

Guided School Visits



Teacher's Pack

Welcome to Whistlestop Valley -
The home of the Kirklees Light Railway!

What's the history?

The Kirklees Light Railway runs along the route of an old standard-gauge branch line once operated by the Lancashire & Yorkshire Railway.

158: Middleton Railway in Leeds opens

1804: Richard Trevithick designs & builds the world's first steam powered locomotive

1825: Stockton & Darlington Railway opens - the first public railway

1829: George Stephenson's 'Rocket' wins the Rainhill Trials for the best design to power the Liverpool & Manchester Railway

1846: The first proposal is submitted for a railway through Clayton West and Skelmanthorpe, linking Huddersfield to Rossington. This proposal failed in Parliament

1846-1866: 28 failed proposals to build a railway to or through Clayton West

1866: The Act of Parliament was granted to the Lancashire & Yorkshire Railway Company in 1866 for a line including a branch line to Clayton West

1872: Construction starts on the line

1879: The line opens 1 September 1879. With two thriving communities each with a colliery to serve, the railway soon proved its worth. Aside from regular goods and passenger trains the line was also used for excursion trains for workers to travel to places further afield.

1979: Coal traffic on the railway ceased

1983: The Clayton West Branch Line is closed completely to all goods and passenger trains

1986: The track is lifted

Late 1980s/early 1990s: The Taylor family (with the assistance of a small team of paid and voluntary staff) begin constructing a 15-inch narrow-gauge railway on the old Clayton West Branch Line

September 1991: A Light Railway Order is granted to the Kirklees Light Railway Company, one of the last to be made under the 1896 Light Railway Act

19 October 1991: The Kirklees Light Railway opens to the public with a line running from Clayton West to Cuckoo's Nest

December 1992: A line extension from Cuckoo's Nest to Skelmanthorpe opens

May 1997: A line extension from Skelmanthorpe to Shelley opens. The line now runs from Clayton West to Shelley - a distance of just under 3.5 miles!

Early 2000s: The Taylor family retire

2006: The Kirklees Light Railway is acquired by a family owned company

2021: Renamed Whistlestop Valley, there are now six steam locomotives, two diesel engines, 16 coaches, a workshop, an engine shed activity area, playground, 7¼-inch railway, static birthday party carriage, jumping pillow and station building at Clayton West, with a large play area, sand pit, party room, dessert parlour and picnic area at Shelley Station.

Who works at Whistlestop Valley?

There are a small number of paid employees who cover roles including:

General Manager

Catering Manager

Accounts Assistant

Administration Assistant

Visitor Services Assistants

Operations Manager

Marketing & Visitor Experience Officer

Birthday Party Hosts

Operations Assistants

There is also a large band of trusty volunteers - the Friends of Kirklees Light Railway - who selflessly give up their time and energy to keep the railway going. The Friends of Kirklees Light Railway do many jobs including:

Train Driver

Ticket Office Clerk

Engineer

Track work

Little Train Driver

Guard

Shop Assistant

Maintenance

Ground work

Without our volunteers, we simply wouldn't exist.

Perhaps the train driver on the day of your visit will be one of our amazing volunteers?!

Where does the Kirklees Light Railway run?

The Kirklees Light Railway runs for three and-a-half miles through the foothills of the Pennine mountains, from the village of Clayton West to the outskirts of the village of Shelley.

The railway line runs through two intermediate stations: one at Cuckoo's Nest, and one at the village of Skelmanthorpe.

Passengers can board and alight trains at both these intermediate stops if they wish to. At Cuckoo's Nest, there is access to walking routes. At Skelmanthorpe, a short walk will take passengers into the village centre which has recently become famous as the home of the first ever female Doctor Who, local actress Jodie Whittaker.

The railway passes through the ancient woodland of Blacker Woods which is mentioned in the Domesday Book and travels past the towering, Grade II-listed Emley Moor Transmitting Station.

Between Skelmanthorpe and Shelley, the train journeys through the Shelley Woodhouse Tunnel which - at 467m long - is the longest tunnel on any 15-inch narrow-gauge railway in Great Britain!

As you travel through the tunnel, you might want to think about what a tight squeeze it would have been for the full-size standard-gauge engines passing through in the early 20th century!

What's at Whistlestop Valley?

