

# Goathland Station

KS2 School Visit Support Materials



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# Introduction

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These resources support school visits to Goathland Station, preparing and extending learning for Key Stage 2 pupils. A PowerPoint presentation containing the images is also available to download from the school pages of the North Yorkshire Moors Railway (NYMR) website. Each resource includes an image from the NYMR archive, background information for teachers and suggested activities with pupil sheets.



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## Colouring sheets

Printable sheets are available on our website.

[www.nymr.co.uk/Listing/Category/  
online-resources](http://www.nymr.co.uk/Listing/Category/online-resources)

## Page key:



Teacher Information



Pupil Information



Print Activity

# Useful Vocabulary

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Archive

Evidence

Safety

Artefact

Fuel

Semaphore

Census

Job

Signal

Coal

Locomotive

Source

Communication

Natural

Station

Economy

Non-renewable

Steam

Energy

Railway

Ticket

Encryption

Renewable

Track

Engine

Resource

Whistle

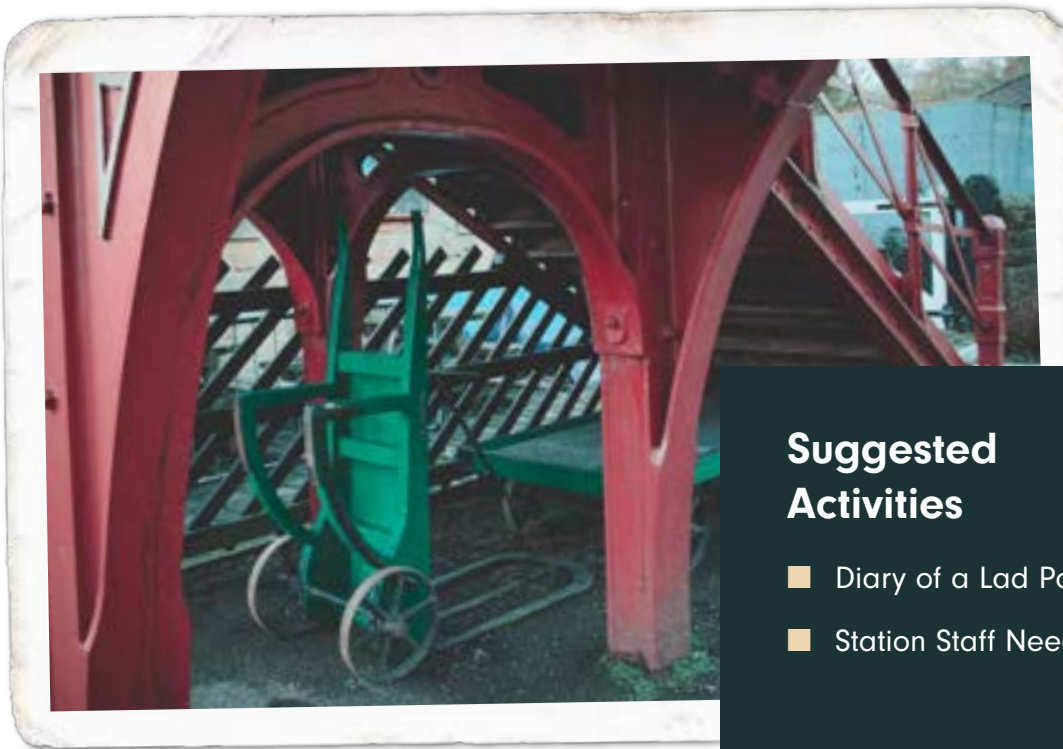


## Literacy

## Teacher Information



# Carrying the Cargo



## Suggested Activities

- Diary of a Lad Porter
- Station Staff Needed!



## Porter's Trolley

Porters were employed to help passengers on and off trains and carry their luggage for them, sometimes using a hand trolley or even the flat bed trolley for heavy loads. They also had to keep the waiting rooms clean and make sure the fires were kept lit all around the station. There was always heavy work to do, helping load and unload cargoes and move them into the Goods Shed or the Weighbridge Office so the goods could be

weighed. Goods coming into the station included coal, timber, bricks and grain as well as foods such as fish, milk, fresh fruit and vegetables. As rail signalling developed, and more staff were needed, some porters could become Porter Signaller. Boys starting out as Junior Porters at age 14 or 15 were sometimes called Lad Porters or Station Lads.





# Diary of a Lad Porter

“On busy days you can’t hear yourself think with the clanking of wagons being shunted in and out of here!”

“Winters can be harsh on the moors. One of my jobs is to light the fire here to make sure our passengers keep nice and warm.”

“Almost everything villages and the farms round here need, comes through this shed. Really, they can’t do without me!”

**Write a diary page for a Lad Porter starting a new job at Goathland Station.**

Remember to write it from the point of view of a young Victorian starting out in a new job.

Things to think about:

- How would they be feeling?
- What new experiences would they have?
- How would a personal diary page be written?
- What sort of doodles and drawings might be included?

More ideas on what you might need to include in your diary page are given below.

