Labyrinth Teacher Pack
Part 1: Introduction
Key Stages 1–5

Visit [http://art.gov.uk/labyrinth/learning](http://art.gov.uk/labyrinth/learning) to download Part 2: Classroom Activities, Cover Lessons & Resources
This two-part resource, produced in partnership with A New Direction, has been devised for primary- and secondary-school teachers, with particular relevance to those in reach of the Tube, as an introduction to *Labyrinth*, a project commissioned from artist Mark Wallinger by Art on the Underground to celebrate the 150th anniversary of the London Tube.

**Foreword**

“The end of all our exploring / Will be to arrive where we started / And know the place for the first time.”

From *Little Gidding* by T.S. Eliot.

The aim is to inform and inspire teachers about this special project, for which Wallinger has designed a unique artwork, each bearing a labyrinth design, for all 270 stations on the Tube network. We hope that the resource will promote knowledge and enthusiasm that will then be imparted to the children and their families throughout the capital and beyond, and will encourage them to explore the Underground network on an exciting hunt for labyrinths.

This Teacher Pack, Part I of the resource, provides introductory information about the project *Labyrinth* and gives background details about the artist. In addition, a brief history of labyrinths is presented as a starting point for the activities in Part 2.

Visit [http://art.gov.uk/labyrinth/learning](http://art.gov.uk/labyrinth/learning) to download the Teacher Pack, Part 2: Classroom Activities, Cover Lesson & Resources. This pack contains a variety of classroom-activity suggestions for different subjects that can be used as a springboard for teachers to devise their own projects. Key stage suggestions are given, although many of these activities can be adapted for a variety of year groups, depending upon the ability of the students involved.

Details are also given about the *Labyrinth* Schools Poster Competition, the winners of which will have the chance to work with a designer and see their posters produced and displayed on the Tube network. Cover lesson plans devised for secondary-school art lessons that could be useful during the exam period are included. Finally, a list of useful resources have been compiled to help with further research and investigation.

**Enjoy the journey!**
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To celebrate the 150th anniversary of London Underground, one of the UK’s leading contemporary artists, Mark Wallinger, has been commissioned to create a major new project. The result is 270 individual artworks, each bearing its own unique circular labyrinth, for all 270 stations on the Tube network. A series of posters has also been created by Rose design with Wallinger to promote the project across the Tube network.

Watch the Art on the Underground video interview with Mark Wallinger, in which he talks about his childhood relationship to the Underground, his project, how it evolved and how the 270 different designs are made.

Video Link – [http://art.tfl.gov.uk/labyrinth/about](http://art.tfl.gov.uk/labyrinth/about)

Search ‘Labyrinth’
150th Anniversary of London Underground

On 9 January 2013, London Underground celebrated the 150th anniversary of the first underground journey, which took place between Paddington and Farringdon on the Metropolitan Railway.

Art on the Underground is presenting a number of special projects to mark the anniversary, alongside Labyrinth. In addition London Underground, in partnership with London Transport Museum, is also celebrating with a range of events and activities throughout 2013. The events will explore the Tube’s history and look at the role it will play in the future – both in the lives of Londoners and in the economy of the City and the UK.

For further information on the Museum’s events and activities please visit www.ltmuseum.co.uk

Clockwise from top left
St James’s Park, Tottenham Court Road, Embankment, Baker Street, Bank, Westminster, Oxford Circus, King’s Cross St Pancras, Green Park and Victoria stations.
**Location**
At each station, the location of the artworks will be different, whether in the ticket hall or on the platform, encouraging people to seek them out. “In a sense the search for the labyrinth within the station is another puzzle,” Wallinger has said. The red cross marked at the entrance of each labyrinth represents us, the travellers, and is the cue to enter into the puzzle. In your own local station the labyrinth will become a familiar symbol that marks the start and end of your journey.

