

THE INDUSTRIAL HERITAGE OF GREENFIELD VALLEY



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How to use this resource

This resource has been funded by Cadw and designed and developed by volunteers from Greenfield Valley Heritage Park in partnership with Keystone Heritage and Flintshire archives. The Industrial archaeological sites, which are scheduled monuments (monitored by Cadw) are situated on the site of Greenfield Valley. Schools visit the Valley along with other visitors every year and this resource has been designed to support self-led school visits with input from teachers which link to curriculum subjects.

This resource is also an excellent way to develop and promote the new Welsh curriculum. The activities have been designed for KS2 and KS3 children but can be adapted by teachers for older/younger children. The activities are available for free.

Follow in his footsteps

This resource is designed for teachers. All activities can be adapted to suit the age and abilities of your class. Activities encourage children to follow the character of **Jonathan Chester Puffington-Smythe**, a factory owner, as he takes you on a tour of his factories and what types of things would happen there. The activities link to the history of the sites and what life was like in Holywell and Greenfield at this time. Children may wish to dress up as factory workers for your visit to Greenfield Valley.

Jonathan Chester Puffington-Smythe



Visiting the sites

- Under 16s must be accompanied by an adult
- Teachers are responsible for children at all times
- Toilets are available at the Greenfield Valley Visitor Centre (check website for opening hours)
- Children must respect the industrial archaeology and not climb on the walls
- Picnics are allowed in the Valley but all rubbish must be cleared away
- Booking is recommended to avoid overcrowding. Please call: 01352 714172
- Coach parking: see <https://www.greenfieldvalley.com/schools>

Using the activities

- Each activity has instructions for teachers to ask children to carry out, key subjects and skills
- Each activity has an equipment list
- A copy of any worksheets/information sheets will be in the appendix at the back of the resource and is linked in the activity



Industrial Revolution: The Movie

Before you begin your activities watch our short film about **Jonathan Chester Puffington-Smythe** and his Industrial Revolution journey

<https://youtu.be/q1KGWrExYm0>

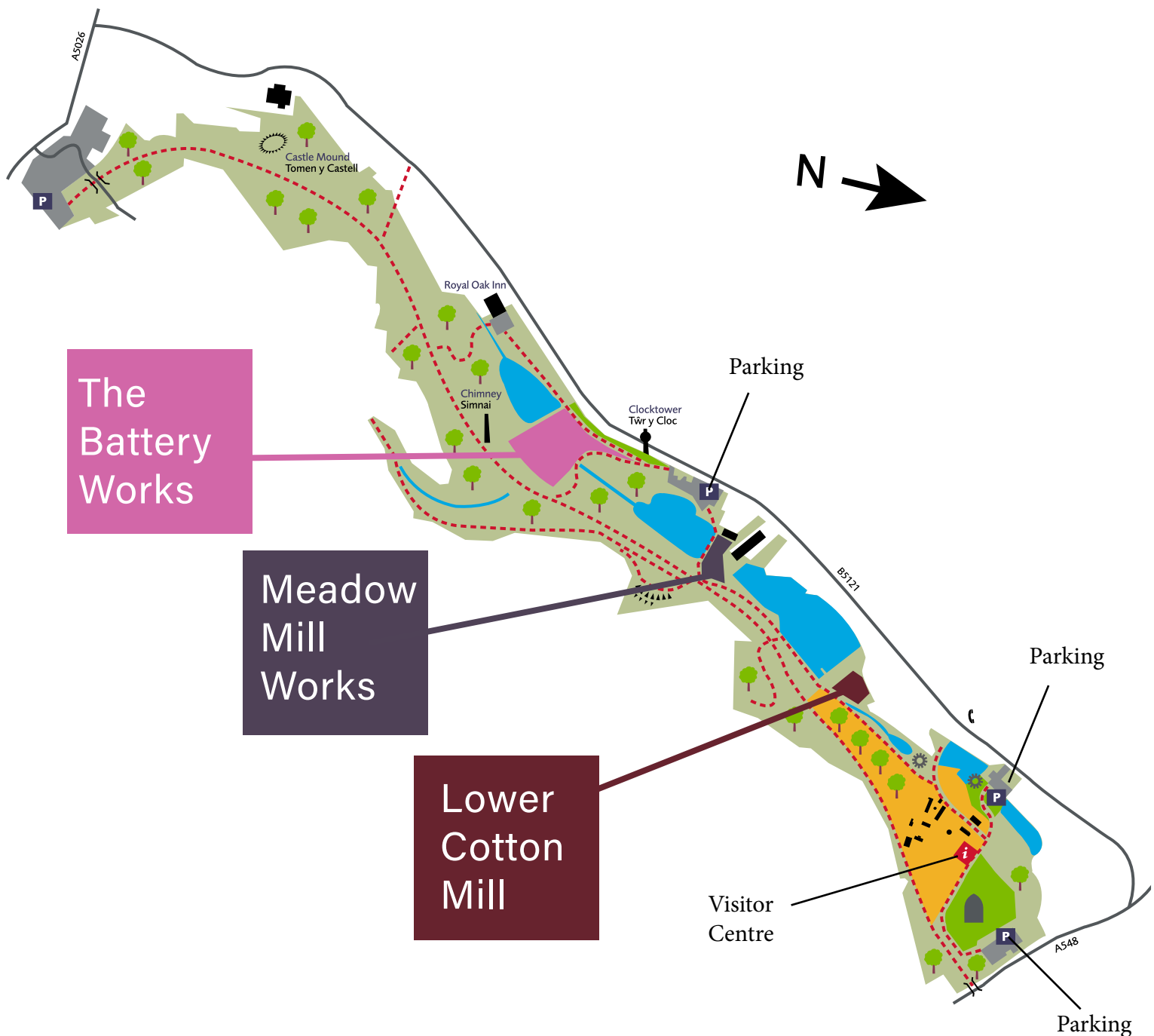
The Sites

In this learning resource we highlight three sites. These sites have been colour coded on your activity sheets for ease of use using the following colours. If you require any assistance finding the sites please, ask at the visitor centre where a receptionist or warden will be happy to show you

