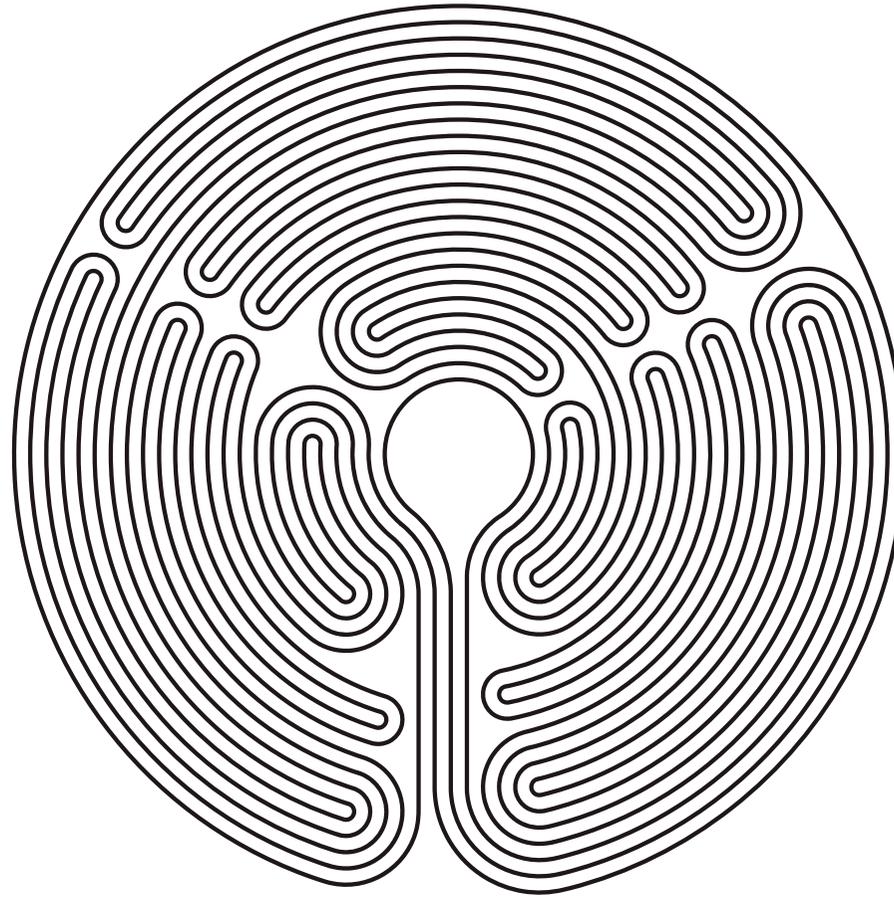


# ART ON THE UNDERGROUND



**The Tube Trail:**  
a family activity inspired by  
*Labyrinth*, a major contemporary  
art commission by Mark Wallinger



Supported using public funding by  
**ARTS COUNCIL  
ENGLAND**

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## Foreword

This London Underground trail is for families and groups of all ages. Activities are designed to be generic, so that they can be completed at any station on the network. Section 1: *Going Underground*, requires a visit to a Tube station, whilst Section 2: *Tube Teasers* can be completed at any location or whilst en-route between stops on a journey. It can be dipped in and out of or completed in one go – it's up to you to decide how to use it.

The trail is inspired by a series of permanent artworks on the Tube by artist Mark Wallinger, commissioned by Art on the Underground in 2013. *Labyrinth* marks the 150th anniversary of the London Underground, the world's first underground railway. A total of 270 unique circular artworks depicting labyrinths have been installed across the network. An artwork lies in wait at every station to be found by you!

The location of the labyrinth differs at each station, whether in the ticket hall, in a walkway or on the platform. Beneath each labyrinth is a red cross – X marks the spot where our journey begins. The circular route reminds us of the

individual journeys that millions of us take on the Underground each day. Where will the path lead us? The spread of labyrinths across London is like a trail in itself, encouraging us to seek them out. As Wallinger says, "In a sense, the search for the labyrinth within the station is another puzzle."