**Craftsmanship**
Each artwork has been handmade by the company specialising in silkscreen printing and vitreous enamel signage that makes the signs for London Underground. “The quality of workmanship and handmade quality of these signs is one of the many reasons why people cherish the Tube”, Wallinger states.

**Numbers**
Each labyrinth has a number, from 1 to 270, handwritten by the artist in the bottom-right corner. Ticking off as many of these numbers as they can see makes a great game for children. The numbers refer to the order of stations visited in the ‘Guinness World Record Tube Challenge’, set in 2009, for the fastest time taken to pass through every single station on the London Underground network. The rules are that participants do not have to travel along all Tube lines to complete the Tube Challenge, merely to pass through all the stations on the system. They may connect between stations on foot, or by using other forms of public transport. The record-winning optimum route in 2009 began in Chesham and finished at Heathrow Terminal 5. It took just over 16 hours.

**World Record**
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. James and Wilson are also the current record holders, completing the challenge in 16 hours, 29 minutes and 13 seconds on 27 May 2011.

The ancient labyrinth symbol has been found all over the world in different forms. Dating back over 4,000 years, it transcends religions, time and cultures and is a universal symbol representing the journey into the inner self.

Wallinger has been fascinated by journeys, whether physical, imaginative or spiritual, throughout his career. Each day Londoners begin their daily ritual with their journey from home to work and finish it with their trip back home again. At these rush hours, the sheer mass of people moving in different directions can make the Tube a daunting place for those unfamiliar with it. But Londoners, as Wallinger reflects, learn to internalise the Tube map and hold its information in their heads, so that it effectively becomes “part of their unconscious”.

**Echoes with nature**

The labyrinth shape echoes spirals in nature: galaxies, hurricanes, snails’ shells, spiders’ webs and ferns. And additionally the labyrinth shape could be said to echo the shapes in our bodies, such as the surface of the brain, inner ear, intestines, umbilical cord and womb.

“Mostly we go about our business, journeying to work on the Tube and return home along a prescribed route. The seeming chaos of the rush hour is really just the mass of individuals following the thread of their lives home. Labyrinth is a symbol of both the individual sense one makes of one’s encounters with the Tube and a mental space or something more contemplative. The journeys we take on the Underground are unique to each of us. I hope Labyrinth can perhaps reflect that individual yet universal experience.” Wallinger

**Is it a Maze or a Labyrinth?**

Originally, the terms ‘maze’ and ‘labyrinth’ were interchangeable. In modern times, though, they have come to mean slightly different things. The difference between the two is simple: a maze offers choices: it is a puzzle, full of tricks and false turnings where we can easily get lost. A labyrinth may look similar to a maze, but if you follow the path, it contains only one route to the centre and then out again, despite its twists and turns. Unlike mazes, labyrinths offer no choices along the way; the only decision is whether to enter and trust the path. You effectively enter a maze to lose yourself and a labyrinth to find yourself.

From early on in its history, the labyrinth became associated with the Greek legend of Theseus and the Minotaur. However, the fact that Theseus needed the help of Ariadne’s skein of thread to navigate the complex passageways of the Minotaur’s lair would suggest that it was in fact a maze and essentially a puzzle.
In the background to Labyrinth and the journeys facilitated by the Tube in the 21st century is the story of the creation of the network itself. Wallinger sees the project as an exciting opportunity to explore the Underground as a whole, which was the world’s first underground railway.

**Graphics and Materials**
Wallinger has referred in Labyrinth to the design language of the Tube, in terms of colours, graphics and materials. His artworks sit comfortably alongside London Underground’s two major design icons, the Tube symbol known as the Roundel, and Harry Beck’s Tube map. Yet Labyrinth also stands out as a new symbol marking the Tube’s 150th year. Rendered in punchy black, white and red graphics, the artworks are produced in vitreous enamel, a robust material that will last as long as the stations themselves. It is used for much signage throughout London Underground, including the Roundel, whose circular shape the Labyrinth artworks echo. VE ink is silkscreen printed by hand in layers onto sheets of metal and fired in a furnace until they melt and fuse together. The result is a tactile surface: the raised black labyrinths invite viewers to trace the route with their fingers, and to understand the labyrinth as a single meandering path into the centre and back out again.

