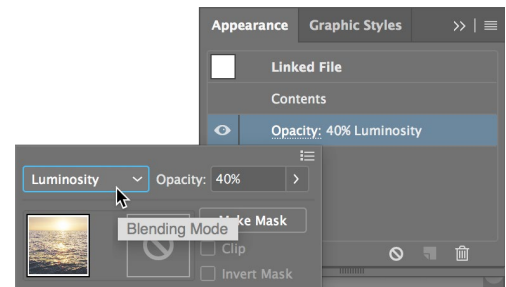
2. To prevent ourselves from accidentally selecting things on other layers, go into the **Layers panel menu** (▤) and choose **Lock Others**.

3. This is an empty layer on which we'll create some lines that look like waves. Select the **Pen** tool (🖊).

4. In the **Appearance** panel, make sure **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:

1. Click here and drag to here

3. Click here and drag to here

2. Click here and drag to here

6. Choose the **Selection** tool (▷).

7. Click once on the wavy white line to select it entirely.
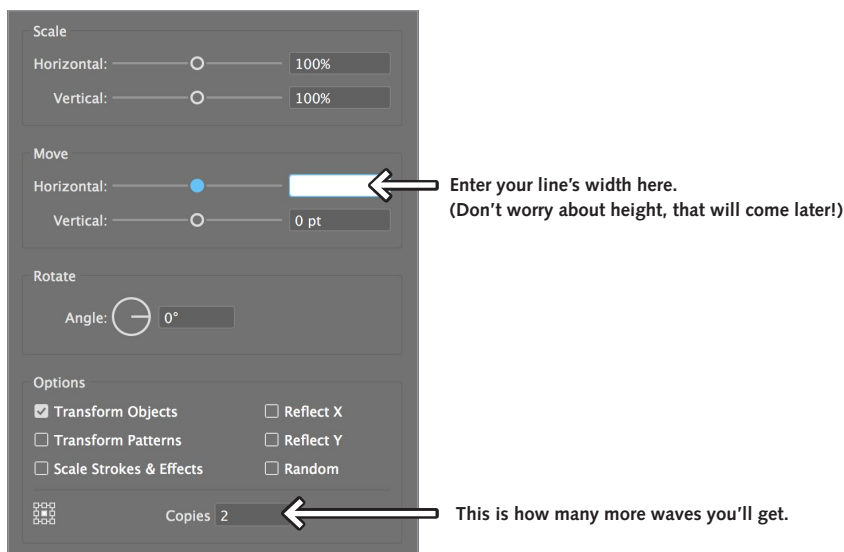
MAKING THE WAVE LINE REPEAT TO THE RIGHT

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 wide enough screen, you can see this info in the **Control** panel at the top of the screen. Otherwise, you can see it in the **Transform** panel (**Window > Transform**).

Write down the width (W) and height (H) somewhere (you'll need those exact amounts in a moment).

2. In the **Appearance** panel, select **Path**.

3. Click the **Add New Effect** button (*fx.*) and choose **Distort & Transform > Transform**.

4. In the dialog that opens, set the following options:

Enter your line's width here.
(Don't worry about height, that will come later!)

This is how many more waves you'll get.

5. Click **OK**.

6. The wave should now repeat more to the right, but there's a good chance the lines are not connecting to form one continuous line. Illustrator can fix this, though. Choose the **Direct Selection** tool (▶).

7. Deselect everything (**Select > Deselect**).

8. 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.

9. Click once on the leftmost anchor point. It will become a solid color which means it is selected. (Hollow white points indicate they are NOT selected.)

10. Hold **Shift** and click on the rightmost anchor point to add it to the selection.

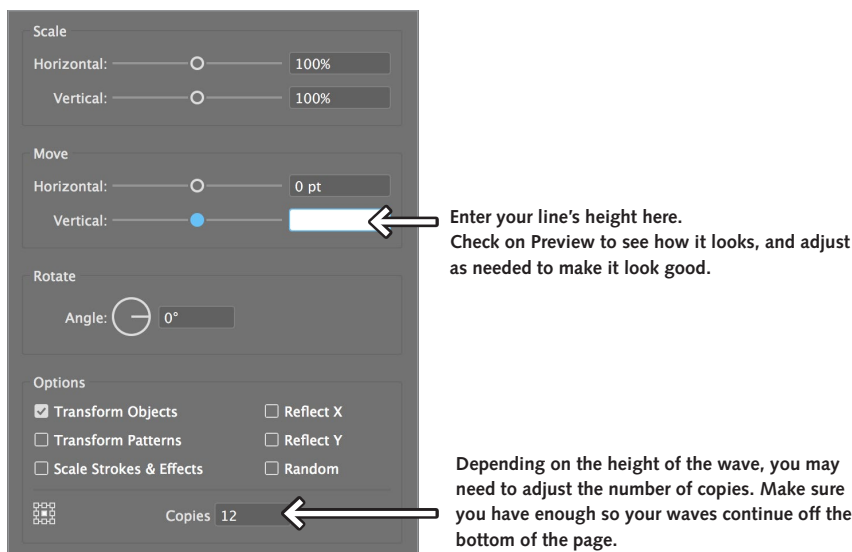**1. CLICK ON THIS POINT**   **2. SHIFT–CLICK ON THIS POINT**
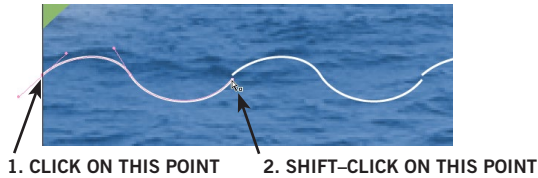
11. Go to **Object > Path > Average**.