As well as helping you to find out more about *Labyrinth*, this trail aims to open your eyes to the wonders of the Underground environment, both old and new. Look again – how much do you really see as you travel through the network of stations, platforms and railways? How much do you know about this historic form of public transport?

# Contents

<b>4</b>	<b>Section 1: Going Underground</b>
	1) I spy a labyrinth
	2) X marks the spot
<b>5</b>	3) Journey to the centre
	4) We are family
<b>6</b>	5) Count, count and count again
	6) Shape finder
<b>7</b>	7) Fun with fonts
<b>8</b>	8) Perfect patterns
<b>9</b>	9) People watching
<b>10</b>	10) Number cruncher
<b>11</b>	11) On the platform
	12) Above ground
<b>12</b>	<b>Section 2: Tube Teasers</b>
	1) TUBE
	2) What's in a name?
<b>13</b>	3) Station anagrams
<b>14</b>	4) Take a line for a walk
<b>15</b>	5) Challenge yourself
	6) Poems on the Underground
<b>16</b>	7) Draw your own labyrinth
<b>17</b>	<b>Appendix I: Labyrinth log</b>
<b>18</b>	About Credits

## Section 1: Going Underground

These activities and ideas rely on observations in a Tube station or on an Underground journey. For tasks that can be completed at home or elsewhere, please see Section 2: *Tube Teasers*.

### 1) I spy a labyrinth

Visit any station on the London Underground. Write the name of the station here:

---

Find the station's labyrinth. The red cross marks the spot "Your journey starts here." Starting from the cross, trace the path to the centre and back out again using your finger. You'll notice that there's only one way in and out again. This single path, with no choices or dead-ends, is what makes it a labyrinth and not a maze. You can't get lost in a labyrinth.

Write down the number on the bottom right hand corner of the labyrinth here:

---

This number is unique to the labyrinth. It refers to the order in which this station was visited during the 2009 Guinness World Record Tube Challenge journey.<sup>1</sup> The Tube Challenge rules state that participants don't have to travel along all Tube lines, but must pass through all stations on the system. They may connect between stations on foot or by using other forms of public transport.

To have a go at planning your own Tube Challenge route, go to Section 2, Question 5 (p.15)

<sup>1</sup> The Guinness World Record Tube Challenge was completed by Andi James, Martin Hazel and Steve Wilson on 14 December 2009 in 16 hours, 44 minutes and 16 seconds. A new world record time of 16 hours, 20 minutes and 27 seconds was set in August 2013 by Geoff Marshall and Andy Smith.

Visit <http://art.tfl.gov.uk/labyrinth/> to see the Tube Challenge 2009 route animated on the Tube map.

### 2) X marks the spot



Stand by the labyrinth, by the X marking "You are here." How would you tell a friend how to find the labyrinth in this station? Think about prominent features around it and in relation to its location, e.g. ticket machine, steps, tickets barriers, platform. Write or draw your instructions in the box below:



Medieval



Square



Native American



Cretan



Opposed



Turf



Organic



Chamfered



East



Woodcut



Emboss

Labyrinth design families

### 3) Journey to the centre

The labyrinth's path always leads to the centre, before taking you back out again. What is in the centre? Is it your destination today? Is it something you hope to find? Something you hope to achieve? Close your eyes and use your imagination. What could be waiting for you in the heart of the labyrinth? Write or draw in the box below:

### 4) We are family

Each of the 270 unique labyrinths belongs to one of eleven design families shown on this page.

Can you work out which design family the labyrinth you've found belongs to? Write down the labyrinth's number, location and family name below:

Labyrinth No:

---

Location/station name:

---

Design family:

---

Use the comments box in the *Labyrinth log* (Appendix I, p.17) to note design-family names whenever you spot a new labyrinth. How many examples of different design families can you spot on your journey?

### 5) Count, count and count again

As you make your journey from the starting point of the labyrinth, count your movements and the things you notice, in your head, e.g: the number of steps to the platform, posters along an escalator, ticket machines, maps, the London Underground's logo 'The Roundel'.

