

Contents

Activity Sheets to use before, during or after the visit

1. I Spy Artefacts Trail (The Whole Museum)
2. A GWR Apprentice (The Works)
3. The Pattern Shop (The Works)
4. Life Inside the Works (The Works)
5. Caerphilly Castle Locomotive (Caerphilly Castle Hall)
6. Engineers and Workers (Building the Railway)
7. Making North Star Move (Building the Railway)

Here is a collection of things that you can see in the display cabinets around the Museum. They are numbered in the order you will find them.

When you have found the object in each picture, try and answer these questions.

What is it?
Why was it needed
or what was it used for?
Who would have used it?

Answer these if you can:

What is it made of?

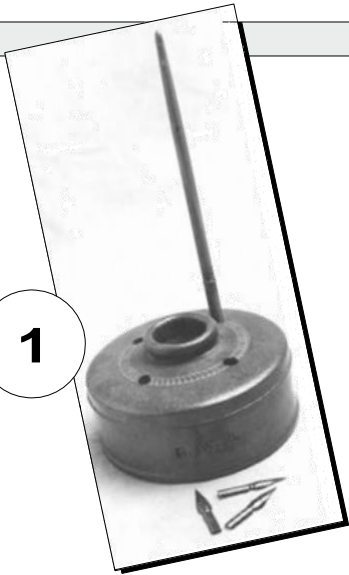
Do we still use it today?

Do we use something else instead?

What do we use instead?

How is it different?

1



.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

4



.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

9



.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

7



.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

5



.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

P.T.O. →

10



.....

.....

.....

.....

.....

8

GREAT
WESTERN
RAILWAY

TIME TABLES

OCTOBER 7th, 1949, to MAY 4th, 1947
(Inclusive).

JAMES MELNE,
General Manager.

GRATUITOUS.

[illegible][illegible]

.....

.....

.....

.....

.....

A photograph of several vintage matchboxes and a circular graphic. The matchboxes are arranged in a cluster. One box is labeled 'SWINDON A.C. (No. 1) 1966' with a circular logo. Another box is labeled 'PLYMOUTH' and 'First Class' with a '689' number. A third box is labeled 'KING'S CROSS' and 'First Class' with a '43' number. A fourth box is labeled 'KENSINGTON (W)' and 'First Class' with a '77' number. A circular graphic with the number '6' is overlaid on the right side of the image.

.....

.....

.....

.....

.....

The Works

A GWR Apprentice

Name



Introductory video

3 words to describe conditions in the Swindon Works.

1) 2) 3)

Difficult Conditions

Foundry

When did the working day begin in Victorian times?

Find and draw the object that was used to pour hot metal.

Long Hours

Pattern Shop

4 different materials used to make a metal part from a pattern.

1) 2) 3) 4)

Materials

space to draw

Carriage and Wagon Shop

Find this object in the display case. What is it made of?

Why was it needed?

Avoiding Accidents



Machine Shop



How could these help keep you safe?

Why were they necessary in the machine shop?

Keeping Safe

Boiler Shop

Most workers were deaf by the age of

Noise

Erecting Shop

Find the brass time 'checks' on the wall. These were used to make sure workers arrived on time.

What do the checks on hooks 60, 31 and 17 have in common?

What do the checks 33, 62 and 80 have in common?

What do you think these symbols could mean?

Timekeeping and Discipline

Where would you least like to have worked and why?

Congratulations! You have now passed your GWR apprenticeship at STEAM.

Name

Find the Pattern Shop

The wooden shapes on the shelf are called patterns. Patterns were cut and carved into shape and then pressed into sand to make specially shaped holes. The shaped holes were filled with hot liquid metal. When the metal cooled and went hard, it made different parts for the engines.

Draw three of the patterns inside the boxes.

Can you work out which parts of the engine each pattern was for?
You may need to go and look at an engine before you can answer this question.



What skills do you think pattern makers needed to be good at their job?

.....

.....

.....

.....

.....

Name

Look carefully at the displays in the Works section,
including the Foundry, Pattern Shop, Carriage and Wagon Shop, Boiler Shop and Erecting Shop.

Write down five words to describe what it
was like to work in the Railway Works in
Victorian times.

- 1)
- 2)
- 3)
- 4)
- 5)

Watch the videos. Give some examples of
different points of view that the factory
workers had about their jobs.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....



Write down three different jobs which the
workers did at the Railway Works.

- 1)
- 2)
- 3)

Would you have liked working in the
Railway Works or not?