The Lower cotton Mill - Cotton

The Meadow Mill Works - Copper

The Battery Works - Copper



The Battery Works

Meadow Mill Works

Lower Cotton Mill

HISTORY OF GREENFIELD VALLEY

Today Greenfield Valley is a peaceful recreational woodland but during the 18th century Greenfield was at the heart of the Industrial Revolution in the North West. Due to its renewable water source which came from the hills in Holywell down to the River Dee it became a great draw for industrialists to set up factories and make their fortunes. Many of the industrialists in the valley belonged to the Quakers Society, which prevented them swearing oaths to universities and trades etc, therefore they became entrepreneurs. The proximity to the sea allowed industrialists to access global trade routes. The water wheel was the greatest power in the Valley driving about 20 factories at one time. Two of the main industries in Greenfield Valley were copper and cotton.

Image courtesy of Flintshire archives





Thomas Patten

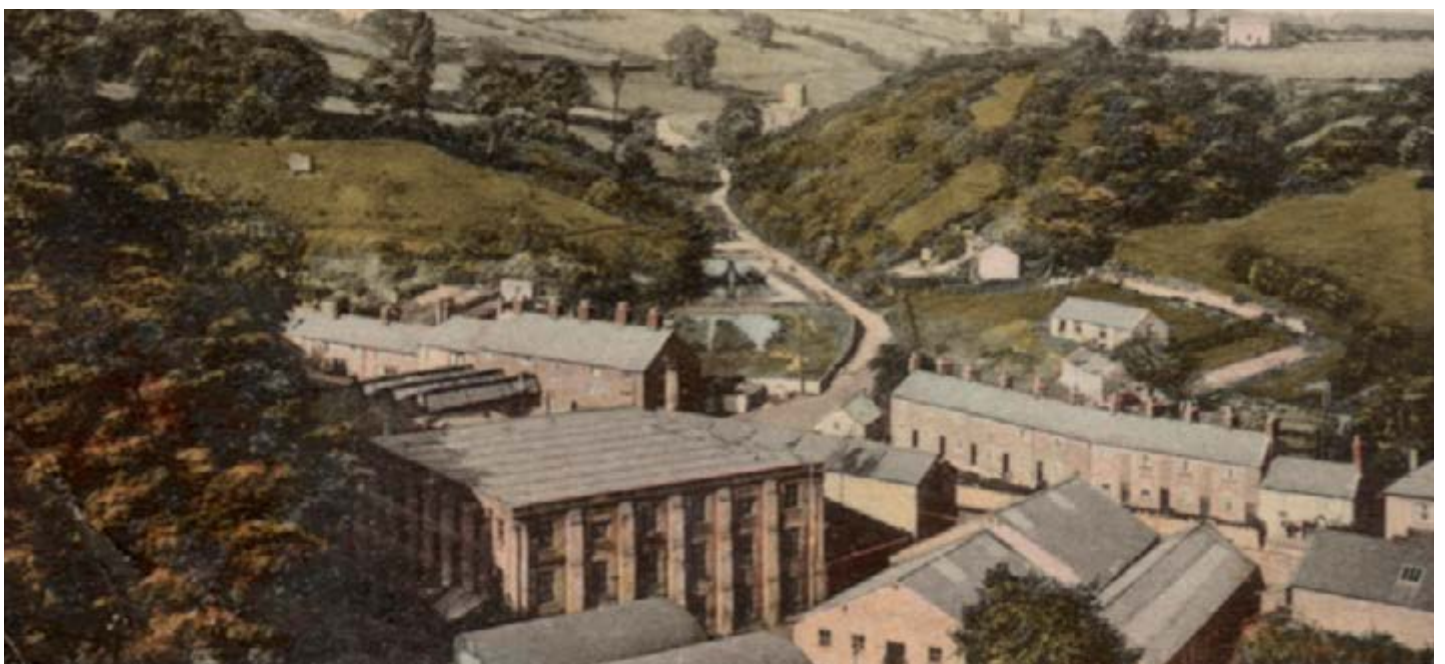
By 1753 Thomas Patten a major share owner of the Warrington Company had established copper and brass mills in Greenfield Valley making household items. They also made copper sheathing for the ships, which were trading as part of the Triangular trade which included slavery and cotton. Also made out of copper were manilla armlets (bright copper), coins ('black jack' copper and lead) and neptunes, large shallow copper dishes, used to evaporate salt water. Forty tons of copper goods each year was produced for this trade giving an income of £5600 (bear in mind that wages in the copper mills were one shilling - 5p a day).



Thomas Williams

In 1785 Thomas Williams (The Copper King) bought the Warrington Company, it was renamed the Parys Mine Company. This company became the most powerful influence on the British Copper Industry and at its peak of prosperity between 1790- 1793 Parys Mine was producing 2500-3000 tons of copper ore per year, which was supplied to ten of the twelve smelting companies in England and Wales.

Both these men through their actions brought great wealth, not only to Holywell but to Great Britain and established the country as a great trading nation.