The roundel logo first appeared on Underground station platforms in 1908. It is the unifying symbol of London's transport services and is widely recognised as an icon of the city.

Time how long it takes you to get from the labyrinth to different points in the station, e.g. to the exit, to the platform, onto the train.



### 6) Shape finder

Look around you. What shapes can you see? Draw a circle around each of the shapes below as you find them.



square



triangle



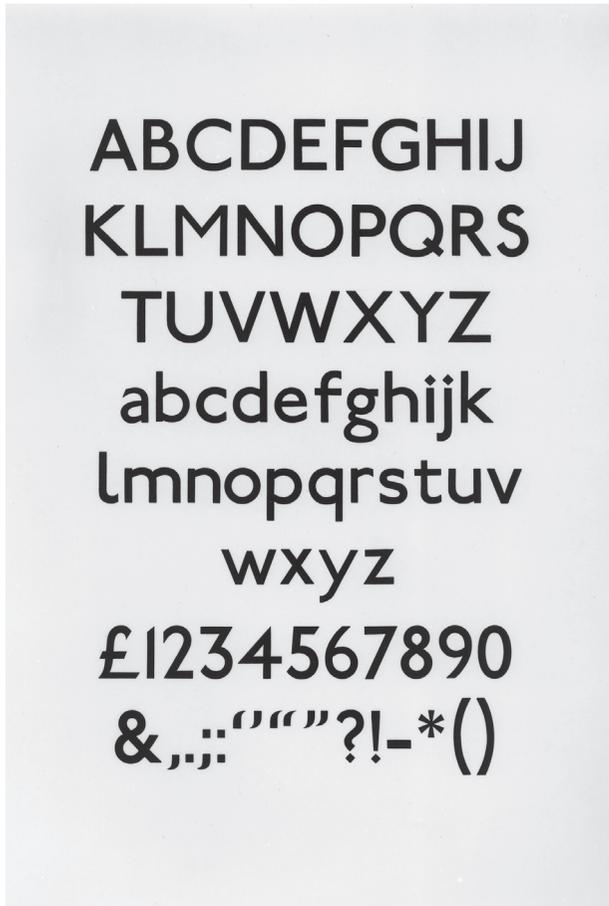
rectangle



circle

Throughout your journey look out for different shapes and draw them in the box below.

Name the new shapes you've found. Do you know any of their mathematical properties? For example, do they have any equal lengths, equal angles, one or more lines of symmetry? Is it a 2D or 3D shape?