Clayton West Station

The Shed (event space)
Workshop
Station building
Engine turntable
The Firebox cafe (open on public operating days only unless specifically requested)
Gift shop
Toilets
Playground
Jumping pillow
The Clayton Flyer 7¼-inch miniature railway
Free parking
Picnic area
Static birthday party carriage
Free teacher pre-visits (by appointment only)
Friendly, helpful staff

Shelley Station

Engine turntable
The Turntable dessert parlour (open on public operating days only)
Toilets
Playground
Picnic area
Marquees (can be heated upon request!)
Party room

Which engines are at the railway?

The railway currently has eight engines in residence.

There are six steam engines:

- Hawk
- Badger
- Owl
- Fox
- Katie
- Sian

There are two diesel engines:

- Jay
- Tram No.7 (often referred to as "Toby")

Alongside the engines, the railway has 16 carriages, a works van and some wagons which help with the heavy-duty work often required along the line.

Let's meet the engines 1!



HAWK

Hawk is our largest and most powerful engine, built at the KLR in 1998 by Brian Taylor. It is used to pull our heaviest trains.

Hawk is an articulated engine which means it has two 0-4-0 power bogies which help it go round very tight corners.

Its bright blue livery means it is very popular with our younger visitors as it resembles a certain, famous little engine.

BADGER

Badger was built at the KLR by Brian Taylor in 1991.

Badger is a 0-6-4 Saddle Tank Engine, loosely based on a famous design of contractors' locomotive which were built in large numbers and exported all over the world.

Badger is one of our hardest working engines and is popular with staff and visitors alike!



OWL

Owl is our most unusual engine, built at the KLR in 2000. It is based on an engraving of an engine that was never actually built!

Its cylinders are arranged in an unusual 'V' formation and it moves itself along by an arrangement that is usually found on diesel engines - it has gears! Owl is painted in the colours of the Lancashire & Yorkshire Railway, the first railway to run trains to Clayton West.



FOX

Fox was the first engine built for the KLR. It was built in 1987, before the Kirklees Light Railway even existed!

Fox is a 2-6-2 Tank Engine. Despite being the oldest of our engines, Fox is one of our hardest working engines.

Fox spent 2015-2020 in the workshop having an overhaul including anew paint job!



Let's meet the engines 2!



KATIE

Katie is the KLR's oldest engine and was built in 1954 by Trevor Guest for the Dudley Zoo Railway. Katie came to the KLR in 2015.

Katie was built to designs by Ernest W. Twining and is a type 2-4-2 engine. Katie is perhaps best known for her work at the Fairbourne Railway in Wales.

Since moving to the KLR, Katie has become a firm favourite and can be seen in service on most operating days and during special events.

SIAN

Sian is the latest addition to the KLR fleet and is owned by the Sian Project Group.

Sian is a 2-4-2 engine designed in 1951 by Ernest W. Twining, built in 1963 & delivered to the Fairbourne Railway in 1964 where she worked alongside her big sister (and fellow KLR resident), Katie.

Sian is now resident at the KLR for the foreseeable future, with permission from the Sian Project Group.



JAY

Jay was completed in 1992 and is a diesel hydraulic engine.

It is similar in appearance to many industrial diesel engines. Jay is our workhorse and it is used almost every day of the year.

It is used by the engineers for maintenance trains, shunting engines and carriages, patrolling the railway and pushing our snow plough. Sometimes Jay even gets to pull passenger carriages!



TRAM NO.7

Tram No.7 was built in 1991 by Brian Taylor to help with the construction of the railway.

It is a steam outline engine and is based on the famous tram engines that were used on branch line and ports in East Anglia.

It is mainly used at our popular Day Out with Thomas events but from time to time may be found undertaking other tasks.



What happens on the day of a school visit?

Please note the details below are a suggested schedule for the 10.30am departure and trips can be tailored to individual needs if time and resources allow. A schedule for the 11.50am train is slightly different from that shown below but contains the same core features:

- ❖ School group arrives at Clayton West Station & are welcomed by staff
- ❖ Storing of packed lunches & visit to toilet before train ride
- ❖ Board train to Shelley
- ❖ Train journey to Shelley Station
- ❖ At Shelley, there is the opportunity to watch the locomotive being turned on the turntable & talk to the driver/guard
- ❖ If time allows, there is the opportunity for the children to play on the outside play area
- ❖ Board train to Clayton West
- ❖ Train journey to Clayton West
- ❖ Toilet & hand-washing break
- ❖ Lunch
- ❖ Rotation of groups between following activities:
 - Meet the loco talk
 - Ride on the miniature railway around the duck pond (subject to availability)
 - Play on the adventure playground (in the event of bad weather, indoor activities will be provided)
- ❖ Opportunity to visit the gift shop

Are there any optional extras?

