



### EDUCATION OPPORTUNITIES: KEY STAGE 2

Nene Valley Railway Education Team offers a range of activities that can be used to enhance or support your school curriculum. Alternatively the activities could be offered as part of an extension programme or included in end of term 'Activity' days.

Outlined below are the core activities that we offer and have proved to be most popular with the schools who visit. In addition we can also offer subject specific experiences in Mathematics, Science, Design Technology, Humanities and English.

If you do not see anything that quite meets your requirements, please do contact us on education@nvr.org.uk, to discuss a programme that would suit you.

Specific curriculum links have been identified for you in our Cross Curriculum Links document.

A price guide for the activities can be found at the end of the document

#### STATION TOUR

Probably our most popular education experience for all ages at NVR is the comprehensive, curriculum based STATION TOUR. After an initial meet and greet, your school group will be divided into smaller groups for the purpose of the tour. We try to have a maximum of 15 children per group but this cannot always be guaranteed.

An Education Team volunteer will accompany the group and lead the tour, answering any questions required and pointing out relevant trains and articles around the station. If you have any specific information that you would like shared with your students, please inform us via the booking form.

The key areas that we visit on the tour are: the signal box, the workshop, the static engines, the platform and footbridge.

#### **LESSONS**

The lessons/activities that we offer are delivered by an NVR Education Team volunteer. They can be booked in conjunction with the station tour OR as a stand-alone activity to be delivered prior to or after the train ride.

As previously notes, if you do not find anything below that specifically meets your requirements then please contact us on education@nvr.org.uk.





## KEY STAGE TWO

### HOW A STEAM ENGINE WORKS

A fact based lesson explaining how a steam engine works using visual aids and/or powerpoint. It includes information about why coal is needed and how steam is made as well as introducing the children to the FIREBOX, CYLINDERS, BOILER, PISTONS AND WHEELS.

There is a large, scale drawing of the engine in the study centre that can be used as a visual aid

The children will then be taken outside to look at the blue static engine more closely to identify/locate the components that have already been discussed.

Age appropriate language will be used.

### IMPACT (Coming of the railways) - KS2

Have you ever imagined what it was like living in England before there was any kind of mechanical transport? When you had to walk everywhere or if you were lucky, could use a horse?

Through an *advanced* powerpoint presentation and question/answer sessions with the students, this lesson explores how important the discovery of steam power was and how it has led to the RAILWAY systems that we have today.

This lesson is intended to have pupil participation.

Age appropriate language will be used.

#### A GREAT INVENTION: STEAM TRANSPORT

This lesson investigates the invention of steam engines, the impact of their discovery and ultimately, their decline.

Through a powerpoint presentation and question/answer sessions with the students, this lesson explores how the steam engine works and its uses from railways to steam ships. We also recognise the achievements of the inventors and their significant achievements, including MALLARDS speed record.

This lesson is intended to have pupil participation with opportunities for their previous relevant knowledge to be shared.





### THE NIGHT TRAIN

Have you ever wondered how letters and parcels were delivered around the country before lorries drove along the motorways? Probably not, as they just seemed to arrive - like magic.

This 'Rail Mail' lesson takes the children back to 1948 when the Night Train was key to the delivery of mail around the country. Filmed on a Night Train, this black and white video shows the journey of a letter from London to Aberdeen including the collection/delivery of mail bags whilst travelling at 50mph.

After watching the short video (15 minutes), the children can then 'have a go' at being a postman and sorting the mail into pigeon holes (which fortunately are not moving).

NB: if you would like to develop this lesson further, please contact education@nvr.org.uk. Price available on request.

### FROM A RAILWAY CARRIAGE - ROBERT LOUIS STEVENSON

NB: This lesson is best delivered from Helga (the railcar which holds up to 44 passengers at a time). Helga can be chartered by the school for the day on non-running days.

This lesson starts in the study centre and continues on the train as the children look for the items that are mentioned in the poem.

A powerpoint introduces the students to Robert Louis Stevenson and the influence that steam trains had on him and his writings. We consider how steam travel expanded everyone's world and how RLS amongst others shared those experiences through poetry and the written word.

If time permits, the group will return to the study centre for a discussion on what the children had seen from the railway carriage window.





# PRICE GUIDE

Activity/Lessons	Cost
Train ride	£4 per child/£8 per adult return **
Station Tour	£50 * up to 60 children
How a Steam Engine Works	£25
IMPACT (of the railway) - KS2	£25
A Great Invention: Steam Transport	£25
The Night Train	£25

<sup>\*</sup> there will be an additional charge for groups over 60.

If you are interested in Through a Railway Carriage, please contact education@nvr.org.uk for further details.

<sup>\*\*</sup> single tickets and platform tickets are also available.