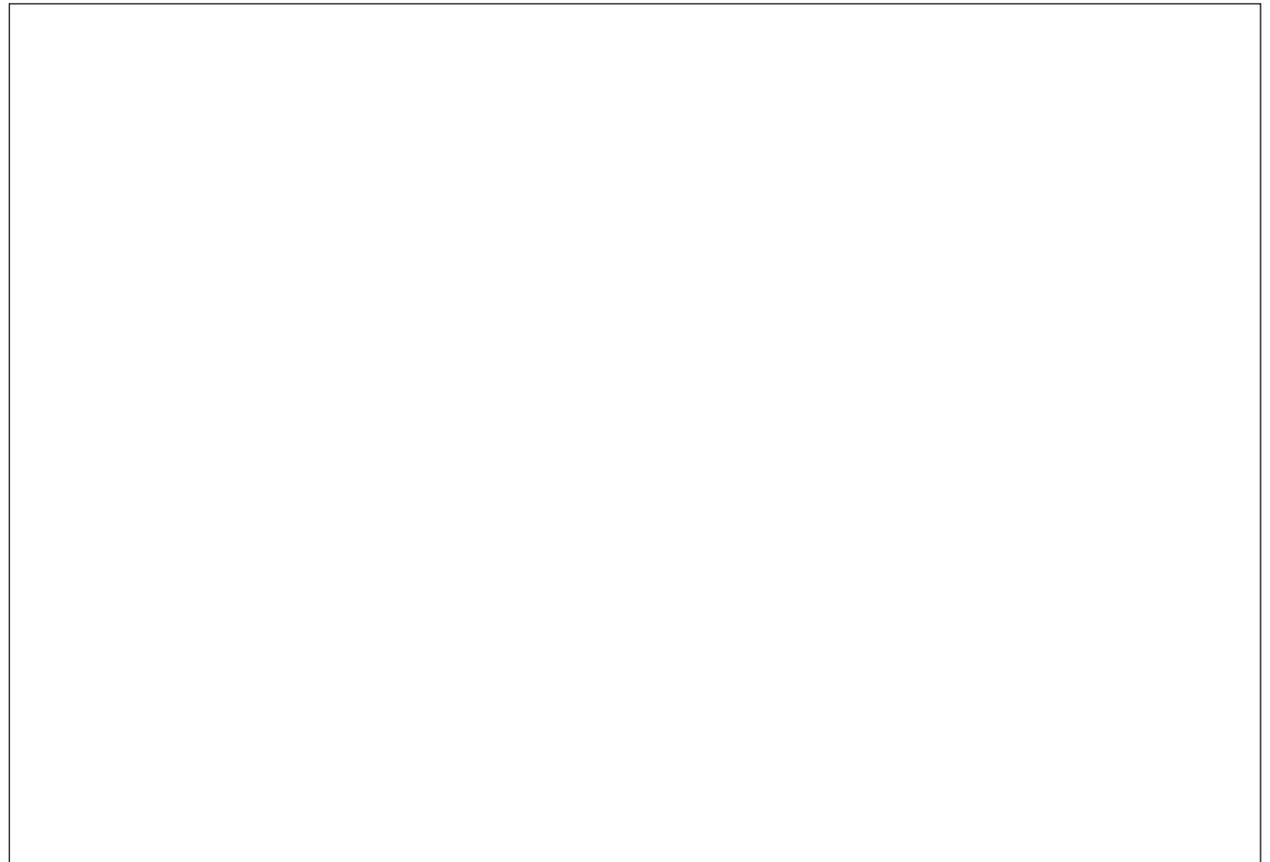
Proof sheet of Johnston Sans Typeface

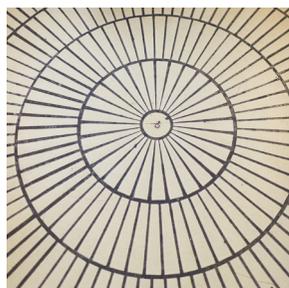
<sup>2</sup> New Johnston is a typeface designed by and named after Edward Johnston. Commissioned in 1913 by Frank Pick, Commercial Manager of the Underground Electric Railways Company of London, the new font was a part of his plan to strengthen the company's corporate identity, which led to the Underground brand.

### 7) Fun with fonts

The lettering used on the Underground and in this trail is known as New Johnston. <sup>2</sup> Features of the font include the perfect circle of the letter O and the use of a diagonal square dot above letters i and j and for the full stop. Commas, apostrophes and other punctuation marks are also based on the diagonal square dot. Can you see these shapes within Underground signage? Copy a word incorporating a circle or diamond shape that you've spotted below:

Can you design your own new font using different shapes within the letters?





### 8) Perfect patterns

Design has always played a big part in the London Underground. Look around you – up, down, left and right. What patterns can you see? Look at the walls, floors, stairs and entrances of stations. Notice patterns on and within Tube carriages.

Describe or draw three of the different patterns you can see on the Underground in the box below and note where you saw them.

When the Tube was first designed, unique colours and patterns of tiles were created for each station platform, to help those who couldn't read to recognise their station. Some newer stations, such as those on the Victoria line, have artist-commissioned tiles that reflect the station name, including the seven trees of Seven Sisters station.

Make your own design for a new station tile in the box below. Which station is this for?