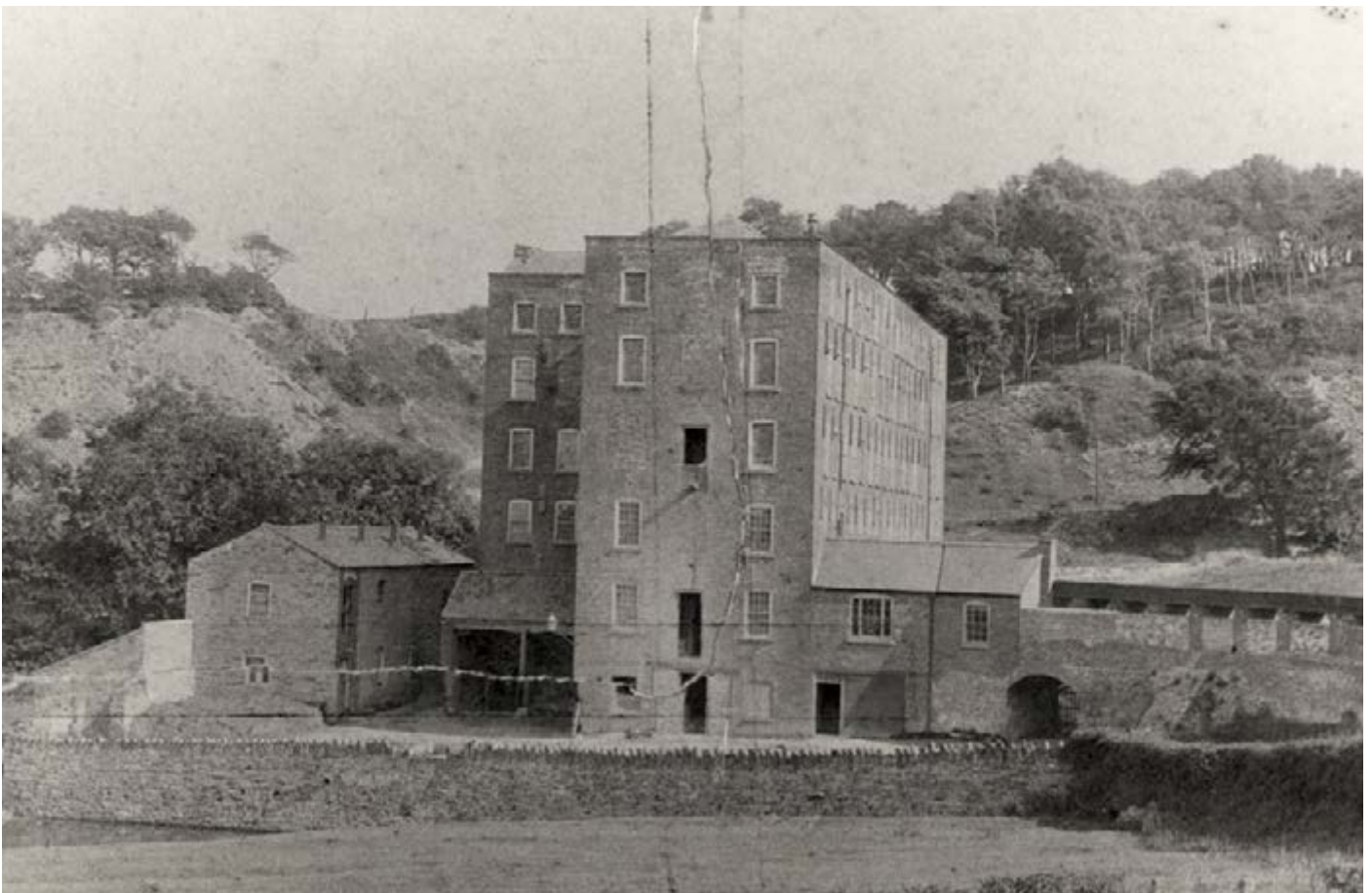


The Lower Cotton Mill

In 1777 John Smalley who had previously met and worked with Richard Arkwright of spinning jenny fame became partners with John Chambers whose mother owned leases on several properties in Greenfield Valley. Greenfield Valley was a great source of female and child labour as the males were working in the mines and quarries.

The Lower cotton mill was the third purpose built mill after the Old Mill and the Crescent Mill, it was thirty six yards long, ten yards wide and six floors high. It took just ten weeks to build, worked with a water wheel eighteen feet high and seven feet wide with a fall of water of sixteen feet.

Purpose built cotton factories were rare and Greenfield Valley had three. The cotton produced in Greenfield was of a high quality and in demand all over the world. Eventually the mills were taken over by other industries.



*Above shows the lower cotton mill as a corn mill producing flour.
Image courtesy of Flintshire archives.*

The Meadow Mill

The Meadow Mill was built in 1788 to specialise in the production of printing rollers for the textile trade. Stamping machinery was installed to produce the Parys Mine Company's unique coinage called Druid tokens. The machinery also made a large number of copper coins for Holland.



Above taken from the railway line looking over Meadow Mill Pond showing the clock tower and Algin House and gardens. Image courtesy of Flintshire archives.

The Battery Works

This mill produced copper pots and pans. The workers would be moving the copper to shape the pots beneath a constant moving hammer. The noise was horrendous hence the local name of Battery Works. Arsenic in copper was dangerous and hand washing before eating food became a habit.



Above showing Battery Row workers cottages, pool, factory chimneys to the right. Image courtesy of Flintshire archives.