**Frank Pick (1878–1941)**
Frank Pick began working with Underground Electric Railways Company of London (UERL) in 1906. Moving through the ranks, by 1908 he had become Publicity Officer responsible for marketing. With a strong interest in design and its use in public life, he began developing the strong corporate identity and visual style for which the London Underground has become famous. He steered the development of London Underground’s identity into a highly recognisable brand by commissioning eye-catching commercial art, graphic design and modern architecture, including commissioning the first versions of the Roundel logo and the New Johnston Font, which is still used today. He believed that if the various elements of the Tube – whether the station entrances, platforms or artworks and fixtures around the entire network – were well designed, people would feel happier and therefore engage with them more. The early posters were very important in order to relay to passengers information about Tube etiquette, or to inspire them to visit certain stations, or simply to be seen as beautiful artworks. In order to maintain travellers’ interest, Pick commissioned a variety of different styles for the posters from renowned artists such as Man Ray, Edward McKnight Kauffer and László Moholy-Nagy.

To explore the collection of Tube posters visit [www.ltmcollection.org/posters/index.html](http://www.ltmcollection.org/posters/index.html)
New Johnston Typeface
To make the Underground Group’s posters and signage more distinctive, Frank Pick commissioned calligrapher and typographer Edward Johnston (1872–1944) to design a clear new typeface. Johnston created a sans serif font (using simple plain strokes) called ‘Underground’, now known as ‘Johnston’. It was first used in 1916 and was so successful that, with minor modifications, it is still in use today.

The Roundel
The Roundel was also designed by Edward Johnston in 1908 and is now over 100 years old. It is one of the most iconic and enduring symbols, recognised worldwide.

Above
Edward Johnston in his garden, 1930’s

Right
Proof sheet of Johnston Sans Typeface

Far right, top
Solid disc Tufnell Park Roundel, 1908

Far right, bottom
Edward Johnston design guidelines for Underground Roundel, 1925
Harry Beck’s Tube Map

Harry Beck (1902–1974) drew up the diagram for the London Underground Tube map in 1931 in his spare time while working as an engineering draftsman at the London Underground Signals Office. Aiming to simplify the complexity of the lines, he realised that because the railway was mostly underground, the actual geographical locations of the stations and their distances from each other were irrelevant to Tube users, who only wanted to know how to get from one station to another. The sole physical landscape feature that he represented was the Thames. It was Beck’s idea to create a network map in colour. Once introduced to the public in 1933 it immediately became popular, and has been used ever since. Beck worked tirelessly to shape and mould the map to developments on the Tube for nearly thirty years.

“The London Underground Diagram has achieved the status of a defining icon of information design. Its continuing ability to take adaptation to meet the changing needs of travellers, whilst retaining its essential character is perhaps its most enduring characteristic.”
Andrew J Scott
Tube-Map-Inspired Art

Harry Beck’s Tube map has inspired many artists and been the stimulus for much creative work.

Examples of poster designs:

**David Booth, Of Fine White Line, 1986**
In this poster, each Underground line is represented by coloured paint squeezed from a tube, with one tube remaining in the location of the nearest Tube station to the Tate Gallery, now Tate Britain.

**Simon Patterson, The Great Bear, 1992**
Having sought permission from London Transport to use the official Tube map, Patterson replaced the station names with those of philosophers, actors, saints and others at the forefront of major world developments. Each profession is given its own line, on which their names are gathered. The title *The Great Bear* refers to the constellation Ursa Major, a punning reference to Patterson’s own arrangement of ‘stars’. This work blurs the boundaries between fine art and design, encouraging the viewer to recognise and celebrate design as art.

