The Whistle Stop Tour Quiz

On your visit to us, look out for the answers to these questions, complete them all (no Googling!), add your details, drop it in on the way out and you could win a family first class return ticket anywhere on the First Transpennine Express network!

1. How many axles on a Class 185 train?
2. What weight can one Mechan jack lift?
3. How many engines does a Class 185 have and who manufactures them?
4. What is the maximum speed of the Class 185?
5. What is the weight of the Class 185?
6. What is the total volume of fuel the 185 can hold?
7. What is the stopping distance from 100mph in emergency brake?
8. What voltages would you expect to find throughout the Class 185?
9. From the outside of the train how can you identify the carriage with a first class section?
10. How many toilets are there on a Class 185?
11. How much air can the Class 185 compressor deliver per minute?
12. How many class 350/4 Desiro trains are in the TPE fleet?
13. How many traction motors are on each DMOS vehicle?
14. Which vehicle is the pantograph located?
15. What is the value of the voltage, supplied to the 350/4 from the overhead line?
16. What is the maximum speed of the 350/4?
17. How many wheels in total are there on a 350/4?
18. Which vehicle is the first class compartment in?
19. What two types of braking systems are used on the 350/4?
20. Where in the world are the 350/4 trains assembled?
21. How many toilets are there on a 350/4?
22. Who manufactured the wheel lathe?
23. How many axles have we turned since the depot opened?
24. What year was the diesel shunt loco manufactured?
25. Where was the diesel shunt loco manufactured?

Your name __________________ Your phone number __________________

Good luck!
Welcome!

We are delighted you could join us for this behind-the-scenes look at our Ardwick Traincare Facility in conjunction with Manchester Science Festival and for our chosen charity, the National Autistic Society. Please take a few minutes to familiarise yourself and those in your party with the information in this leaflet to ensure you get the most out of your visit and stay safe. This is a working site and will be operational throughout the open day. Please ask anyone in an orange hi-vis vest if you need help or assistance.

SMOKING - Smoking is only permitted in the official smoking area. Please ask a member of staff who will guide you to the smoking area.

FIRE ALARM - In the unlikely event of the fire alarm sounding, you must leave the depot by the nearest marked exit and report to the assembly point which is the main car park. Please do not move from this area until further instructions are given by the on duty fire warden.

FIRST AID - Qualified First Aiders and a fully equipped treatment room are available on site. If you need any first aid treatment during your visit, please inform a member of staff who are located throughout the depot.

REPORTING OF ACCIDENTS & NEAR MISSES If you have an accident it must be reported to a member of staff who will organise first aid and report the incident to the Depot Supervisor.

SLIPS, TRIPS AND FALLS - Please take care when moving around the site. Take your time crossing tracks and climbing up and down stairs and steps. Use handrails where they are available and ensure you wear sensible footwear.

SITE EQUIPMENT - Do not touch or interfere with any equipment on the site unless you have been authorised. Follow all safety instructions provided and stay inside the safety of the fenced areas.

HAZARDOUS SUBSTANCES - Please do not bring any hazardous substances on site without prior permission.

CHILDREN - We welcome children to the depot but please assist us in providing interesting and fun activities by keeping them near you and under supervision throughout the visit.

PHOTOGRAPHY AND TELEPHONES - We will have a professional photographer and video crew throughout the for promotional use. If you or any of your party do not want to be photographed, please pick up a ‘no photography’ sticker from reception. You are more than welcome to use your camera or telephone during the visit but please do not use them during movement on steps or stairs. We’d love to see your photos and hear what you thought after your visit and there’s a feedback form at the back of this booklet. Please respect any visitors wearing a ‘no photography’ sticker.

COMFORT & REFRESHMENTS - Toilets are available in the depot; please follow the signs or ask a member of staff. A catering van is on-site for the duration of the event.

MAINLINE RAILTRACKS - The public area for the open day has been set within the depot boundary with defined areas that you are able to use in order to keep you away from the mainline. Please stay on the authorised walkways at all times and obey the instructions of any host. Do not move any of the barriers.

SAFETY QUESTIONS - If you have any safety questions during your visit, please do not hesitate to ask a member of staff who will be happy to help. Equally, if you see any unsafe acts, please report them to a member of staff.

CHARITABLE DONATIONS - We are raising money for the National Autistic Society (registered charity number 269425). Any support you can give to this cause would be welcome. Special pin badges, a cake stall, a raffle with some excellent prizes and steam train rides are available with all proceeds going to the National Autistic Society.

Keep in touch!
If you’re on Twitter, we’re @SiemensUKNews and @McrSciFest #DepotOpenDay and if you’re on Facebook, join at facebook.com/whistlestoptour
When it comes to supporting the UK’s major programme of rail investment and improvement, there’s not much that doesn’t involve Siemens. From supplying and maintaining trains to signalling and electrification, we can provide a range of expertise and offer a great career to those looking to start out or transfer skills.

In train maintenance in the UK we employ around 700 people and maintain over 370 Siemens passenger trains which cover over 60 million miles a year. We’re proud of our UK fleet and our carefully-built and designed traincare facilities that incorporate leading edge technologies at Ardwick, Northampton, Acton, Glasgow, Southampton and York (plus two currently under construction at Hornsey and Three Bridges). But we’re equally at home working from our clients’ facilities, and we do just that at Crewe, Ilford, Neville Hill and Strawberry Hill. Whatever the location, our hand-picked, well trained experts pride themselves on maintaining the most reliable, clean and comfortable trains in the UK to the very highest standards.