WORKING WATERWHEELS

The early factories in Greenfield used the power of water to run their machines. The entrepreneurs of the time picked the Valley because of its constant water supply.



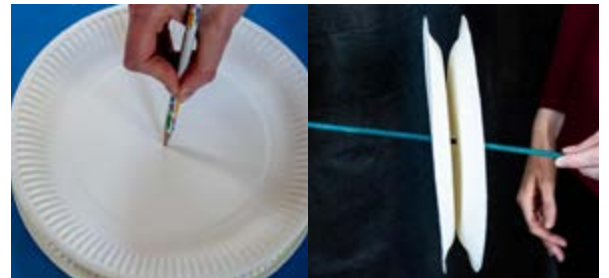
INSTRUCTIONS:

How to make Waterwheels

1. Take two paper plates and place them back to back



2. Make a hole in the middle of the two paper plates (the size of your wooden stick)



3. Using sellotape stick the cups between the two paper plates all facing the same way

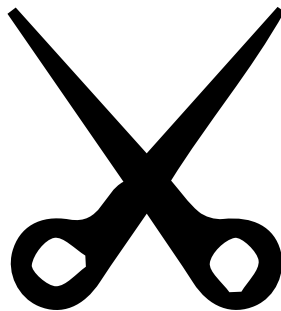


4. Place the waterwheel over a bucket or tub and pour water over the top and observe the wheel moving



EQUIPMENT

- PAPER PLATES
- PAPER CUPS
- DOUBLE SIDED TAPE
- WOODEN STICK
- WATER
- BUCKET/TUB



SUBJECTS

- SCIENCE AND TECHNOLOGY
- HUMANITIES

SKILLS

- INVESTIGATION
- OBSERVATION

CONSIDER THE COPPER KING

Thomas Williams of Llanidan, (1737-1802) was the most successful trader in copper and became known as "The Copper King". Become detectives and find out as much as possible about Thomas Williams and create a display all about his life.



INSTRUCTIONS:

- Use Appendix 1 to develop pupil's research skills. Use the worksheet and ask pupil's to use a variety of methods to find out about Thomas Williams including:
 - The internet
 - Your local library, National Library, Flintshire Archives
 - The Holywell and District Society
 - Greenfield Valley Trust
- Ask the pupils to use the information found to create a classroom display, a PowerPoint presentation or an assembly for the whole school.

EQUIPMENT

- APPENDIX 1
- COMPUTERS/IPADS
- PAPER
- PENS
- POWERPOINT



Below Thomas Williams of Llanidan



SUBJECTS

- HUMANITIES
- SCIENCE AND TECHNOLOGY

SKILLS

- INVESTIGATION
- READING
- WRITING
- ORACY
- COMMUNICATION

COIN CRAFT

Greenfield Valley made their own coins which had to be used within the Valley. This meant that people spent their pay within their local town which benefited local businesses. Ask pupils to make their own coins inspired by Greenfield's coins, come up with a pricing structure and create their own local market in school.

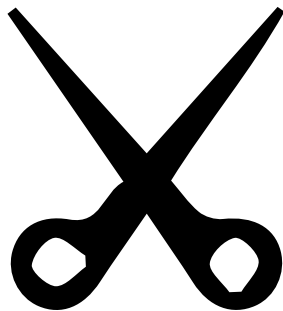


INSTRUCTIONS:

- Coins would usually have a person or animal or local landmark on them. The Parys Mine Company used a Druid because they were based on Anglesey, the home of the Druids.
- Ask Pupils to:
 - Design their own illustration.
 - Research local famous people and landmarks
 - Print copies of Appendix 2 on card
 - Draw the coin design on the coin template
 - Cover the line drawing with blue tack
 - Cover with foil and press down
 - Create their own pricing structure for the coins
 - Research a product to sell
 - Create their own stall front and prices for the goods they are selling
 - The stall which makes the most money is the winner

EQUIPMENT

- APPENDIX 2
- CARD
- BLUETACK
- FOIL
- SCISSORS
- PENCIL
- MARKET STALL GOODS



An image of the Druid coin once used in and around Greenfield Valley
© Greenfield Valley Museum



SUBJECTS

- HUMANITIES
- EXPRESSIVE ARTS
- SCIENCE AND TECHNOLOGY
- MATHEMATICS AND NUMERACY

SKILLS

- CREATIVITY
- INVESTIGATION

PAST POETRY

The working conditions in the factories inspired poetry. One of these poets was John Jones. He was an apprentice in the cotton mills. What can you learn from the poem and use it as inspiration for pupils to write their own poems.



INSTRUCTIONS:

- Read the poem below by John Jones (either as a class, group or individually)
- Ask the pupils in groups to use the following to analyse the poem:
 - Themes and issues
 - Rhythm and rhyme
 - Imagery and symbolism
 - Use of personification, onomatopoeia, alliteration and hyperbole
 - Use the poem to answer the following questions:
 - How do you think John felt about working in the factory?
 - What sounds could he hear?
 - What do you think the working conditions were like?
 - Study other poems about child workers in factories. Use these and the poem below to write your own poem.