The following optional extras can be added but must be booked at least seven days in advance of your visit:

- ❖ Ice-creams or lollies from £1.50 per head
- ❖ Cold lunch for staff/adults from £5.95 per head
- ❖ Cold lunch for children from £3.95 per head
- ❖ On non-operational days, the café can be opened for drink purchases from 10.15am-1.30pm. This service incurs an additional charge of £30 (plus the cost of the drinks purchased)

How should I prepare for a school visit?

We recommend that you come and visit for yourself if you have not visited previously. This way, you can familiarise yourself with the site and also conduct any necessary risk assessments. A copy of the railway's risk assessment paperwork is available from our website.

We offer free pre-visits for teachers (by pre-arranged appointment only).

Keeping safe

- ❖ Even though we are not a full-size railway, as an operational railway we have to adhere to the strict Health & Safety regulations dictated by the Office of Rail & Road
- ❖ We have trained first aiders on site
- ❖ The railway station areas are completely wheelchair accessible however, we regret that due to the size and nature of our carriages, we cannot transport unfolded wheelchairs on the trains. We can transport folded wheelchairs if the wheelchair user is able to transfer into the carriage and sit without assistance
- ❖ Our guards will give a brief safety instruction upon boarding the train but it may be useful to have a talk with the children *before* visiting about not touching carriage door handles or windows or the locomotives themselves

Staying comfortable

- ❖ We have toilet facilities, including toilets with disabled access, at both Clayton West Station and Shelley Station
- ❖ In the event of inclement weather, we can provide undercover areas for the children to eat their lunches
- ❖ School groups are welcome to leave their bags at Clayton West Station during their train journey if desired
- ❖ Our train carriages are fully enclosed so even on the most wet and miserable days, you and the children can stay protected from the elements

Having fun

- ❖ We have excellent outdoor play areas at both Clayton West Station and Shelley Station where the children can 'let off some steam!'
- ❖ There is a well-stocked gift shop at Clayton West Station where the children can spend their hard-earned pocket money on a memento of their visit. Pre-purchased gift bundles are also available to save precious time!
- ❖ Ice creams and/or lollies can be ordered in advance for an additional charge which can help cool the children off on particularly hot days
- ❖ We can take the pain out of packed lunches by providing cold food options for children and adults alike (must be pre-booked and incurs an additional fee)

What do I need to remember when visiting?

Clothing

Please ensure that both adults and children come well prepared for the weather and please note that there can often be a striking difference between the weather at Clayton West and the weather at Shelley Station. When checking the forecast in advance of your visit, please check the forecasts for BOTH areas!

Warm weather suggestions: sturdy footwear, sun hats, cardigans/jumpers to cover up, sun cream.

Cool weather suggestions: sturdy footwear, hats, scarves, gloves, good outdoor coat.

Behaviour

Teachers and group leaders are responsible for the behaviour of the children for the duration of their visit. Please encourage the children to listen to instructions given by staff members and to follow any rules that may be given:

1. Please do not touch any of the locomotives, especially the one you travel on as it will be HOT and DIRTY
2. Please watch where you are walking - there can be uneven surfaces
3. Please stay in your groups and do not stray - we don't want to lose anyone!
4. Please stay off the railway track and stick to the platforms
5. Please do not eat or drink in the playground areas
6. Please put all litter in the litter bins provided
7. Please do not climb onto any walls or fencing

Risk Assessment

We do advise the leaders of school groups to conduct a risk assessment before visiting. This can be done during your free pre-visit (please book an appointment).

A copy of the railway's risk assessment paperwork is available from our website.

