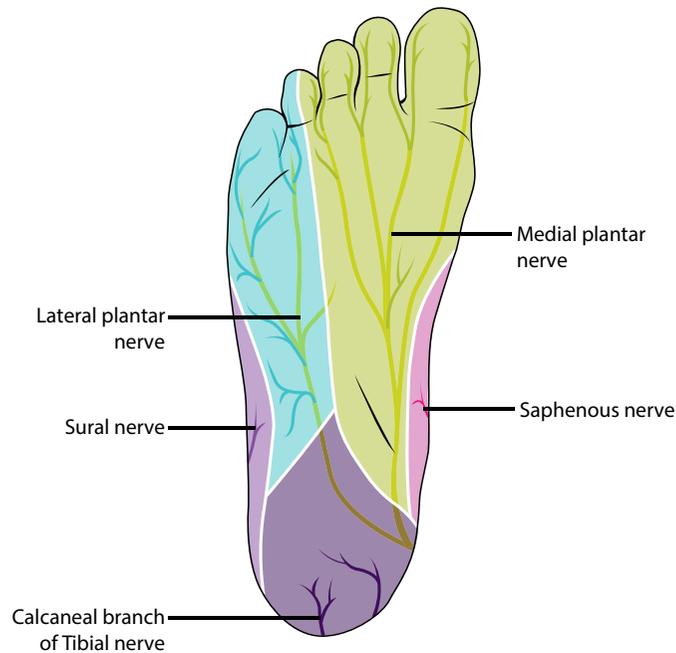MαET

Medical Artists' Education Trust

Illustrator essentials part 2 - follow along tutorial

Recreate this illustration of the areas of nerve innervation of the foot.

Medial plantar nerve

Lateral plantar nerve

Sural nerve

Saphenous nerve

Calcaneal branch of Tibial nerve

First find an image of the bottom of a foot. You can either draw one in Photoshop using a book or photo as reference or for speed of this tutorial, download an image from the internet. If you prefer you can draw a hand instead if you wish to try something different.

Create a new document in illustrator
File>Create New
Name your document Innervation of the foot
Make sure it is set to Print, A4, CMYK portrait and that you have set the bleed margin to 5
Open the downloaded or drawn image in Illustrator and Copy and Paste it to your newly created document.
Open your layers panel and you will find it on Layer One. Name it reference
Position your image and then lock your layer
Create a new layer - name it pen layer
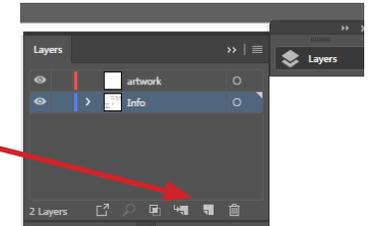
We are going to use the pen tool to create a black outline of the foot. But first you need to learn how to use it
The Pen tool is difficult tool too master but so important and worth the time to learn.
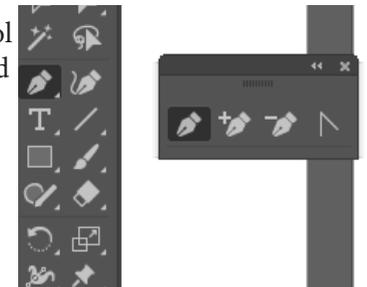Try these easy instructions below. There is also an illustrator file I can give you if you prefer to use that.
If you find guides at all distracting then try these two options:
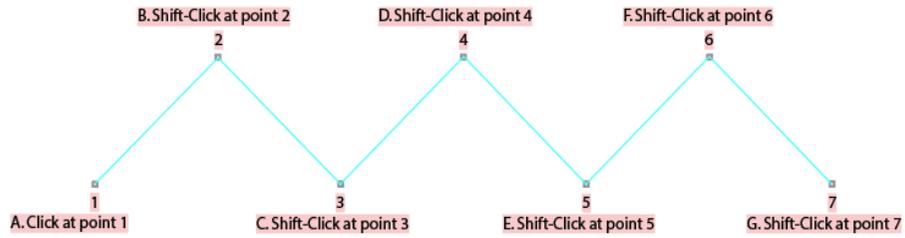View menu >smart guides to turn off smart guides
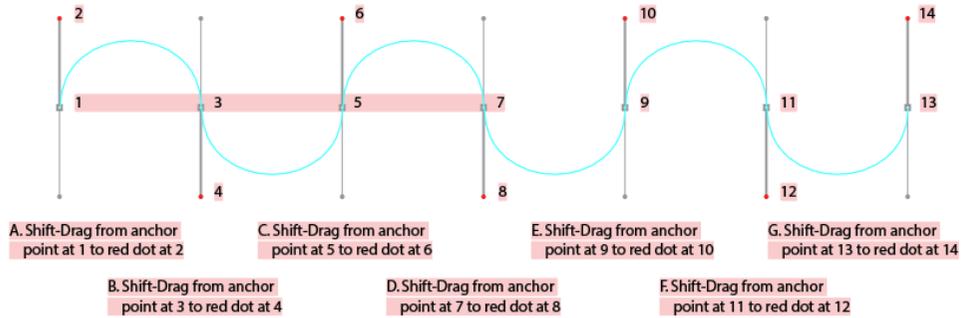View menu>Guides>Hide guides if they are also distracting