## ▶ Write in First Person

Use personal pronouns (I, we)

## ▶ Dates and Time

Use a date for each entry and include time conjunctions and adverbial's (e.g. after work, until bedtime)

## ▶ Descriptions

Add in small details and use senses (sights, smells etc.) to make your diary descriptive

## ▶ Tense

Remember to use the past tense if you are writing about events which have happened

## ▶ Chronological Order

Write about the events in the order that they happened

## ▶ Colloquial language

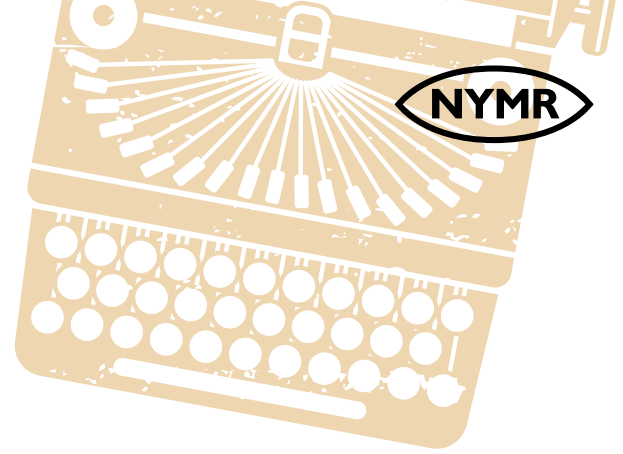
Think about how your character would have spoken and the words they would have used

## ▶ Personal Thoughts

Consider the thoughts, feelings and opinions your character might include in their diary

**Write a  
Diary**

[illegible]



## Station Staff Needed!

“As one of the porters it’s my job to operate the crane by hand. It makes it much easier to move goods out of the wagons and into the carts parked out back.”

“Being a Porter’s a busy job. If I’m not helping passengers on and off trains and carrying their luggage, then I’m moving goods in the Goods Shed. Then there’s the weighbridge office and all the goods to be weighed in and out there.”

“I’m thinking, one day I might train to be a signalman.”

**Have a go at writing a job advertisement for a new Junior Porter to appear in the local paper.**

Design your final advert so it is suitable for a Victorian newspaper.

Remember to detail:

- The tasks a Junior Lad Porter would do
- The skills needed for the job

A guide on what to include in your job ad is given below.



### Job Title

This lets the applicant know at a glance the type of job



### Essential Experience

Details of the previous work experience needed for the job



### Desirable Characteristics

A list of the qualities the employer is looking for e.g. reliability



### Training

Details of what training the employer would offer



### Job Overview

An introduction paragraph describing what the job is



### Responsibilities

A bullet point list of what the tasks of the job are, in order of importance



### Skills

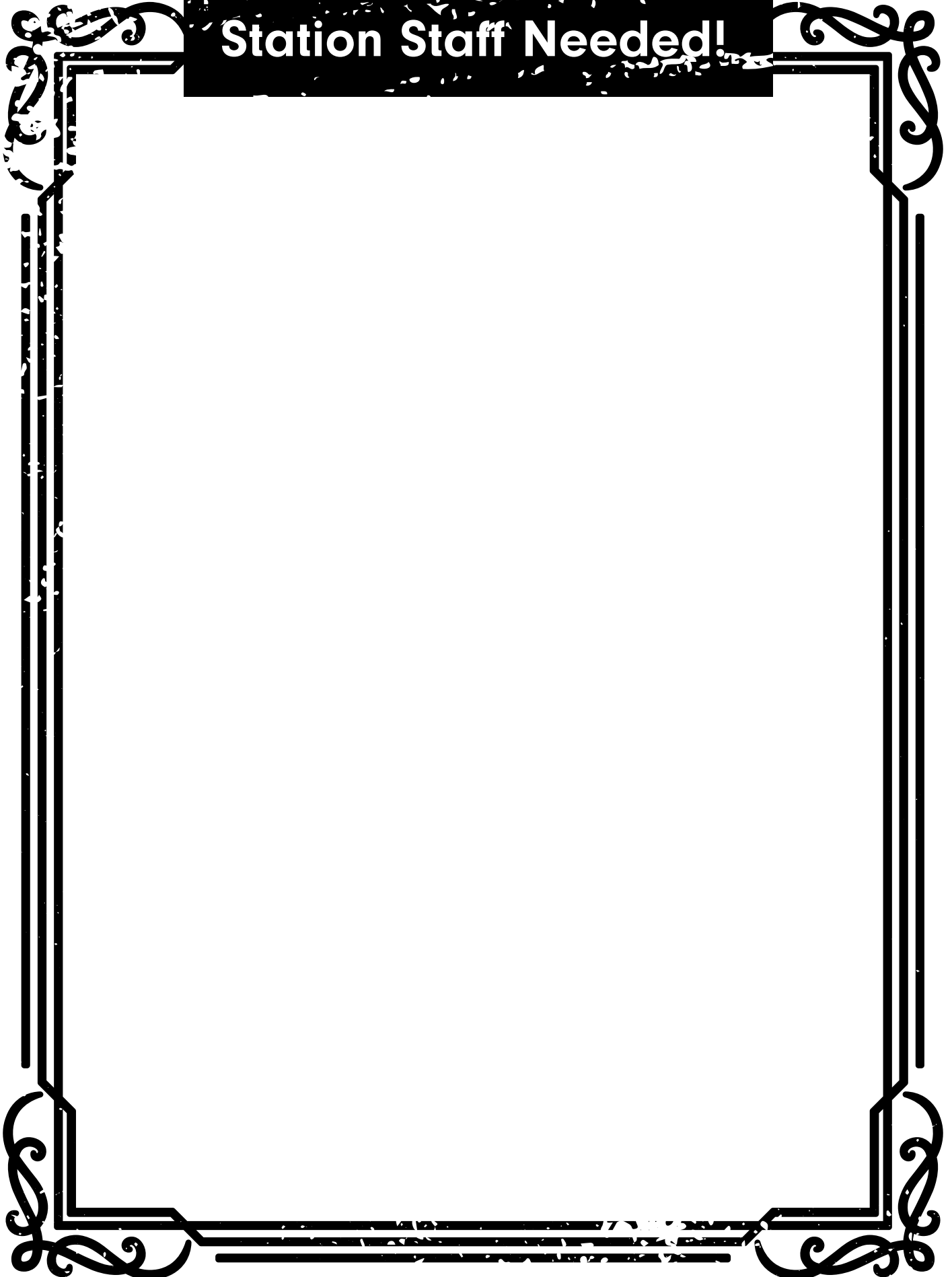
A bullet point list of the skills needed for the job e.g. team working