EQUIPMENT

- PAPER
- PENS
- OTHER POEMS



SUBJECTS

- LANGUAGES, LITERACY AND COMMUNICATIONS
- HUMANITIES

SKILLS

- INVESTIGATION
- COMMUNICATION
- OBSERVATION
- READING
- WRITING
- ORACY

*Well, I remember, how in early years,
I toil'd therein, with unavailing tears...
No bondage state - no inquisition cell,
Nor scenes yet dearer to the prince of hell,
Could greater acts of cruelty display
Than yon tall factories on a former day;
E'en neighbouring forests frown'd with angry nods,
To see, Oppression! Thy demand for rods!
Rods, doom'd to bruise in barb'rous dens of noise
The tender forms of orphan girls and boys!
Whose cries- which mercy in no instance found,
Were by the din of whirling engines drown'd.*

- By John Jones

CENSUS STUDY

The 1841 census records the names of the people who lived in Battery Row and Back Battery Row and their occupations. These jobs reflect the industry in Greenfield Valley at that time. Use the census to help the pupils find out as much information as they can about the lives of people living in Battery Row and Back Battery Row.



INSTRUCTIONS:

- Ask Pupils to:
 - Use the census information in Appendix 3A to get the children to answer the questions in appendix 3B
 - Research the jobs that the inhabitants of Battery Row had using Appendix 3C to help
 - Next ask the pupils to use Appendix 3D and fill out the boxes with information about the different roles and draw a small picture in the upper box.
 - Ask pupils to think about what the person would have done and where, what equipment they would have used and what the conditions would have been like.
- This Activity links to **Activity 9 - Industrial Imagination**

EQUIPMENT

- APPENDIX 3
- PAPER
- COMPUTER



SUBJECTS

- LANGUAGES, LITERACY AND COMMUNICATIONS
- HUMANITIES

SKILLS

- INVESTIGATION
- COMMUNICATION
- OBSERVATION
- READING
- WRITING
- ORACY

Example



FACTORY OWNER

The factory owner managed the factory, inspected the workers and made sure everything was completed on time. He was very strict.

MAGNIFICENT MAPS *KS3*

Greenfield Valley has changed considerably over the last few centuries. What was once a great industrial area now only contains the remains of its industrial past. Use the maps to discover more about these changes.



INSTRUCTIONS:

- Use Appendix 4 to compare the 2019 map (appendix 4a) and 1855 (appendix 4b) 1871 maps (appendix 4c)
- and ask pupils to answer the following questions:
 - Which map has more houses?
 - How many industries can you count?
 - How many different industries can you name?
 - Can you find the railway line?
- What else can the maps tell you about the industries in Greenfield in the past?



EQUIPMENT

- MAPS
- APPENDIX 4
- PENCILS



SUBJECTS

- HUMANITIES

SKILLS

- INVESTIGATION
- OBSERVATION
- READING



HISTORICAL HYMNS

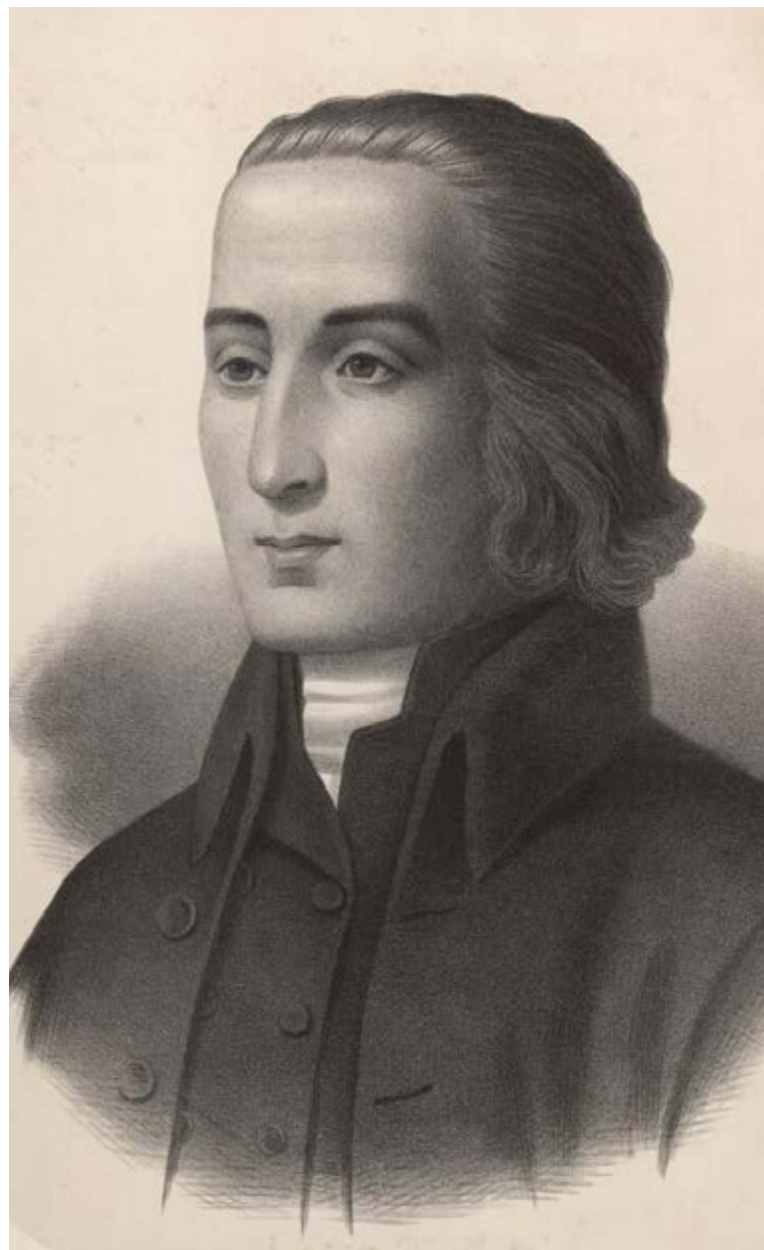
Factory workers would have worshipped in local churches and sung a number of hymns. The best known composer of the time was William Williams in the 18th century who wrote nearly 1000 hymns. Research him and his songs and learn a Welsh hymn to perform over the factory ruins at Battery Works when you visit.