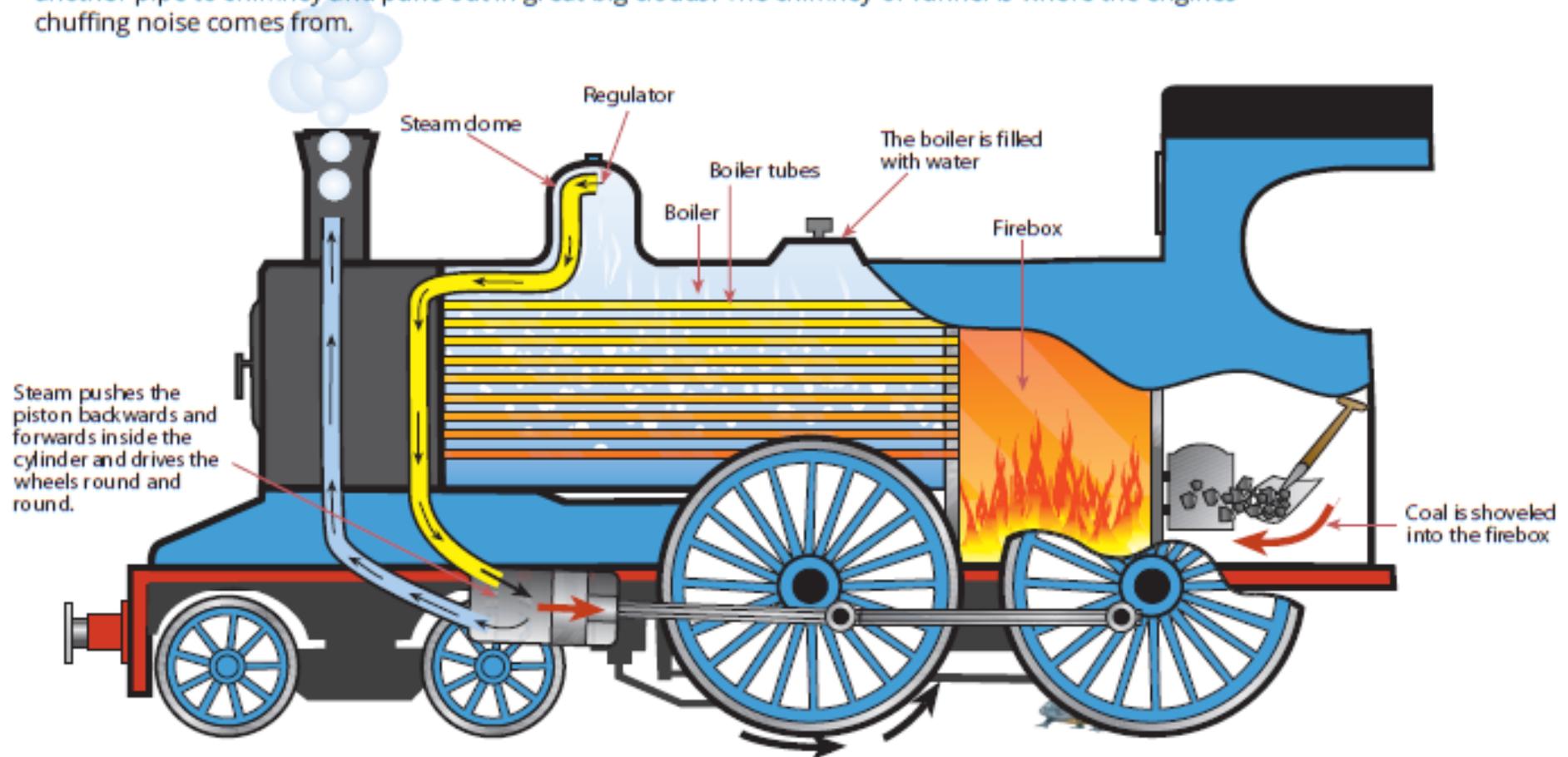
Map of the Kirklees Light Railway



How does a steam engine work?

Coal is shoveled into the firebox. The heat produced by the fire is then drawn through long tubes in the boiler to the smokebox and out of the locomotive from the chimney.

The boiler is filled with water. Heat from the fire passes through tubes in the boiler heating the water, making it boil. Boiling water produces steam, like a kettle. The steam rises to the top of the boiler and into the steam dome. When the driver is ready to go he'll open the regulator and the steam travels through a pipe at great pressure from the dome to the cylinders. When the steam reaches the cylinders, it pushes on the piston inside the cylinder and moves it backwards and forwards. As the piston moves backwards and forwards it drives the wheels around and around. The used steam then travels through another pipe to chimney and puffs out in great big clouds. The chimney or funnel is where the engines chuffing noise comes from.



What's the educational value of a visit to Whistlestop Valley?

A visit to Whistlestop Valley provides plentiful opportunities for children from the EYFS to the end of KS2 to develop their skills and have their enthusiasm ignited!

Early Years Foundation Stage (EYFS)

Whistlestop Valley offers children in the EYFS a unique opportunity to explore a new environment in a controlled manner.

Communication & Language and Literacy Development: there will be an abundance of opportunities for children to develop their confidence and language skills through the introduction of new vocabulary related to the trains and also the countryside through which they will travel, the opportunity to speak and listen to our engaging staff and to ask and answer questions.