If you want to have a pull out menu of all the pen tool then click on the tiny triangle beside the pen tool and drag the menu out.
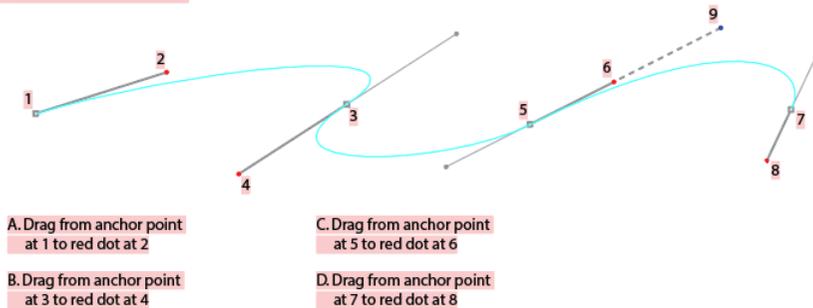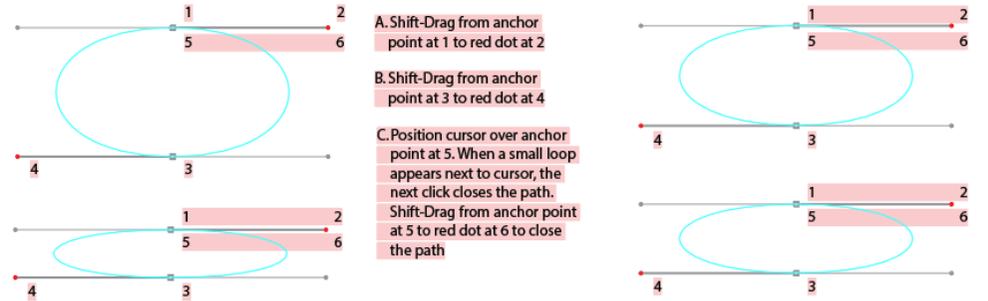
B. Shift-Click at point 2

2
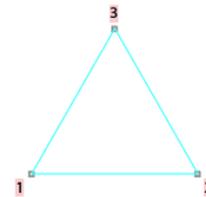
D. Shift-Click at point 4

4

F. Shift-Click at point 6

6

1

A. Click at point 1

3

C. Shift-Click at point 3

5

E. Shift-Click at point 5

7

G. Shift-Click at point 7

Part One: Constrained Paths

| 1 | 2 |
| 5 | 6 |

4
3

A. Shift-Drag from anchor point at 1 to red dot at 2

B. Shift-Drag from anchor point at 3 to red dot at 4

C. Position cursor over anchor point at 5. When a small loop appears next to cursor, the next click closes the path. Shift-Drag from anchor point at 5 to red dot at 6 to close the path

| 1 | 2 |
| 5 | 6 |

4
3

| 1 | 2 |
| 5 | 6 |

4
3

| 1 | 2 |
| 5 | 6 |

4
3

Part One: Constrained Curves

2   6   10   14

1   3   5   7

9   11   13

4   8   12

A. Shift-Drag from anchor point at 1 to red dot at 2

C. Shift-Drag from anchor point at 5 to red dot at 6

E. Shift-Drag from anchor point at 9 to red dot at 10

G. Shift-Drag from anchor point at 13 to red dot at 14

B. Shift-Drag from anchor point at 3 to red dot at 4

D. Shift-Drag from anchor point at 7 to red dot at 8

F. Shift-Drag from anchor point at 11 to red dot at 12

Part Two: Unconstrained Paths

A. Drag from anchor point at 1 to red dot at 2

B. Drag from anchor point at 3 to red dot at 4

| 1 | 2 |
| 5 | 6 |

| 1 | 2 |
| 5 | 6 |

4
3

4
3

C. Position cursor over anchor point at 5. When a small loop appears next to cursor, the next click closes the path. Drag from anchor point at 5 to red dot at 6 to close the path