INSTRUCTIONS:

- Ask pupils to Research the life of William Williams and his songs.
 - Look on the internet
 - Contact your local church to find out about old songs (they may teach you one of the songs!)
 - Learn one of his songs or another Welsh song of your choice
 - **Links to Activity 16 - Haunting**
Historical hymns: Perform this song on the walkway at Greenfield Valley overlooking the ruins of Battery Works

A portrait of William Williams from the Welsh Portrait Collection at the National Library of Wales



EQUIPMENT

- COMPUTER
- SPEAKERS
- LYRICS



SUBJECTS

- EXPRESSIVE ARTS
- HUMANITIES

SKILLS

- INVESTIGATION
- READING
- ORACY
- PERFORMANCE

ACTIVITY 8 - LOWER COTTON MILL

FEATURE FINDER

The Lower Cotton Mill would have been a factory of many floors. Imagine what the inside would have been like, the smells and sounds. Explore the Lower Cotton Mill and find the key features.



INSTRUCTIONS:

- Print copies of the picture sheet (appendix 5)
- As we only have some of the ruins left ask the pupils to try to imagine what it may have looked like
- Ask pupils to write what they think each feature might have been in the space provided
- Discuss your findings as a class and do more research back at school into what you have found



EQUIPMENT

- PENCIL
- CLIPBOARD
- APPENDIX 5



SUBJECTS

- HUMANITIES
- HEALTH AND WELLBEING

SKILLS

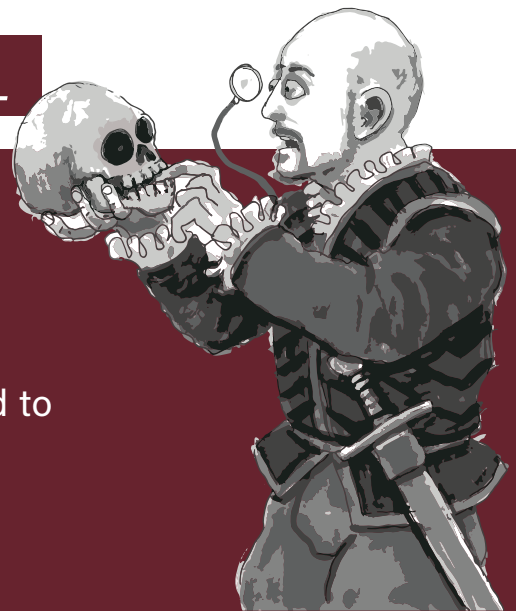
- INVESTIGATION
- OBSERVATION
- COMMUNICATION

ANSWERS

- 1)Air Brick/vent
- 2)Water inlet
- 3)Mill Access/door
- 4)Metal wheel
- 5) Water chute
- 6)Water arch
- 7)Abutment straps
- 8)Iron Roller
- 9)Warehouse Arch
- 10)Electric cable/Junction box
- 11)Gateway
- 12)Retaining strap

INDUSTRIAL IMAGINATION

Use the information researched back in school from **Activity 5 - Census Study** to create short scenes linked to the different factory roles.



INSTRUCTIONS:

- Split pupils into groups and ask them to:
 - Develop actions linked to your their chosen role
 - Create a 'freeze frame' (pupils carry out actions until teacher shouts freeze)
 - The teacher will tap a random member of the group on the shoulder
 - Person tapped on the shoulder will give a piece of information about that role.
 - This is an opportunity to take a picture of each group.



Image courtesy of Flintshire archives.



Image courtesy of Flintshire archives.

EQUIPMENT

- CENSUS STUDY INFORMATION
- CAMERA
- PROPS AND COSTUME (YOU MAY WANT TO DRESS UP AS WORKERS BEFORE YOU VISIT)



SUBJECTS

- HUMANITIES
- EXPRESSIVE ARTS

SKILLS

- INVESTIGATION
- COMMUNICATION
- OBSERVATION
- ORACY



MEADOW MILL MINDFULNESS MEANDER

Greenfield Valley is used today as a place to walk and enjoy time outside. It is very different to how it would have been during the industrial revolution. As you walk between the factory sites think about what you can see, hear, smell and touch.

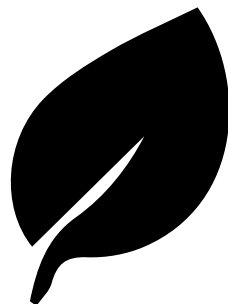
INSTRUCTIONS:

- Use four of your senses to think about the following as you walk:
- Sight:** What five things can you see?
- Touch:** What four things can you touch?
- Sound:** What three things can you hear?
- Smell:** What two things can you smell?
- As a group talk about what you could see, hear, touch and smell.
- Try doing this Mindfulness activity every time you move between sites**



EQUIPMENT

- THE VALLEY



SUBJECTS

- SCIENCE AND TECHNOLOGY
- HEALTH AND WELLBEING

SKILLS

- OBSERVATION
- INVESTIGATION
- ORACY

ACTIVITY 11 - MEADOW MILL

FEATURE FINDER FOLLOW UP

Meadow Mill would have had a large water wheel to power the machinery inside. Imagine what the inside would have been like, the smells and sounds. Explore the Meadow Mill and find the key features.