Physical development: with adventure playgrounds to explore and train carriages to clamber in and out of, the children will be kept active and experience situations which help to develop their co-ordination, control, and movement.

Personal, social and emotional development: whilst still in the comfort of their familiar groups, children will have the opportunity to interact with our friendly staff during their visit as well as their peers. With guidance from both practitioners and railway staff, the children will move through their day learning how to behave safely, appropriately and confidently in new and unfamiliar environments.

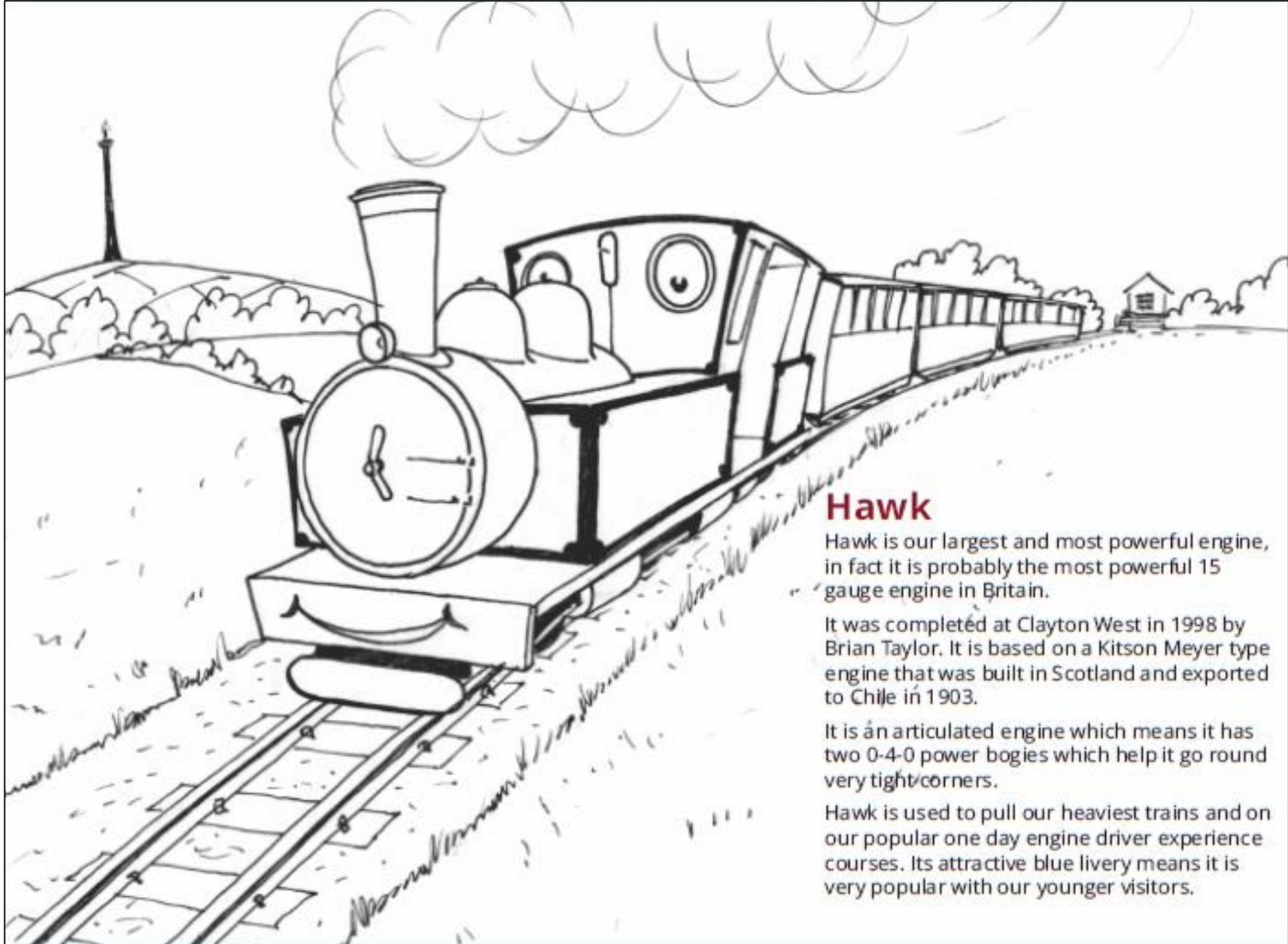
Mathematics: our engine shed tour in particular will encourage the children to improve their counting skills and develop their descriptive skills when it comes to shapes, spaces & measurements!