*Clockwise*  
Detail of Paolozzi wall mosaic, Tottenham Court Road station; Detail of floor, Tottenham Court Road station; Moquette, Bakerloo Tube carriage; Detail of tiles, Seven Sisters station

### 9) People watching

4 million journeys take place on the Tube every day! Stop for a moment and watch some passengers. Create a tally chart of the number of people passing by a fixed point in the station. Before you start, decide how long you're going to do the survey for, e.g. 1, 2, 5 or 10 minutes.

What are you going to record? You may want to count the number of:

- People wearing red, black or white clothes
- Men, women or children
- People carrying an umbrella
- People wearing hats

Did you expect the results you obtained? What do you think your results would have looked like if you'd tallied for an hour or a day?



*Labyrinth* by Mark Wallinger at Victoria station

Item to count	Tally



### 10) Number cruncher

Each Underground train carriage has an identification number. These numbers can be three, four or five digits long. Similarly, each labyrinth artwork is numbered at the bottom right-hand corner. Record a number you've seen here:

---

Your challenge is to make a calculation equalling the labyrinth number using only the digits of your train carriage number.

For example, if your carriage number is 5547 and the labyrinth number is 22 then you could create the following calculation:  $4 \times 5 + 7 - 5 = 22$

If your carriage number is 21060 and the labyrinth number is 63 then you could create either one of the following calculations:

$$60 + 2 + 1 \text{ or } 2^6 - 1 = 2 \times 2 \times 2 \times 2 \times 2 - 1$$



Top  
Arnos Grove station

Bottom  
Southgate station

### 11) On the platform

Underground platforms are very long, allowing many passengers to get on and off at the same time.

Measure the length of the platform from end to end using pigeon steps or strides. Before you pace it out, make an estimate of the number of steps and record it here.

How many did you count?

---

Did your actual result differ much from your estimate?

---

How would you find the halfway point in the length of an Underground platform? Write down three different methods you can use to do this in the box below.

### 12) Above ground

Station design has always been an important part of the Underground. When you go above ground, look at the station entrance. Look up as well as around you. What shapes, patterns and designs do you see? Draw some details below.

Charles Holden was the architect responsible for a brand-new look to stations from 1923. Amongst other achievements, he was responsible for the design and build of seven new stations in south London for the extension of the City and South London Railway (now part of the Northern line) from Clapham Common to Morden.

## Section 2: Tube Teasers

These puzzles and ideas could be completed at a station, during a journey, back at home or elsewhere. They're not dependant on direct observations in a station.

### 1) TUBE

How many different ways can the word TUBE be read in the arrangement shown?

Start your word journey at T and then go up or down, left or right, in any direction you wish, as long as you always pass from one letter to another that adjoins it. Circle each word as you find it.

E  
E B E  
E B U B E  
E B U T U B E  
E B U B E  
E B E  
E

### 2) What's in a name?

Look at a Tube map.

Can you find the three stations whose names contain all the vowels a, e, i, o, u?

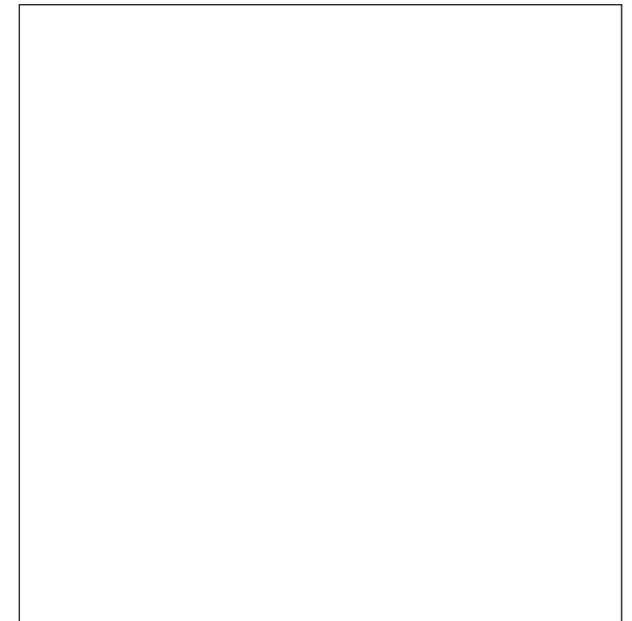
1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

Which stations do you think have interesting names? Why do you think these names were given in the first place? Give reasons for your answers.