INSTRUCTIONS:

- Print copies of the picture sheet (appendix 6)
- As we only have some of the ruins left try to imagine what it may have looked like
- Write what you think each feature might have been in the space provided
- Discuss your findings as a class and perhaps do more research back at school into what you have found



EQUIPMENT

- PENCIL
- CLIPBOARD
- APPENDIX 6



ANSWERS

- 1)Cast iron support
- 2)Door strap
- 3)Window arch infill
- 4)Memorial sculpture
- 5)Water wheel arch
- 6)Metal Girder
- 7)Sandstone block
- 8)Metal machine support
- 9)Door beam
- 10)Blocked up window
- 11)Window arch
- 12) Support for door frame

SUBJECTS

- HUMANITIES
- HEALTH AND WELLBEING

SKILLS

- INVESTIGATION
- OBSERVATION
- COMMUNICATION

NATURE NURTURERS

Greenfield Valley is filled with a vast array of plants and insects. During spring and summer there is a wild flower area next to the old factory ruins. What can you see?



INSTRUCTIONS:

- Using the spotter sheet in Appendix 7 tick how many of the animals and insects you can spot. Continue to use this sheet as you walk between sites in the valley.



EQUIPMENT

- APPENDIX 7
- PENCILS
- CLIPBOARDS



SUBJECTS

- SCIENCE AND TECHNOLOGY
- HEALTH AND WELLBEING

SKILLS

- INVESTIGATION
- OBSERVATION

SILENT SYLLABLES

Lip Reading would have been used in many noisy factories, it was to inform other factory workers of what was happening but was not used for whole conversations. It was a skill that was picked up over time and not everyone mastered it. Groups will try to guess the words and then form a sentence or poem when the words have been figured out.



INSTRUCTIONS:

- Arrange the class into small groups of about eight
- Split each group into half
- Each group takes it in turn to stand next to the waterfall taking turns to mouth a word each to the opposite team
- The other team guesses the word of each pupil and then swaps
- Each child gets a different word from the easier challenge or the harder challenge in Appendix 8
- If you have time ask the children to make a short poem using the words

Easier challenge:

MILL WHEEL WATER COTTON WORKER

Use the five words to write a sentence as a group about the factory

Harder challenge:

MILL WHEEL WATER COTTON WORKER
YARN SPINDLES SLAVES COPPER
MACHINERY

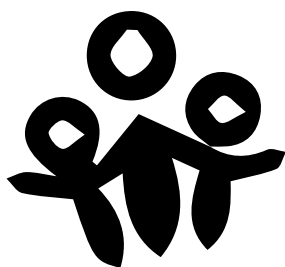
Use these ten words to write a poem such as:

*The mills were dark and dangerous places
The work meant food, clothes and smiley faces
A large **WATER WHEEL** would power the **MILL**
Without water the **MACHINERY** stood still
The **SPINDLES** would hold the precious **YARN**
Picked by **SLAVES** on the **COTTON** farm
The **COPPER WORKER** before food they oughta
Wash their hands in nice clean water
Because of the arsenic in the ore
This was a life or death chore*

~By Gwladys Harrison

EQUIPMENT

- APPENDIX 8
- PAPER
- CLIPBOARDS



SUBJECTS

- LANGUAGES,
- LITERACY AND COMMUNICATIONS
- HUMANITIES

SKILLS

- COMMUNICATION
- OBSERVATION
- READING
- WRITING

ARCHAEOLOGY ART

Only the remains of the many factories are still visible in Greenfield Valley. Using your creativity imagine what would have been here hundreds of years ago.



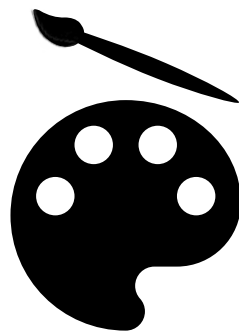
INSTRUCTIONS:

- Ask the pupils to look at the archaeology they can see in front and around them
- Give each child a copy of the frame in appendix 9 so they can focus in on a specific part of the site
- Ask them to draw what they can see now and what they think it looked like using a combination of what they have learnt and their imagination
- Ask pupils to think about the following questions:
 - Where can you see blocked up doors and windows?
 - What would they be for?
 - Why were they blocked up?
 - Where would the chimneys have been?



EQUIPMENT

- PAPER
- PENCILS
- APPENDIX 9



SUBJECTS

- EXPRESSIVE ARTS
- HUMANITIES

SKILLS

- OBSERVATION
- CREATIVITY

PAST POETRY PERFORMANCE

The Valley's history is inspirational and its current setting is very evocative. Perform the poetry in this setting.



INSTRUCTIONS:

- Ask the pupils to perform the poetry they have written in class during *Activity 4 - Past Poetry* overlooking Battery works
- Perform individually
- Record performances of pupils and if you post on Twitter please share with us at [@cadwwales](https://twitter.com/cadwwales)



EQUIPMENT

- POEMS



SUBJECTS

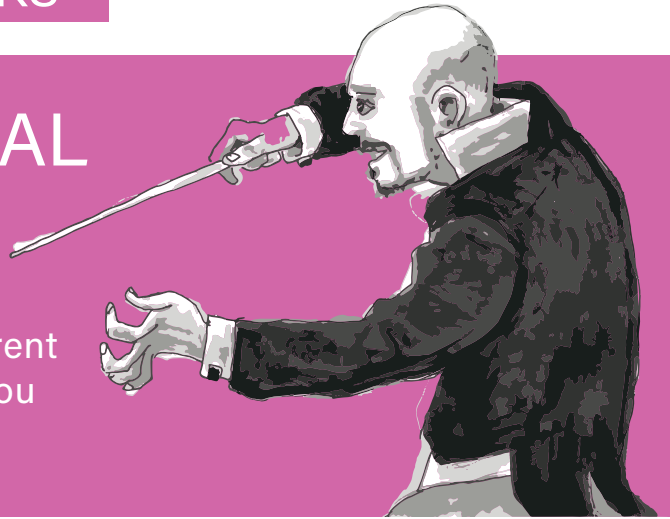
- LANGUAGES, LITERACY AND COMMUNICATIONS
- EXPRESSIVE ARTS

SKILLS

- ORACY
- COMMUNICATION
- READING

HAUNTING HISTORICAL HYMNS

The Valley's history is inspirational and its current setting is very evocative. Perform the hymns you learnt in class in this beautiful setting.