Right
David Booth,
*Of Fine White Line*, 1986

Far right
Simon Patterson,
*The Great Bear*, 1992
Since 2003 Art on the Underground has commissioned a series of contemporary artists each to create a new work for the front cover of the pocket Tube map, which is free and available at stations. Many of the works invite a moment of contemplation for passengers while travelling across the network.

Here are two examples:

**David Shrigley, Untitled, 2005**
Shrigley’s abstract tangle made up of the same coloured lines as those used on the Tube map itself immediately references the iconic map. In this humorous work the artist takes the reassuring order of the Underground map and turns it into a wiggling chaotic scribble that resembles a big plate of spaghetti.

**Richard Long, Earth, 2009**
This work also uses the different Tube line colours, this time stacked on top of each other, with the black grid between referencing the Northern line. The image echoes the format of a hexagram symbolising Earth depicted in the ancient Chinese I Ching (Book of Changes), a figure composed of six stacked horizontal lines.

Visit [http://art.tfl.gov.uk/podcasts/](http://art.tfl.gov.uk/podcasts/) to see the ‘Artists on the Underground’ interviews with David Shrigley and other artists talking about their Tube Map cover commissions.
Mark Wallinger, born in Chigwell in 1959, grew up with the Central line running close to his family home. As a boy he used to go down to the footbridge and wave at the Tube drivers. The Underground provided him with a connection from his home in the suburbs to the complexities and possibilities of the city.

This personal relationship with the Underground has informed his interest in public transport and fuelled a fascination with the idea of being ‘transported’ in an imaginative or spiritual sense. He lives and works in central London.

Many of his most memorable works have demonstrated a preoccupation with the symbolism of transport, both physical and spiritual, and the significance of thresholds and frontiers. For example, his 11-minute video work Threshold to the Kingdom captures people entering through the arrivals doors at London City Airport. The industrial environment of the airport is transformed by the musical soundtrack of Gregorio Allegri’s Miserere Me Deus (text from Psalm 51), so that the passengers appear to be making the transition to heaven.

Wallinger is perhaps best known for his sculpture Ecce Homo (1999) commissioned for the Fourth Plinth, in Trafalgar Square, London, and State Britain (2007), a recreation at Tate Britain of Brian Haw’s protest display outside the Houses of Parliament, for which the artist was awarded the Turner Prize. In 2012 he was one of the three artists commissioned for Metamorphosis: Titian 2012 at the National Gallery, London, as part of the London 2012 Cultural Olympiad.

Further information:
• See the link for Wallinger’s full biography http://www.anthonyreynolds.com/ to see the catalogue of Wallinger’s work.
• Visit www.youtube.com to see Wallinger being interviewed by Adrian Searle, art critic of The Guardian.
Most people are familiar with mazes, especially those built from hedges, such as the famous example at Hampton Court, with their complex patterns of pathways intended to confuse the visitor. But these mazes are a relatively recent invention, first appearing around 600 years ago in the gardens of royal places and wealthy landowners in late medieval Europe. Labyrinths, however, have only one pathway leading from the entrance to the centre, albeit by the most tortuous of routes. These can be traced back over 4,000 years to the Neolithic period and are found worldwide in a number of different forms. The twisting pathways of the labyrinth have variously been traced by eye or with a fingertip when carved, woven or painted on rocks, walls or household objects, or have been walked, run and danced through when laid out on the ground. Since the labyrinth symbol first appeared, many design variations have been employed in its construction, but two specific forms, the ‘Classical’ and ‘Medieval’ types, have proved by far the most popular. Many of these labyrinths have a pleasing visual symmetry combined with a surprising length of pathway enclosed within a relatively small area. Unlike the later mazes, labyrinths offer no choices along the way – the only decision is whether or not you enter and trust that the path will lead you to your goal.