To find out more about the origins of place names used for stations on London's Underground see: *What's in a Name?* by C.M. Harris, Capital Transport Publishing, 2001.





Russell Square, Tottenham Court Road  
and Seven Sisters stations

### 3) Station anagrams

Pick a station name. How many words can you  
make out of the letters of the station?

Before you start, estimate how many different  
words you may find.

#### 4) Take a line for a walk

Look at the legend in the bottom left-hand corner of a Tube map. How many lines are there?

---

Each line is represented by a different colour on the map and in signage across the network.

The Tube map in use today comes from Harry Beck's 1931 design.<sup>3</sup> Since 2004 Art on the Underground has commissioned a series of new works by contemporary artists especially for the cover of the pocket Tube map, a small leaflet available free from all London

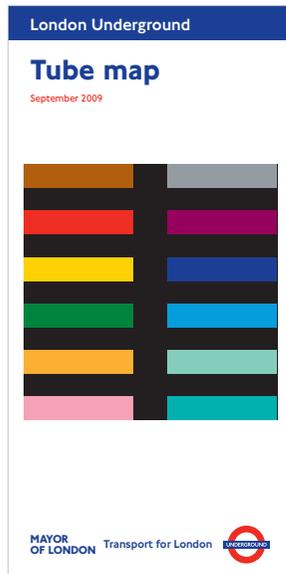
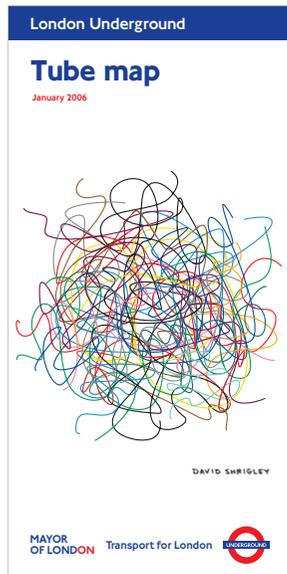
Underground stations. Some artists, including David Shrigley and Richard Long, have made works inspired by Beck's design.

See more at: <http://art.tfl.gov.uk> (search Artists, Projects & Events: Tube Map Cover series)  
Listen to podcasts of artists at: <http://art.tfl.gov.uk> (search Podcasts: Artists on the Underground)

Create your own drawings, designs and doodles using only the colours of the Underground lines. Draw your design in the box below, or go BIG using coloured chalks, wool or tape on the ground or floor at home!

Left  
David Shrigley, *Untitled*, 2005

Right  
Richard Long, *Earth*, 2009



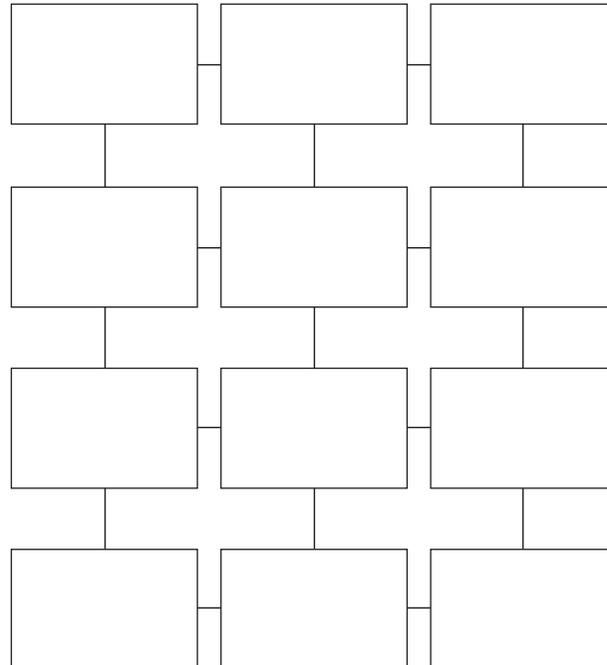
<sup>3</sup> Beck was a London Underground employee who realised that because the railway ran mostly underground, the physical locations of the stations were irrelevant to the traveller wanting to know how to get to one station from another. He simplified the network based on the interactions of the lines themselves rather than their actual location in relation to one another. This form of map is called topographical.