3

1   2

A. Click at anchor point 1

B. Click at anchor point 2

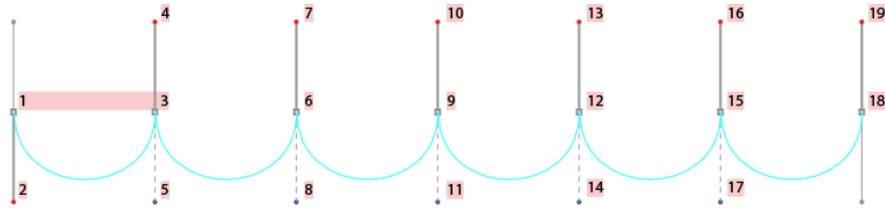C. Click at anchor point 3

D. Position cursor over anchor point at 1. When a small loop appears next to cursor, click to close the path.

3

1

2

Part Two: Unconstrained Curves

2

1

9

6

5

3

7

4

8

A. Drag from anchor point at 1 to red dot at 2

B. Drag from anchor point at 3 to red dot at 4

C. Drag from anchor point at 5 to red dot at 6

D. Drag from anchor point at 7 to red dot at 8

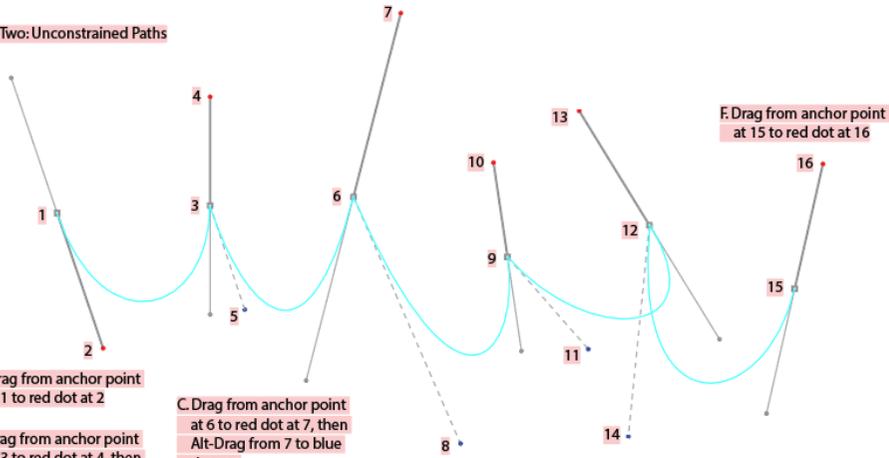## Part One: Constrained Paths

A. Shift-Drag from anchor point at 1 to red dot at 2

B. Shift-Drag from anchor point at 3 to red dot at 4, then Alt-Shift-Drag from 4 to blue dot at 5

C. Shift-Drag from anchor point at 6 to red dot at 7, then Alt-Shift-Drag from 7 to blue dot at 8

D. Shift-Drag from anchor point at 9 to red dot at 10, then Alt-Shift-Drag from 10 to blue dot at 11

E. Shift-Drag from anchor point at 12 to red dot at 13, then Alt-Shift-Drag from 13 to blue dot at 14

F. Shift-Drag from anchor point at 15 to red dot at 16, then Alt-Shift-Drag from 16 to blue dot at 17
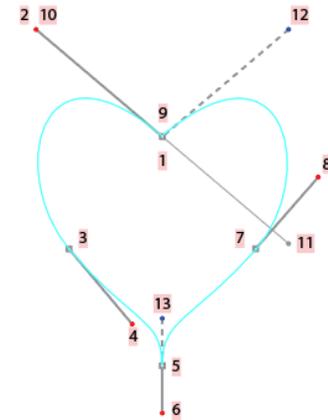
G. Shift-Drag from anchor point at 18 to red dot at 19

(Windows®: use Alt to activate the Convert Direction Point Tool)
(Macintosh®: use Option to activate the Convert Direction Point Tool)