We maintain the trains on behalf of our customers, which include South West Trains, First TransPennine Express, Heathrow Express, Abellio Greater Anglia, Northern Rail, London Midland and ScotRail.

To meet the challenge of providing skilled technicians for high-tech new train fleets, Siemens and our partners NSARE (the National Skills Academy for Railway Engineering) are constructing a National Training Academy for Rail (NTAR). NTAR will specialise in the development of a rigorous tailored curriculum for the academy in order to deliver the next generation of high skill rail engineers in traction and rolling stock. With the first students expected to arrive in 2015, the training academy will be located in state-of-the-art new facilities next to our flagship traincare facility and UK service headquarters in Kings Heath, Northampton.
What to see and do

Ardwick Open Day Tour Route

Key safety points
1. Remember this is a working depot
2. Stay within safety barriers at all time
3. Ensure children are closely supervised
4. Overhead wire is 25,000 volts - keep away!

Events key
1. Entrance - Brief point
2. Class 185 on jacks
3. Name on Train
4. Class 350 walkthrough
5. Wheel lathe demo
6. Diesel Shunt walkround
7. Class 185 equipment
8. Ride on steam train
9. Event Marquee

Please note all activities, demonstrations and trains are subject to change due to operational or availability reasons. Thank you for your understanding.
About our site and the trains

Ardwick depot was first opened in 2006 following a £30 million investment by Siemens. Whilst it was expected to remain a diesel-only facility for the rest of its operational life, it was designed with the option to be extended to meet future needs. Since that time there has been a major focus on electrifying the railways and in 2013, electrification and extension of the site was completed as an integral part in helping First TransPennine Express deliver additional passenger services on its busy network.

The site maintains 51 Class 185 Siemens Desiro Diesel Multiple Units, which were introduced in 2006, and 10 Class 350/4 Siemens Desiro Electrical Multiple Units. The Class 350/4 trains that were delivered on time in early 2014 as part of a £60m investment in new rolling stock for the northwest of England and Scotland.

These new four-carriage trains, which have been designed with 110mph capability, increase the capacity between Manchester and Glasgow and Edinburgh in Scotland by 60%. They also improve space for luggage by 25% and reduce the carbon footprint of the service by over one third.

Welcome to the Curiosity Project from Siemens

How curious are you?

Who we are
As a leading global engineering and technology services company, curiosity is at the heart of everything we do; addressing megatrends and finding innovative solutions to global problems. We help tackle the world’s major challenges, focusing on the areas of electrification, automation and digitalisation. We have been present in the UK since 1843 and employ 13,760 people in offices and factories throughout the UK, with headquarters in Frimley, Surrey.

What we do
Our engineering is pioneering. We are reshaping the future of energy, transforming infrastructure and industry, exploring the cities of tomorrow, as well as developing the next generation of healthcare. Through our work, we seek out constant improvement, asking the big questions and challenging the norm. Dedicated to helping enrich and enhance STEM (science, technology, engineering and mathematics) subjects, Siemens offer exciting and rewarding careers, apprenticeships and graduate schemes that nurture and engage curious young people in the technological world of the future.

What’s the Curiosity Project?
The Curiosity Project is a three-year engagement programme by Siemens, bringing STEM to life. We aim to inspire a generation of young people, turning curiosity into opportunity and a diverse career in engineering and science.

Find out more at: siemens.co.uk/curiosity-project
Download resources and materials at: siemens.co.uk/education

I want to be an engineer when I grow up

About our site and the trains

Don’t be shy!
Have a question about our trains? Go on, be curious and ask one of our team! You can also do our Whistle Stop Quiz on the back page as you walk around.
A burst of creation, experimentation and wonder is at the heart of this year’s Manchester Science Festival (MSF) proudly produced by the Museum of Science & Industry – supported by Siemens and Lead Education Partner University of Salford. Running from 23 October – 2 November in over 40 venues across Greater Manchester, this award-winning Festival is now in its eighth year. With more city-wide and creative collaborations than ever before, this diverse and inspiring 11 day programme features World Premieres, internationally acclaimed art and artists, cutting-edge science, comedy, hands-on workshops, evening events, talks and a jam-packed family programme all designed to inspire, engage and immerse visitors of all ages with the science that lives all around us.

The National Autistic Society

Who we are
The National Autistic Society (NAS) was formed in 1962 by a group of parents passionate about creating a brighter future for their children with autism. 52 years on we are the leading charity for the 1 in 100 people in the UK with autism and their families. We have almost 30,000 active members, over 100 local volunteer groups and have provided support to millions of people affected by autism.

Autism and what we do
Autism is a lifelong developmental condition that affects everyone differently, some live relatively independent lives while others require round the clock care. Despite the huge amount of people it affects autism is widely misunderstood and misreported.

Last year, we supported over 100,000 people living with autism. The families we support access our specialist services every day throughout the UK. Our transformational work includes seven specialist schools, 111 volunteer-led branches nationwide as well as a national helpline.

Many organisations have provided prizes, time or financial support to help us with this open day and we’d like to thank them for their generosity. You can keep up to date with our fundraising efforts for the National Autistic Society by visiting www.justgiving.com/Ardwick-Open-Day.

Thank you for visiting us. To help us improve future events, please let us know what you thought of the event by completing the form overleaf.