Understanding the world: the railway has a very intrinsic link to the local community and to the industrial development of Great Britain as a whole. A visit to the railway can be an ideal starting point for introductions to the local community and the community's history both socially and geographically.

Expressive arts and design: a visit to the railway will give practitioners a variety of starting points for art and design work which can be followed up and explored after the visit. Areas such as the locomotives, steam, coal, noises at the railway, the surrounding countryside, wildlife, even the coach trip to the railway may be good starting points.

See next page for post-visit colouring sheets!

EYFS Colouring Sheet 1



Hawk

Hawk is our largest and most powerful engine, in fact it is probably the most powerful 15 gauge engine in Britain.

It was completed at Clayton West in 1998 by Brian Taylor. It is based on a Kitson Meyer type engine that was built in Scotland and exported to Chile in 1903.

It is an articulated engine which means it has two 0-4-0 power bogies which help it go round very tight corners.

Hawk is used to pull our heaviest trains and on our popular one day engine driver experience courses. Its attractive blue livery means it is very popular with our younger visitors.

EYFS Colouring Sheet 2

Tram - No.7

Tram was built in 1991 by Brian Taylor to help with the construction of the Railway.

It is a steam outline engine and is based on the famous Tram engines that were used on branch line and ports in East Anglia. It is mainly used at our popular Day Out with Thomas events but from time to time may be found undertaking other tasks.



What's the educational value of a visit to Whistlestop Valley?

Key Stages 1 & 2

Learning outcomes and key topics that could be covered in school, before or after a visit to Whistlestop Valley, for KS1 and KS2 children, are:

History

- ❖ changes within living memory - where appropriate, these should be used to reveal aspects of change in national life
- ❖ events beyond living memory that are significant nationally or globally
- ❖ the lives of significant individuals in the past who have contributed to national and international achievements, some should be used to compare aspects of life in different periods
- ❖ significant historical events, people and places in their own locality
- ❖ a local history study; a study over time tracing how several aspects of national history are reflected in the locality
 - The history of transport
 - Victorian transport & George Stephenson
 - Isambard Kingdom Brunel & railway engineering
 - Local railway history and the use of railways in local industry including the textile mills and coal mines of West Yorkshire
 - The use of railways during war-time & evacuees
 - Children at work in coal mines and textile mills

Technology & Science

- ❖ Steam engines & how they work
- ❖ Levers (signalling)
- ❖ Forces
- ❖ Designing & building railways (track, bridges, tunnels)
- ❖ Water & coal
- ❖ How technology has advanced since the first steam railways to the present day

Geography

- ❖ Maps (what do railways look like on different maps, where do railways run?)
- ❖ Distances
- ❖ How the railways change the landscape of Britain
- ❖ Location of coal mines

Literacy

- ❖ Creative writing or poetry inspired by the experience of riding on a steam train or the location of the railway
- ❖ Writing about the trip to the railway

Numeracy

- ❖ Weights

- ❖ Volume
- ❖ Measures
- ❖ Pressure
- ❖ Money (tickets, fares)
- ❖ Timetables & telling the time

Art

- ❖ Architecture of railways and railway buildings
- ❖ Drawing from life (the engines, the scenery, the station, the tracks)
- ❖ Railway art and posters

Ideas for further exploration back at school

The ideas below are a guide to possible areas of exploration for teachers after visiting Whistlestop Valley.

There are some amazing resources about steam locomotives and related activities for teachers and children available to download for free from <https://petersrailway.com/schools/>.

- ❖ Build a bridge using straws, paper and sticky tape
- ❖ Create a scrapbook of the visit
- ❖ Write a diary from the day of the visit
- ❖ Create a word bank from the visit to use in creative writing
- ❖ Start to explore the history of children working in local coal mines and textile mills in Victorian times
 - Write a 'day in the life' of a working Victorian child
 - Write a letter to a Victorian child telling them how life is different in the modern day
- ❖ Use the visit as an introduction to coal and fossil fuels
- ❖ Use the visit as an introduction to levers, pressure and motion
- ❖ Use the visit as an introduction to textiles, weaving etc.
- ❖ Learn about Stephenson's Rocket, the first ever steam locomotive, and explore the differences between modern day rail travel and Victorian steam travel
- ❖ Look at the influence of transport on Great Britain and the changes it brought to communities