Earliest Examples
The earliest examples, precise symbols found carved on rocks and painted or scratched on pottery, date to the Neolithic and Bronze Age periods, although they are often difficult to date precisely. The same design, found on coins from Crete of the first few centuries BC, symbolise the mythical labyrinth at Knossos in which the Minotaur was imprisoned.

Popular throughout the Roman Empire as a protective and decorative symbol on the mosaic floors of civic buildings and villas, they were also constructed outdoors at this time as a playground for children and as a test of skill for soldiers on horseback.

During the medieval period, the labyrinth symbol developed into a more intricate form, reflecting the complexities of faith, life and philosophy in the medieval mind. Occurring first in manuscripts, it was subsequently laid out in coloured marble and tiles on the floors of cathedrals and churches, most famously at Chartres Cathedral, where the labyrinth constructed in the early 13th century survives to this day, and has become an object of pilgrimage for modern visitors.

In Britain and Germany, from the late medieval period onwards, labyrinths were created by cutting the designs into the turf of town commons, village greens and rural hilltops. Employed as a dancing ground for rustic festivities, they were once widespread, but only eight historic examples survive in England and three in Germany. Walkable labyrinths formed of rocks on remote islands in Scandinavia are associated with the superstitious practices of the fishing communities that built them during the medieval period. Other examples alongside prehistoric burial grounds in Southern Sweden and Arctic Russia hint at an earlier use in the region, for purposes that remain mysterious.
Equally puzzling are the labyrinths found carved and painted on cave and temple walls in India and on tribal objects from Sumatra and Java – how and when the labyrinth reached these remote areas remains difficult to explain. Similarly, it is not known whether the occurrence of the symbol amongst rock art in the American Southwest was an independent discovery of the design or a European introduction.

By the 19th century, colonial influences had taken labyrinths and mazes to all corners of the world. Many of the modern forms of mazes, aimed specifically at family entertainment, were developed at this time. During the late 20th century, mazes with ever more innovative designs and complex technological developments became an integral part of visitor attractions and the leisure industry. Labyrinths, rediscovered by a new generation appreciative of their historic connections and spiritual possibilities, found a new acceptance, and at the current time are more popular than they have ever been throughout their history. Estimates vary, but perhaps 10,000 labyrinths have been constructed worldwide in the last 25 years, in a remarkable variety of locations.

With their ageless forms and complex, swirling pathways that always lead eventually to the goal. They invite playful interaction, as well as soulful contemplation. It is this charm that so appeals to modern visitors. The lure of the labyrinth has ensnared humankind for thousands of years, and this fascination shows every sign of continuation.¹

In the field of landscape architecture, a labyrinth is for meditation, a walkway offering no choices that leads to a centre and then out again. Research conducted at the Harvard Medical School’s Mind/Body Medical Institute by Dr Herbert Benson has found that focused walking meditations are highly efficient in reducing anxiety. Labyrinth walking is one of the simplest forms of focused walking meditation, and the demonstrated health benefits have led hundreds of hospitals, health-care facilities and spas to install labyrinths in recent years.²

Left
Turf labyrinth at Saffron Walden, Essex, created in 1699

Middle
Turf labyrinth at Alkborough, Lincolnshire, first documented in late 1600’s

Right
Turf labyrinth at Meridian School, Comberton, Cambridgeshire – a replica of the labyrinth formerly situated at the old village school
A huge variety of labyrinths are found all over the world (see ‘Useful Resources and Information’ to locate these), Chartres Cathedral in France being one of the most significant. It is a 13th-century floor labyrinth, 12.9 metres (42.3 ft) in diameter, that fills the cathedral’s nave. Visitors trace their way around its path to mark the end point of a pilgrimage.

Wallinger discovered Chartres Cathedral whilst travelling as a young man. The image made a long-lasting impact on him, and was the inspiration behind the labyrinth ‘design families’ that he has used in his commission. The medieval style can be seen for example at Westminster station, artwork 101/270.