Part Two: Unconstrained Paths

A. Drag from anchor point at 1 to red dot at 2

B. Drag from anchor point at 3 to red dot at 4, then Alt-Drag from 4 to blue dot at 5

C. Drag from anchor point at 6 to red dot at 7, then Alt-Drag from 7 to blue dot at 8

D. Drag from anchor point at 9 to red dot at 10, then Alt-Drag from 10 to blue dot at 11

E. Drag from anchor point at 12 to red dot at 13, then Alt-Drag from 13 to blue dot at 14

F. Drag from anchor point at 15 to red dot at 16

A. Drag from anchor point at 1 to red dot at 2

B. Drag from anchor point at 3 to red dot at 4

C. Drag from anchor point at 5 to red dot at 6

D. Drag from anchor point at 7 to red dot at 8

E. Position cursor over anchor point at 9. When a small loop appears next to cursor, the next click closes the path. Click and drag from anchor point at 9 to red dot at 10 to close the path

F. Then Option-drag (Macintosh®) or Alt-drag (Windows®) from handle at 11 to blue dot at 12

G. Press the Ctrl key (Windows) or Command key (Macintosh) to select the direct selection tool and drag a marquee around anchor point at 5. When a handle appears at 6, Option-drag (Macintosh) or Alt-drag (Windows) from handle at 6 to blue dot at 13

Once you have mastered the pen tool then start creating your outline around the foot. Make sure you have the Fill OFF

Delete all your previous scribbing and make sure you are on layer 2 and the foot layer below is locked

Remember to change the line width to something more bold if you need.
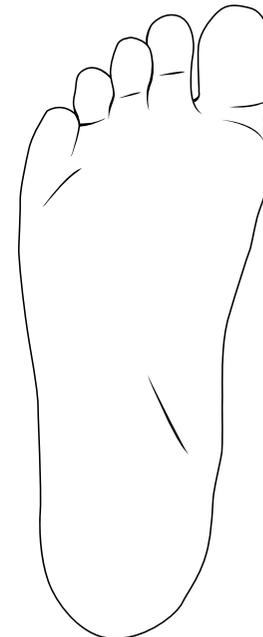
Once you have finished your outline, we are going to make it into a fill rather than stroke so we can add more contour and definition
Marquee select all of your outline and then go to Object menu>Path>Outline Stroke
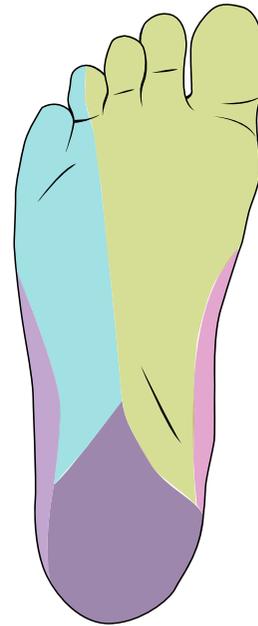This will change your line to a fill.
Now you can edit the anchor points to create sharper and thicker lines
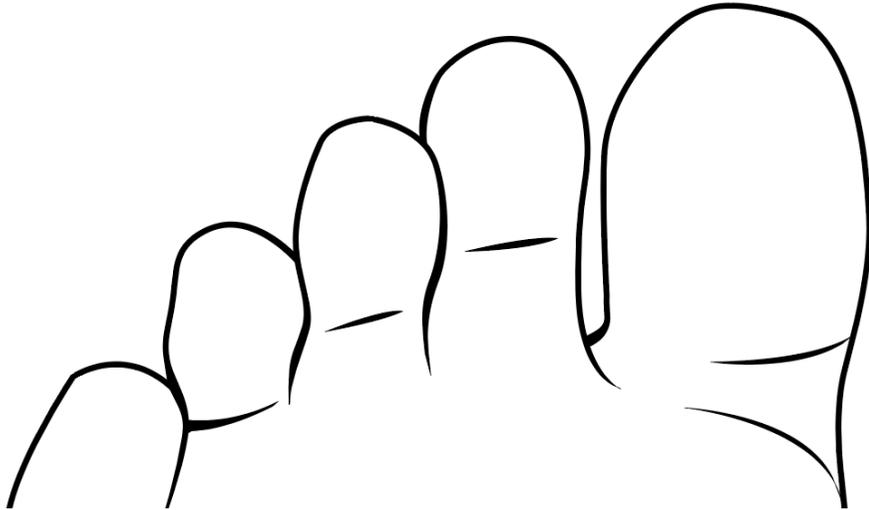
Create a new layer and place it below the Pen layer.
Name it Colour layer

Lock the pen layer so you don't edit it

Now on the Colour layer create your seperate innervation areas. You may look this up on the internet of find a book to help.
Use the Pen tool to outline the area, but turn off stroke colour and just add a fill of what ever colour you like.