## Writing a Job Ad





# Station Staff Needed!





# The Sound of Steam

## Useful links:

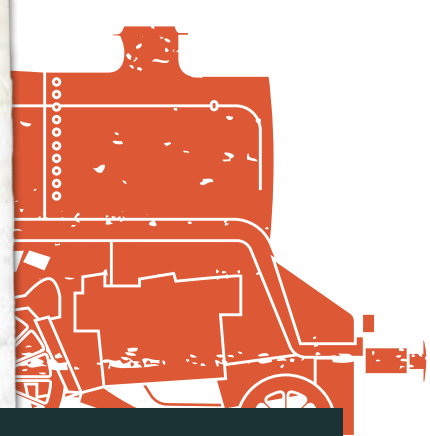
### Footage of NYMR Steam Galas:

■ [www.youtube.com/  
watch?v=vfYF14bt97k](https://www.youtube.com/watch?v=vfYF14bt97k)

■ [www.youtube.com/  
watch?v=z3COhfWw7Ck](https://www.youtube.com/watch?v=z3COhfWw7Ck)



Image: NYMR Archive



## Suggested Activities

- The Shape of Steam
- Song of Steam and Rail

## Steam Power

This photo, taken just before the Second World War, shows a steam train leaving Goathland Station. Steam trains make a rhythmic sound as they move. Coal is burned and the hot air moves through the pipes in the boiler which is filled with water. The water boils, producing steam which is guided to a cylinder. The steam creates so much pressure, that the rods connected to the driving wheels

of the engine start to push back and forth, creating the rhythmic sounds. The iconic huffing of a steam train is the sound of the smoke being emitted through the chimney. The air-pump 'hisses' as it produces pressure for the brakes. Another sound associated with steam trains is the whistle – a safety feature or signal to warn that the train is approaching.



# The Shape of Steam

A shape poem is written to show the shape of the subject it is describing. This helps to give extra meaning to a poem.

Your task is to write a Shape Poem about the sounds of a steam engine, in the shape of a steam engine! A template is provided to help, but you can design your own.

Try reading 'From a Railway Carriage' by Robert Louis Stevenson for inspiration.

Start by writing down all the words that come to mind about the steam engines particularly trying to remember (or imagine) all the sounds you would hear. You can use these words in your poem.

## From a Railway Carriage By Robert Louis Stevenson

Faster than fairies, faster than witches,  
Bridges and houses, hedges and ditches;  
And charging along like troops in a battle,  
All through the meadows the  
horses and cattle:  
All of the sights of the hill and the plain  
Fly as thick as driving rain;  
And ever again, in the wink of an eye,  
Painted stations whistle by.  
Here is a child who clambers and scrambles,

All by himself and gathering brambles;  
Here is a tramp who stands and gazes;  
And there is the green for  
stringing the daisies!  
Here is a cart run away in the road  
Lumping along with man and load;  
And here is a mill and there is a river:  
Each a glimpse and gone for ever!

**A Child's Garden of Verses, 1885**

The RLS Website: [www.robert-louis-stevenson.org](http://www.robert-louis-stevenson.org)



Write a Shape Poem

A large, stylized outline of the state of New York. The interior of the outline is filled with horizontal lines, providing a space for writing a poem. The outline includes the characteristic notches on the left side and the rounded top and bottom.





# Song of Steam and Rail

Try to compose a short piece of music inspired by the sounds of the steam engine. Or perhaps you could put your poem to music!

You might prefer to create some sounds effects and actions to accompany your poem.

How can you make train sounds with your mouth and hands?

You could try adding in instruments available at school.



whistle

clack

click

choo choo





# Make Engine Whistle Pan Pipes

Here are some instructions to make your own pipes and try to recreate the whistling of the engine.

Materials:

- |                              |                  |
|------------------------------|------------------|
| ■ Large width plastic straws | ■ Modelling clay |
| ■ Ruler                      | ■ Tape           |
| ■ Scissors                   | ■ Lolly Stick    |



1. Cut the Straws – use the ruler to carefully measure and cut the straws accurately.

- |                 |                |
|-----------------|----------------|
| Pipe 1: 17.5 cm | Pipe 5: 11 cm  |
| Pipe 2: 15.5 cm | Pipe 6: 10 cm  |
| Pipe 3: 13.5 cm | Pipe 7: 9 cm   |
| Pipe 4: 12.5 cm | Pipe 8: 8.5 cm |

2. Add a clay plug to the end of each straw and secure it in place with tape.
3. Tape your pipes together in size order, making sure the end with the clay plugs are at the bottom!
4. You can reinforce your pipes using a lolly stick.
5. You are ready to experiment with your steam engine pan pipes!