Give a reason for your answer.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Name

Look carefully around the locomotive and on the walls and banner.
Write your answers in the spaces.

Objects on Caerphilly
Castle's Coat of Arms?

How Many
Large (Driving) Wheels?

How Many
Small Wheels?

Types
of Metal Used?

Place Built?



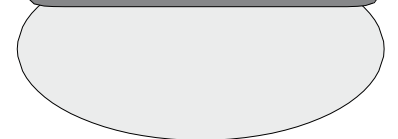
Other
Materials Used?



Date Built?



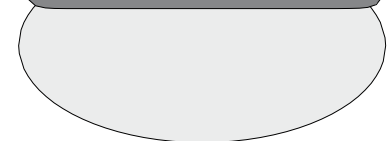
Colours Used
on Caerphilly Castle?



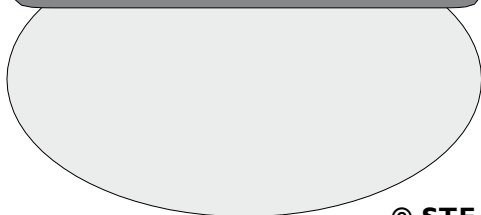
Size of
Driving Wheels?



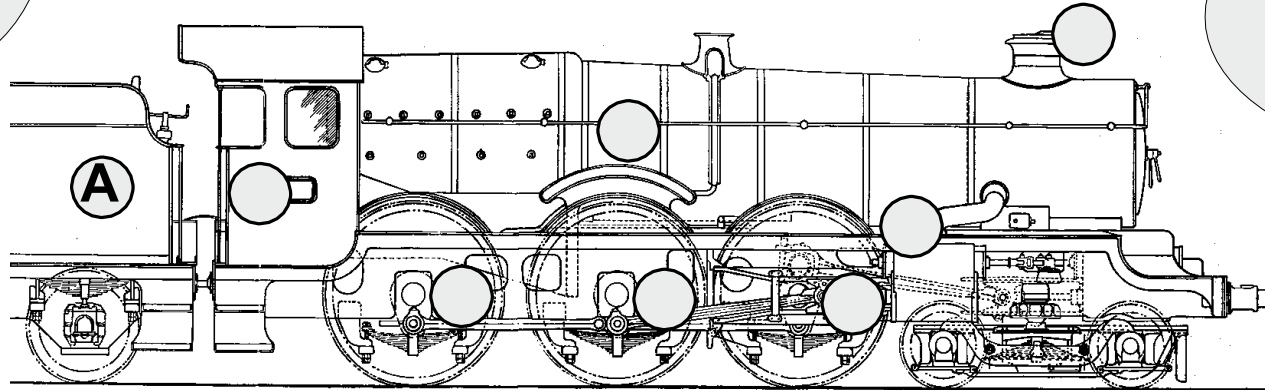
How many
Medium Wheels?



Caerphilly Castle's
Loco Number?



Shapes on
Caerphilly Castle

Match the letters to the parts of the locomotive.

- A** Tender where water and coal are stored
- B** Boiler where water is held
- C** Chimney
- D** Driving wheels
- E** Cab for the driver and fireman
- F** Tubes that carry steam



Name



My name is Isambard K_____ B_____.

I was engineer of a new railway from L_____ to B_____
_____, planned in 1833.

It was called the G_____ W_____ R_____

I am a n_____. We built the railway. It
was very hard work.

We ate b_____ and b_____
and drank b_____.

Carefully draw one of us at work.

I also designed bridges, tunnels, ships and the P_____ Viaduct.

It was built in 18_____. The steam engine you can see is called N_____

_____. S_____. It was designed by another famous engineer,

R_____ S_____ to run on my new railway. It was

built in N_____ on T_____.

(Look around the locomotive very carefully).

Find the picture of the modern 'Intercity 125' locomotive on the wall.

How many differences can you spot between the old and new loco?

(You can write your answers on the back of the sheet).