Then create the nerves.
Create a new layer. Call it nerves
Place it below the white line layer.
You will want to create them to be brighter or bolder than the colour layer below.
Go back to the colour layer and then to the appearance panel and lower each of their opacity to 50%

Once you are happy with this, you can add white lines to seperate the areas just for extra clarity.
Create a new layer above the colour layer
Call it White lines
Create the white lines. You can keep these as strokes and there is no need to make them into Outline strokes.
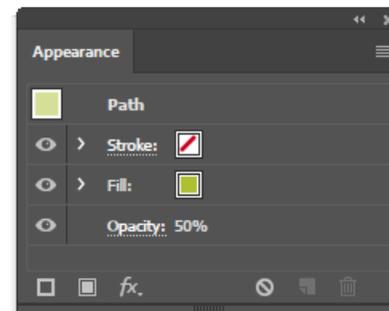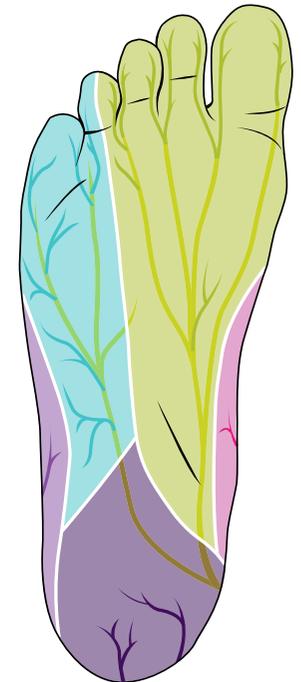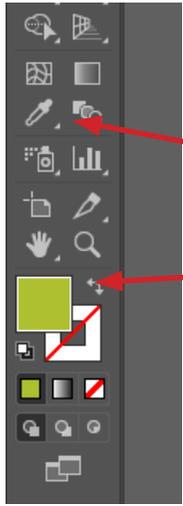
If you want the nerves to be accents of the colour of the innervation zone then you need to colour pick the zone colour.

Use the eye drop tool to pick the colour of your innervation zone, go back to the nerve layer and then start drawing the nerve as a stroke with no Fill. You may have to use this arrow to switch the colour from fill to stroke.
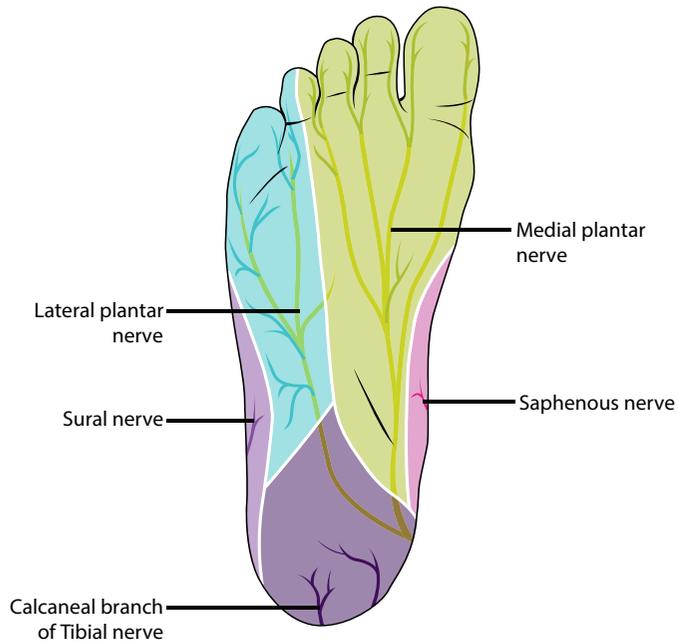
Create them as strokes with no fill.
Change their colours depending on which site they are innovating.

Once finished, make them Outline strokes like before and close off the ends.

Remember to always align your line and text so the line runs through the center of your lettering - ie. the line is in-line with the middle line on the lower case letter e.
Jo Cameron will explain more and I will cover it in another tutorial.

End of part 2

Medial plantar nerve

Lateral plantar nerve

Sural nerve

Saphenous nerve

Calcaneal branch of Tibial nerve

Once your illustration is finsihed, you need to label them.
Create new layer
Call it labels layer
Use the line too and press Shift when creating the lines to make sure they are 100% horizontal.

Use the Type tool to create the labels