# Movie Magic

## Suggested Activities

- Local Landmarks
- Setting the Scene



## A Celebrity Station

Image: John Hunt, photographer

The original Whitby to Pickering line was proposed by renowned Victorian engineer George Stephenson in 1831. Goathland Station was built in 1865 and retains its Victorian charm, consisting of stone buildings in the design of a classic country station. The station's many historic features make it a popular location for filming period dramas. The 1 in 49 gradient (angle of the incline) between Grosmont and Goathland is one of the steepest on any passenger railway in the UK and creates a spectacular, steam filled arrival into the station as engines need to be travelling at full power.

Goathland Station is the celebrity station on the NYMR, appearing in numerous films and TV series. Most famously, it was the setting for Hogsmeade Station in *Harry Potter and the Philosopher's Stone*. Harry, Ron and Hermione arrive at the station as first year pupils on their way to Hogwarts School, and are greeted on the platform by Hagrid. Goathland village and station also appeared in the TV series *Heartbeat* which was set in the 1960s.



# Local Landmarks

Research a local landmark or heritage site close to where you live. You might choose to research a local story of a well-known person instead.

Can you find out about some of the people who lived or worked there? You could also find out more about the type of jobs people did or more about their hobbies and lifestyle.

Different sources of evidence can be used together to build up a picture of the lives of people who lived in the past. Gather interesting information you might be able to use in a story.

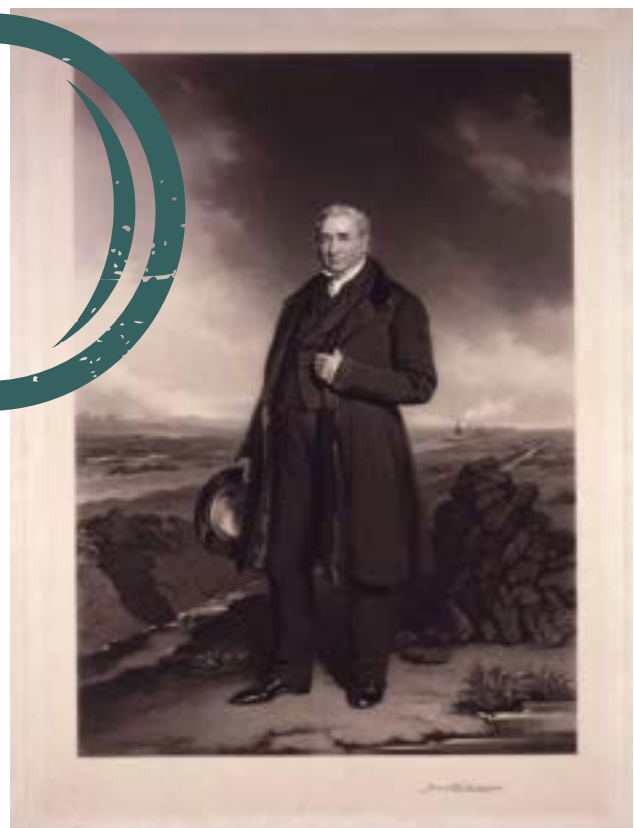
## Sources of Evidence

- Census Returns
- Maps
- Photo Archives
- Newspaper Archives
- Talking to Local People
- Local History Societies

**Make a  
fact file**

You could research the life of a famous person such as 'Father of the Railway' George Stephenson. Make a fact file or an information poster of the information you discover.

Image: T. L. Atkinson after Lucas,  
Public domain, via Wikimedia Commons







# Setting the Scene

Plays are written for people to perform. The script is a written version of the play. Your challenge is to write a scene for a play set at a local landmark or including information about a person you have researched. You can also choose to set your story at Goathland Station, using the stories of people who have worked there.

**Write  
a script**



## Tips for writing your script:

- Include a list of the characters
- Write stage directions in the present tense
- Add instructions, in brackets, on how the characters are feeling and speaking (loud, slow, happy etc.)
- Characters should take turns to speak
- Use a new line when a different character speaks
- Use verbs and adverbs in the stage directions to add more atmosphere to the story (shout, scream, joke etc.)





# Goathland Station

## Local Legends

Here are some stories of people who have worked at Goathland Station. You could use their stories as inspiration for your play.

### Hannah Readman

#### Porter

At the start of the First World War, Hannah and Thomas Readman lived at Railway House, 2 Incline Top, Goathland. Thomas worked on the railway. In 1917, he was ordered to join the army to lay rails to transport supplies.

Sadly, he died after less than a month so Hannah had to support herself and her children. She found work as a porter on Goathland Station. At that time, it was very unusual for women to work on the railways.

Hannah's responsibilities included helping passengers on and off trains, carrying their luggage for them, keeping the waiting rooms clean and making sure the fires were lit in the hearths all around the station.