### 5) Challenge yourself

Warm-up for your very own Tube Challenge!

Write the names of 12 Tube stations in the boxes below. Starting at any station on the grid, find the shortest route to take you across all the 11 lines to visit each station. You'll need to go over some of the lines more than once to complete your journey.



<sup>4</sup> Poems on the Underground was launched in 1986. Poems are displayed on posters in 3,000 advertising spaces in train carriages across London, and are usually changed three times a year. They are selected by Judith Chernaik, together with poets Cicely Herbert and Gerard Benson. The scheme is supported by TfL, as well as The British Council, London Arts, The Poetry Society and Arts Council England.

### 6) Poems on the Underground

Next time you're in a carriage, look out for Poems on the Underground.<sup>4</sup>

*We're going on a journey  
on the London Underground.  
A world of patterns, shapes and numbers  
colours and sounds.  
Going on a journey  
Are we nearly there?  
Seen so much, done so much  
and now we've arrived X*

Use your journey as inspiration for your own poem. Write down words that describe your experience of being on the Tube. Think about sounds, smells, sights and emotions.

Now write your short poem here:

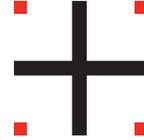
A large, empty rectangular box with a thin black border, intended for the student to write their poem.

## 7) Draw your own labyrinth

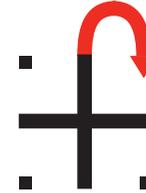
There are a number of ways to create a labyrinth. Follow the instructions below to draw your own simple three-circuit classical labyrinth.



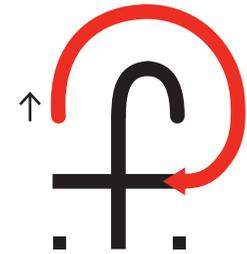
1. Draw a cross



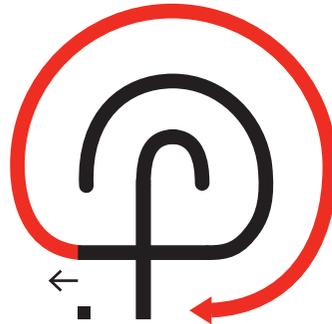
2. Draw a dot in each corner



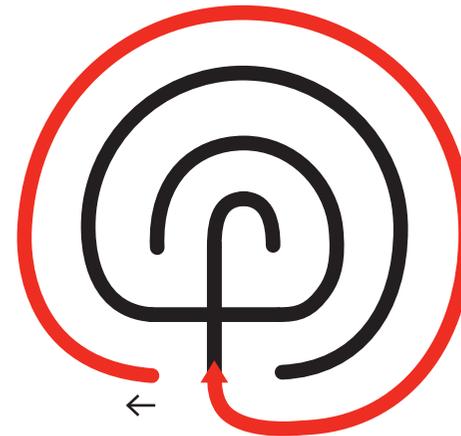
3. Connect top with top right dot



4. Connect the top left dot with the right arm of the cross



5. Connect the right arm of the cross with the bottom right dot



5. Connect the bottom left dot with the lower arm of the cross

## Appendix I: Labyrinth log

Every time you come across a labyrinth,  
record it here. How many can you find?

Station name	Labyrinth number	Date	Time	Comments

## About

Art on the Underground  
<http://art.tfl.gov.uk>

Our vision is to present 'World Class Art for a World Class Tube'. We provide a programme of contemporary art that enriches the Tube environment and customers' journey experience, as well as continuing London Underground's long-standing tradition of art and design at the core of its identity and services. Visit our website for more information about *Labyrinth* and other exhibitions and projects on the Underground.

## Credits

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