12. Choose **Horizontal** and click **OK**.

13. Deselect everything (**Select > Deselect**).

14. The line should no longer have gaps but might not look smooth. Still using the **Direct Selection** ( ) tool, click on the rightmost point so the direction handle becomes visible.

15. 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 leftmost direction handle as well.)

MAKING ADDITIONAL ROWS OF WAVE LINES DOWN THE PAGE

1. Use the **Selection** tool ( ) to select the wavy line.

2. In the **Appearance** panel, make sure the **Path** is highlighted.

3. To make the line repeat in rows going down, in the **Appearance** panel click on the **Add New Effect** button (*fx.*) and choose **Distort & Transform > Transform**.

4. A message may ask if you want to apply this new effect; click **Apply New Effect**.

5. In the dialog that opens, set the following options:

Scale
Horizontal: 100%
Vertical: 100%

Move
Horizontal: 0 pt
Vertical: → **Enter your line's height here.**
Check on Preview to see how it looks, and adjust as needed to make it look good.

Rotate
Angle: 0°

Options
☑ Transform Objects   ☐ Reflect X
☐ Transform Patterns   ☐ Reflect Y
☐ Scale Strokes & Effects   ☐ Random

Copies 12 ← **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.**

6. Click **OK**.

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**
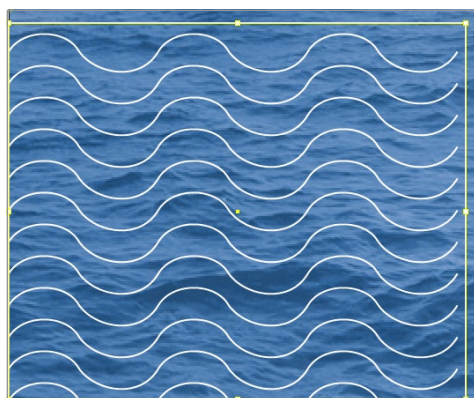
3. As shown to the right, in the **Tools** panel:

   • Make sure **Fill** is active (in front of Stroke).

   • Below the Fill, click the **Gradient** button to apply a gradient.

FILL IS IN FRONT

GRADIENT

4. If you get the default **white to black linear** gradient, move on to the next step. Otherwise, do the following sidebar:
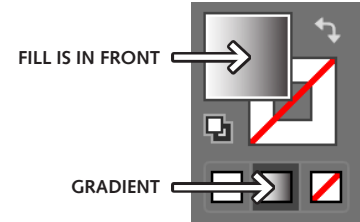

MAKING A WHITE TO BLACK LINEAR GRADIENT

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. Set the **Type** to **Linear**. (If you don't see it, go into the **panel menu** ( ) and choose **Show Options**.)

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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 (maybe you want them to fade out faster), as shown below, click on the mask icon in the **Transparency** panel.
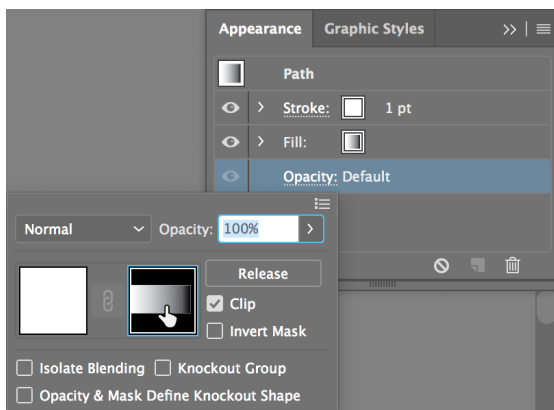
10. Choose the **Gradient** tool (▣).

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.

13. Then click the thumbnail to the left of the mask to return to
the regular artwork.
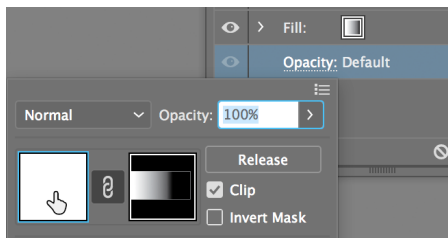
14. Go to **Select > Deselect**.

15. To see the completed art, go to **View > Fit Artboard In Window**.

16. Congratulations, you are on the way to saving the Earth and
mastering Illustrator.

If there are 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.