# Goathland Station

## Local Legends

### Edward Mowforth Station Master

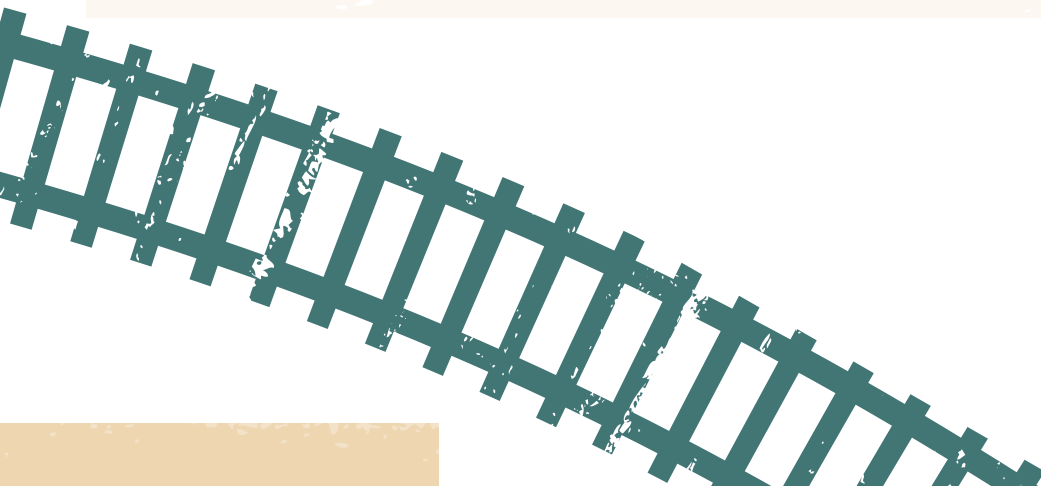
Between 1934 and 1946, Edward Mowforth was the Station Master at Goathland and Levisham. He was paid a salary by the London & North Eastern Railway (LNER) but to make extra money he sold coal and hens' eggs to local farmers and villagers.

The Station Master was responsible for the smooth running of operations at his station. He was in charge of all the other people who worked here including the Ticketing Clerk, the Porters, the Lad Porter, the Signallers and the Guard.

One of the most important jobs of the Station Master was to check that the station clock was set at the right time.



Image: NYMR Archive





# Signalling for Safety

## Suggested Activities

- Make a Single-track Token
- Design a Railway Safety Poster



## Signaller's Bag

This is a very interesting object – it is still used today when the trains are running! It is a token bag used by the signaller. On a single-track, trains can be moving in either direction so there is a real risk of collisions. A reliable system of knowing which trains are on the track is needed. A section token (tablet) is something that the engine driver must have before entering a section of single track. The tokens are tracked using a machine called a Tyer's Electric Train Tablet System, ensuring only one train is on the track. It gives the driver a physical assurance they have the right of way.

The long handle of the bag is because the bag is passed between the driver and signaller while the engine is moving! The driver or signaller can more easily put the bag over their shoulder. You can see this space in the bag where a token (tablet) can fit.

In the past, tokens were made of brass and usually had the name or the stations of the length of track they were used on. Each token on the line had a different shape in the centre to correspond to each different station, so that the driver could feel it in the dark.





# Make a Single-track Token

Make and paint a clay token suitable for using at the North Yorkshire Moors Railway.

Research the route of the North Yorkshire Moors Railway and decide which two stations to include on your signal token. These stations need to be one after the other along the route, as the token is given to the Engine Driver by the Signaller so they know the route between the two stations is clear.

The token has notches around the edge, which shows which section of railway it is for. What shapes will you include in your token design? Remember it needs to be circular to fit into the token bag.

Tokens were usually made of brass, but perhaps you want to use different colours to make your token stand out.



## Useful links:

### Footage of NYMR Stations:

- [www.nymr.co.uk/Pages/Category/station-info](http://www.nymr.co.uk/Pages/Category/station-info)





# Design a Railway Safety Poster

Research ways we can be safe travelling by train, using level crossings and when we are near railway lines.

Many railways now operate electric trains. Electricity brings new potential dangers near railway lines.

Make a poster or leaflet to inform friends how to be safe.



## Useful websites::

- [www.networkrail.co.uk/stories/educational-resources-for-children](http://www.networkrail.co.uk/stories/educational-resources-for-children)
- [www.networkrail.co.uk/communities/safety-in-the-community/safety-education](http://www.networkrail.co.uk/communities/safety-in-the-community/safety-education)
- [www.switchedonrailsafety.co.uk/7-11-years](http://www.switchedonrailsafety.co.uk/7-11-years)



## STEM

## Teacher Information



# The Age of Steam

## Suggested Activities

- Label the Locomotive



Image: NYMR Archive

## The Water Tower

The invention of the steam engine helped to ignite the first Industrial Revolution, powering mills and factories which could then mass produce goods. Coal was needed by this growing number of factories therefore, large amounts of coal needed transporting around the country. Steam locomotives also meant goods could be transported to new markets and people could travel more easily, including for holidays and day trips to towns like Whitby.

Coal is burned in the locomotive's firebox. The heat produces gases that rise and go through tubes in a boiler which contains water. The heat boils the water, producing steam. The steam is then directed through another tube to a cylinder. The steam then

pushes the piston which in turn pushes a driving rod that is connected to driving wheel. This is how steam makes the locomotive move. The steam then rises out through the chimney. Large amounts of water are needed.

The water tower at Goathland Station is used to fill the boiler of locomotives. Coal is a fossil fuel, which releases carbon dioxide and other greenhouse gases when it is burned. This adds to the problem of global warming. Transport is responsible for around a quarter of the UK's greenhouse gas emissions. New developments in electric vehicles, including locomotives, and renewable sources of energy to produce electricity are helping to reduce the reliance on fossil fuels.



Cut out the words and stick on the correct labels to the diagram.