It is interesting to compare and contrast the 11-ring floor-plan of the labyrinth in Chartres Cathedral with Wallinger’s 5-ring labyrinth.
Wallinger has produced 270 unique artworks, each belonging to one of the ‘design families’ shown below. The artworks have been conceived so that no two artworks bear the same path.

To find out more about how to create labyrinths see page 30 in Teacher Pack, Part 2.

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Medieval  Cretan  Native American  Turf  Opposed  Chamfered

Organic  Woodcut  Emboss  East  Square
**Useful Resources & Information**

**Mark Wallinger & Art On The Underground**
- www.art.tfl.gov
- Martin Herbert, *Mark, Thames & Hudson* (2011)

**Labyrinths**
- www.labyrinths.net — this website is excellent.
- www.labyrinthlocator.com — an easy-to-use database of over 4,200 labyrinths in more than 75 countries around the world. It includes their location, pictures and contact details.
- www.labyrinthbuilders.co.uk
- www.labyrinthcompany.com — you can buy paver kits to make your own labyrinths. All are wheelchair accessible.

**Station Name Resource**
Cyril M. Harris, *What’s In A Name?*, Capital Transport (2001)

**Harry Beck**

**Alan Fletcher**
For information about graphic designer Alan Fletcher go to his official website at www.alanfletcherdesign.co.uk

**Myths And Legends – Theseus and the Minotaur**
- TES teacher resources — there are various resources on Myths & Legends and specifically on ‘Theseus and the Minotaur’
- Google Theseus and the Minotaur to see mini YouTube films of the myth.

**Places To Visit**

**Fen Court Labyrinth, London**
This floor labyrinth, built in 2008, is a quiet haven for contemplation amongst the office blocks on a little alley called Fen Court in London EC3. Located a five minute walk from Monument Tube, the area has been planted and is connected to the London Centre for Spirituality. For further information go to www.spiritualitycentre.org.

**The London Transport Museum in the Covent Garden Piazza**
Look on their website under ‘Learning Page’ for a variety of workshops devised to enhance the curriculum: www.ltmuseum.co.uk, or call 0207 565 7298.

Current exhibition at the London Transport Museum: *Poster Art 150 – London Underground’s Greatest Designs*. This exhibition features designs commissioned since 1908 and runs until October 2013

**Longleat Safari and Adventure Park, Wiltshire**
Take your class/family to Longleat, which has a selection of mazes, a ‘lunar labyrinth’ in the shape of the moon and a ‘love labyrinth’. See: www.longleat.co.uk, or call 01985 844400 for further information
Visiting London Underground
Please contact Art on the Underground in the first instance if you wish to arrange a school visit to your local London Underground station.

Art on the Underground
0207 027 8694
art@tube.tfl.gov.uk

Practical information on using the Tube
Visit [http://art.tfl.gov.uk/visit/](http://art.tfl.gov.uk/visit/) for a list of links to practical information to assist your visit to our permanent artworks and temporary exhibitions on London Underground:

See the Current Project Map for station locations for our exhibitions

TFL Journey planner helps you plan your route, from your street to your destination

Travelling by Tube gives useful information and links to help to plan your journey

Accessible Tube maps
Direct Enquiries offers detailed information on access to individual stations, including walking distances between platforms

For further assistance contact London Underground

Customer Service Centre
Tel: 0845 330 9880 (08:00–20:00, seven days a week)
Post: Customer Service Centre, London Underground, 55 Broadway, London SWIH 0BD

About
Art on the Underground
[http://art.tfl.gov.uk](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 our customers’ journey experience, as well as continuing London Underground’s long-standing tradition of art and design at the core its identity and services. Visit our website for more information about Labyrinth and other exhibitions and projects on London Underground

A New Direction
[www.anewdirection.org.uk](http://www.anewdirection.org.uk)

We connect children, young people and education with the best of arts and culture in London. We believe that together we can make London the best city in the world for young people’s cultural and creative development.

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