Name

Fill in the missing words

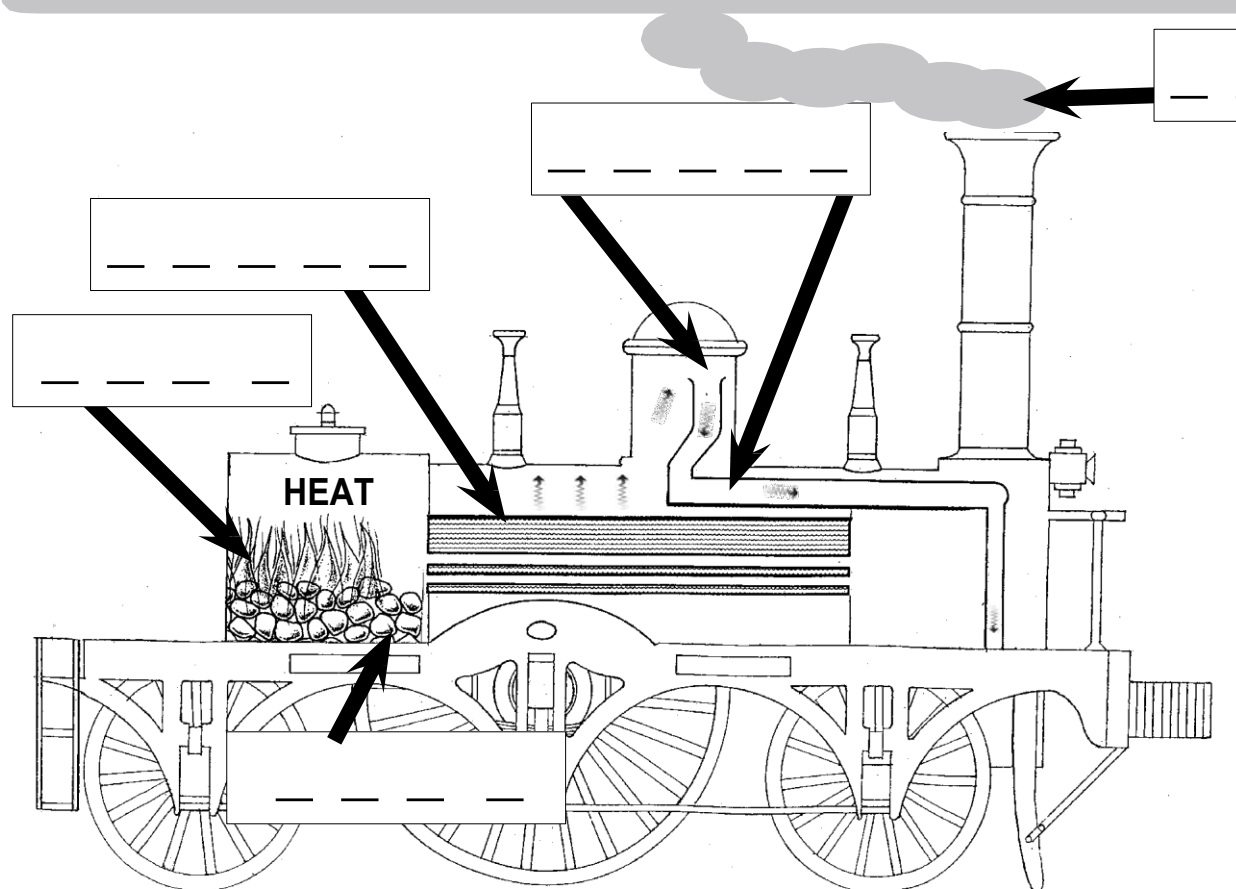
smoke

coal

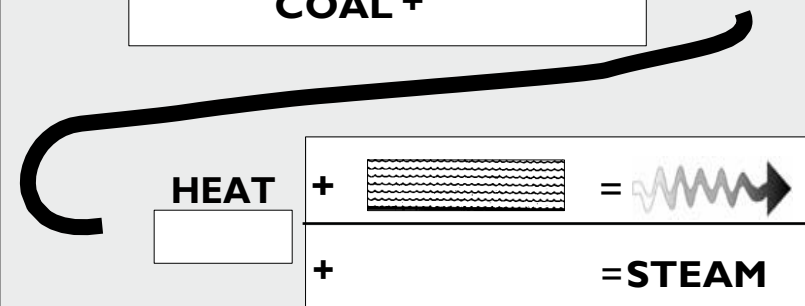
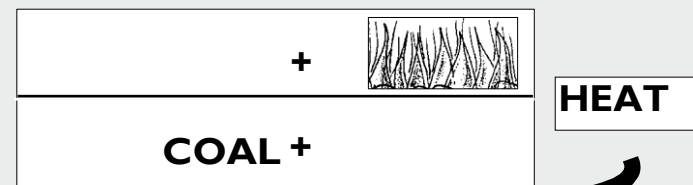
fire

water

steam



**Crack the code.
Fill in the missing words and symbols.**



**Steam makes
the engine go**