Smoke

Driving Wheel

Burning Coal

Piston

Water

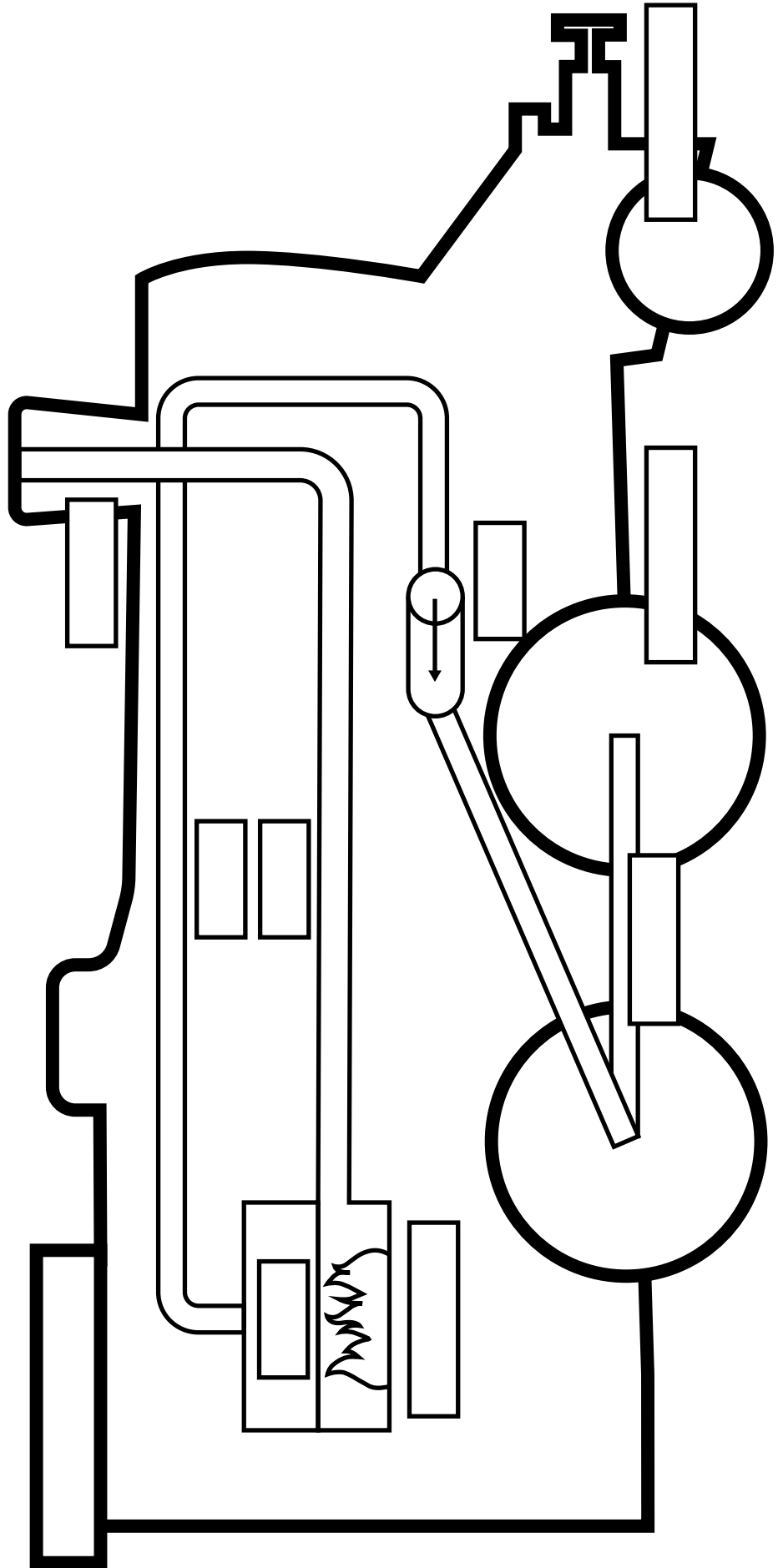
Driving Rod

Chimney

Steam

Guide Wheel

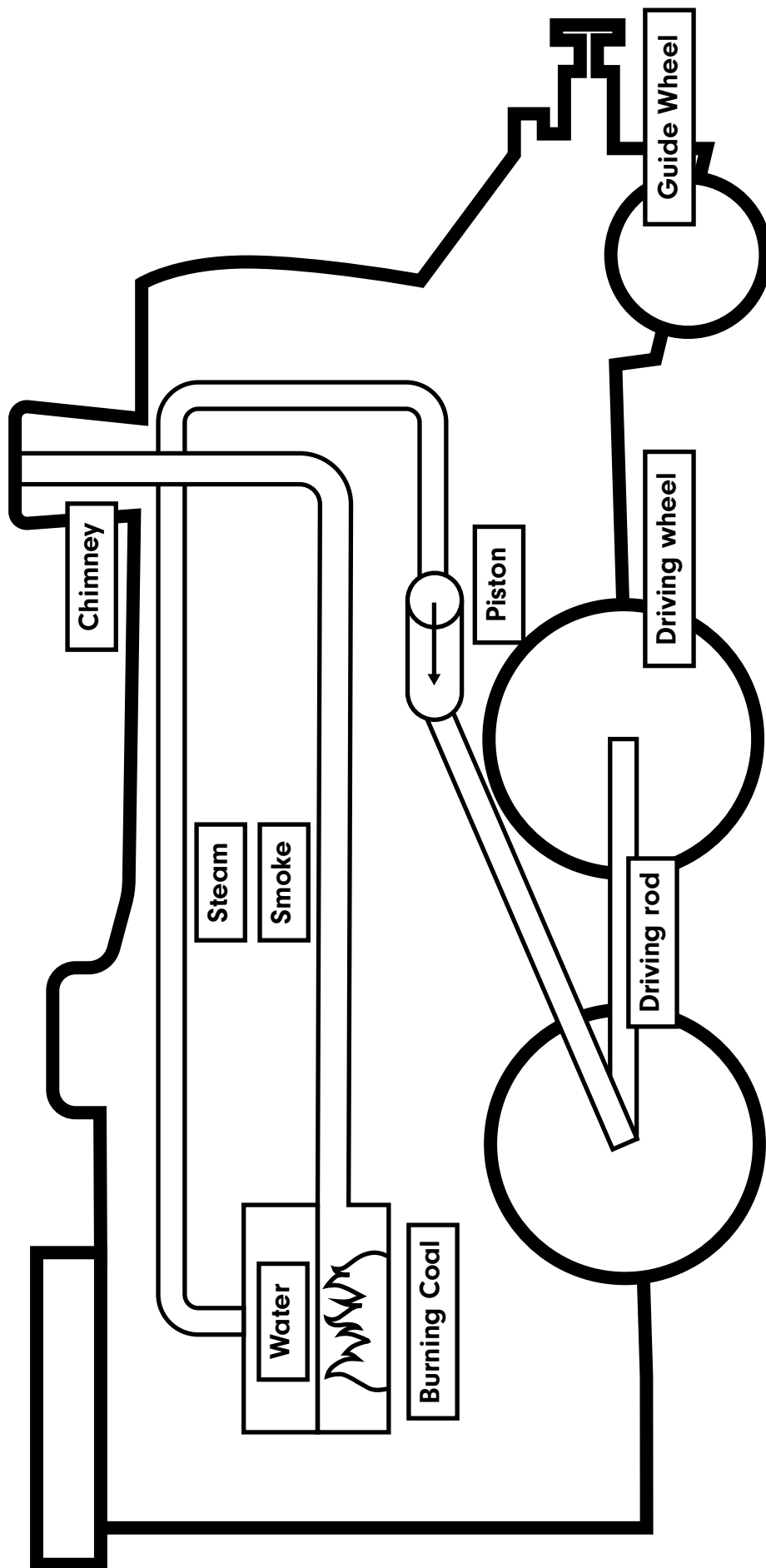
# Label the Locomotive





# Label the Locomotive

## Answers





## Geography

## Teacher Information



# Mapping the Railway



## Suggested Activities

- Comparing Old and New

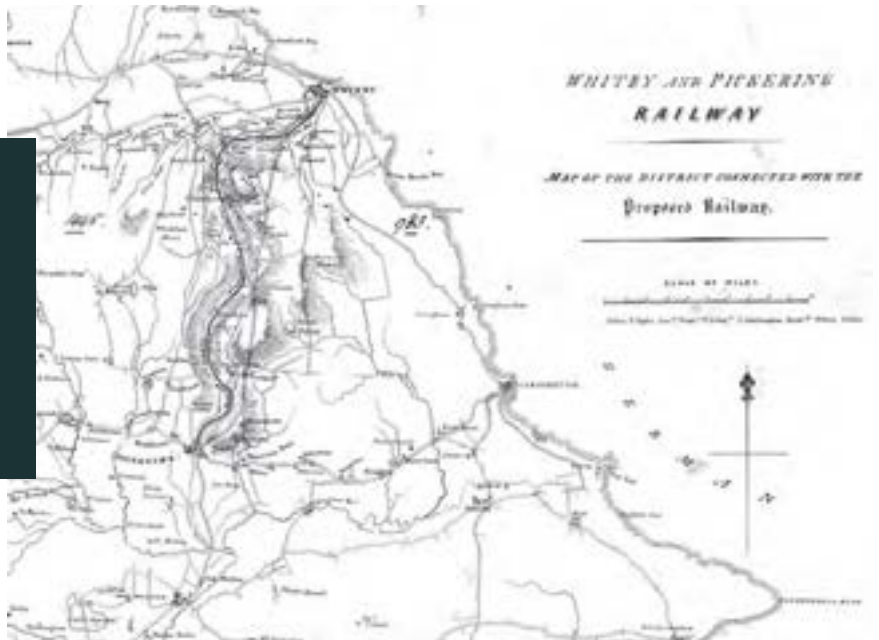


Image: NYMR Archive

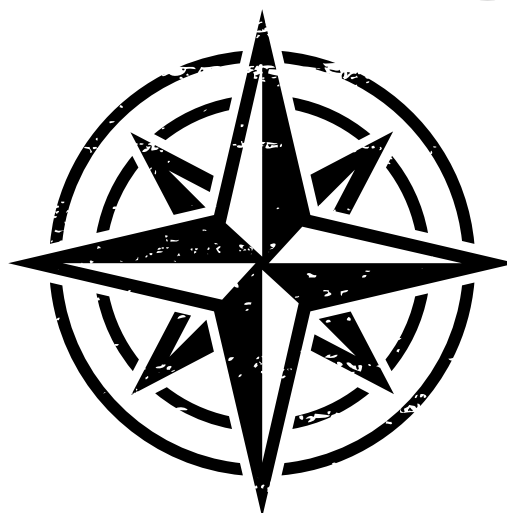
## Whitby and Pickering Railway

The Whitby and Pickering Railway was designed in 1831 by renowned Victorian engineer George Stephenson, the “Father of the Railways”. The horse-operated railway opened in 1836, opening up new inland markets for the fishing and shipping industries of Whitby. Building the new railway line was a challenge because of the geography of the North Yorkshire Moors and required some innovative engineering solutions. This included cutting through 110 metres of rock at Grosmont to create one of

the oldest railway tunnels in England. Part of the line involved climbing a steep gradient from Beckhole to the original Goathland Station. The incline was 1400 metres long and horses could not pull the wagons. A solution was found using water tanks to provide gravitational force to pull the carriages up the incline one at a time. By 1865 this had been abandoned and replaced with a deviation line and the new station at Goathland was built.



# Route of the Railway



Compare the Proposed W&P Railway old map from 1861 with a modern OS map of the North Yorkshire Moors.

1. Can you add and colour in features on the old map using information from the OS map:

- W&P railway line
- Rivers
- Woodland
- Towns

2. Add contour lines to the old map.

3. Which OS symbols on the new map can you find along the route of W&P railway line? Draw them in the table below and find out what they mean.

Symbol	Meaning



4. Design a key of other symbols you think are needed for the 1861 map and add them in the right places.

Symbol	Meaning



# North Yorkshire Moors

## 1861 Map

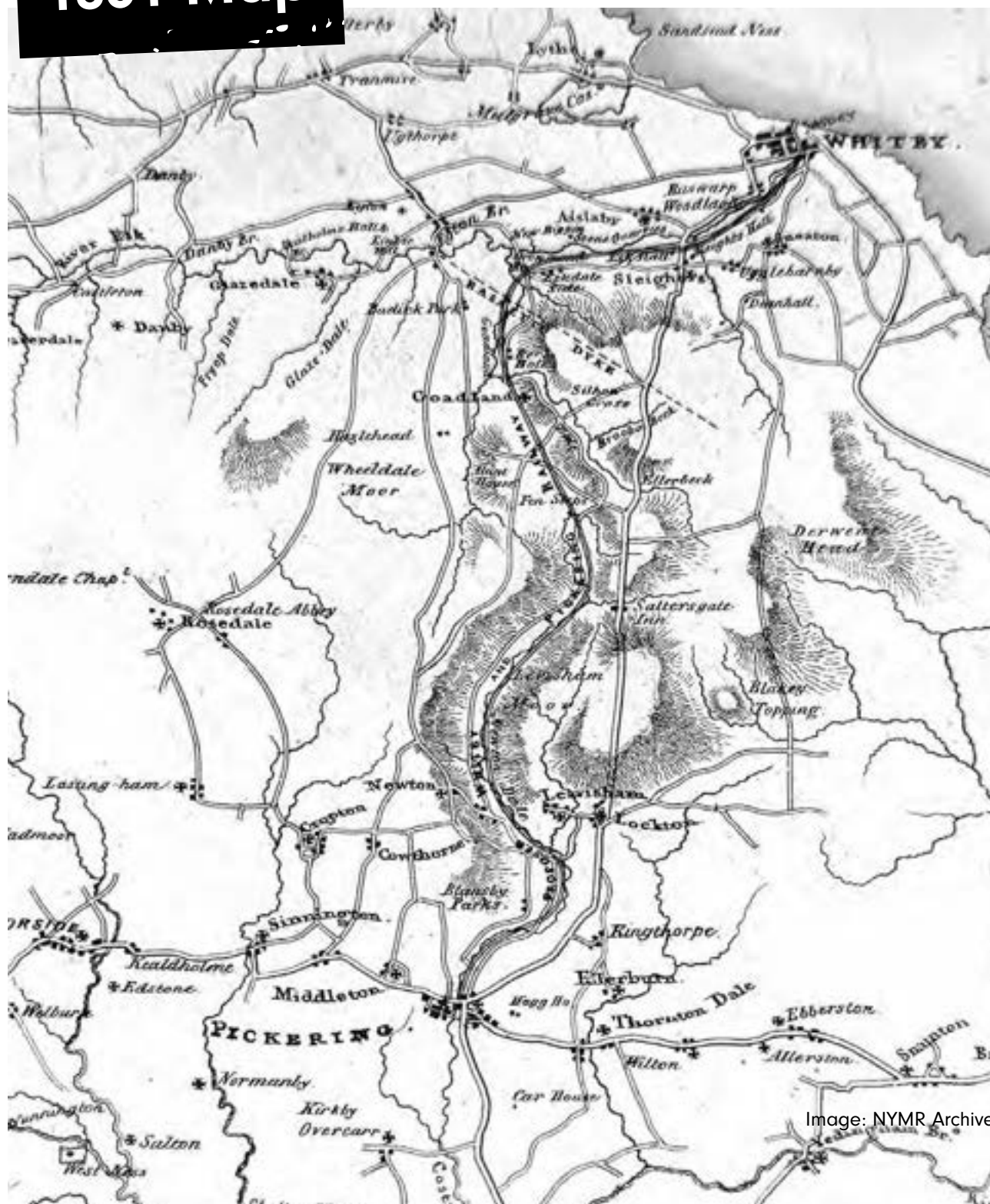


Image: NYMR Archive



# North Yorkshire Moors

## 2017 Map



Map Contains Ordnance Survey Data, Crown Copyright and Database Right 2017

Image: [www.mapmoose.com](http://www.mapmoose.com)





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