INSTRUCTIONS:

- Using the hymns learnt in class from **Activity 7 Historical Hymns**, ask your class to perform them on the walkway as a group.
- Ask them to think about themselves in a different historical time as they sing
- Ask the questions:
 - What would your day have been like?
 - When not in work what would you be doing?
 - What would have brought you joy?
 - What might have brought sadness?



EQUIPMENT

- HYMNS



SUBJECTS

- EXPRESSIVE ARTS
- HEALTH AND WELLBEING

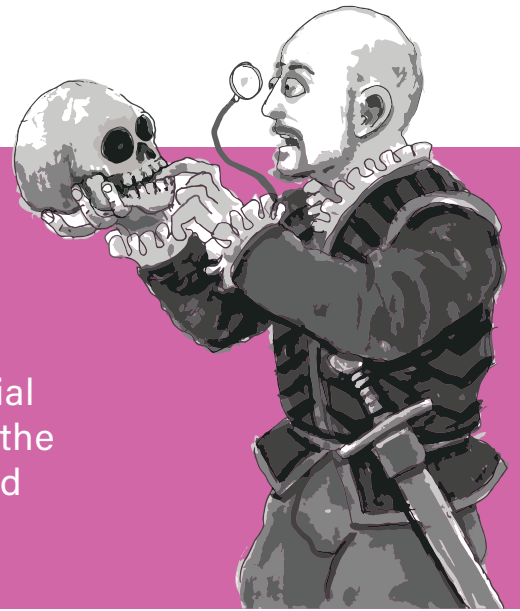
SKILLS

- ORACY
- COMMUNICATION
- READING



BECOMING BATTERY ROW

Battery Row was a row of small houses built for industrial workers. The families who lived there in 1841 worked in the different industries in Greenfield. The work was hard and living conditions were poor and cramped.



INSTRUCTIONS:

- Using the information in appendix 3A (families) and 3C (Jobs) imagine the life of these families by role playing an evening in their home. This can be done on the walkway or on the eastern side of the walkway where the managers cottage remains are still visible.
- Ask pupils to think of questions they would like to ask each other



Image courtesy of Flintshire archives.

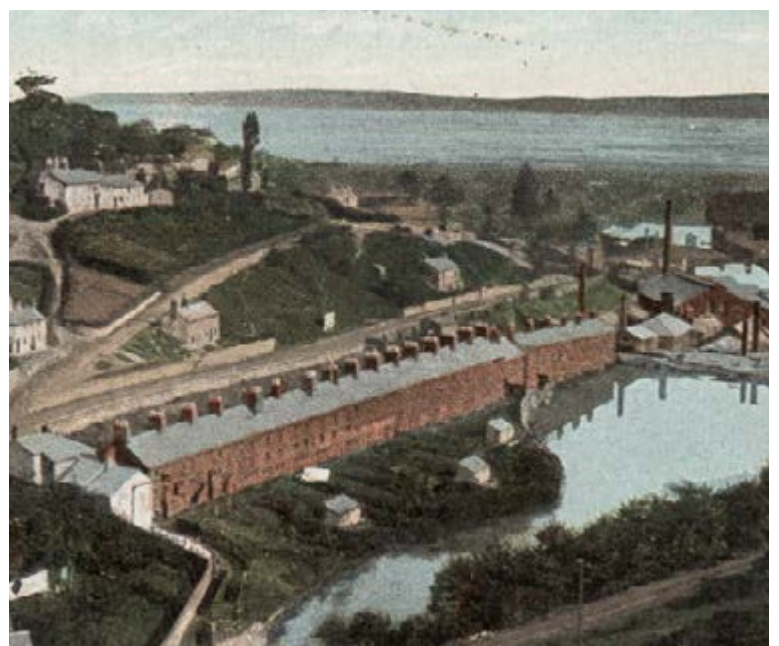


Image courtesy of Flintshire archives.

EQUIPMENT

- LIST OF FAMILIES IN CENSUS APPENDIX 3A
- LIST OF JOBS APPENDIX 3C



SUBJECTS

- HUMANITIES
- LANGUAGES, LITERACY AND COMMUNICATIONS
- EXPRESSIVE ARTS

SKILLS

- COMMUNICATION
- ORACY



INDUSTRIAL INTRIGUE

Making your factory successful would often require having an investor. Ask pupils to get into small groups and pick one of the three factories and create a short presentation to sell their factory to the 'investor' (teacher)

INSTRUCTIONS:

Teacher splits class into groups and each group picks a factory and creates a short presentation as a group focusing on:

- What you sell
- Who you sell your products to
- What they are used for
- Who works for you
- How do you treat your employees
- What you pay your employees
- Research can also include general facts about working in factories during the Industrial Revolution.

Investor (teacher) to ask questions including (but not limited to):

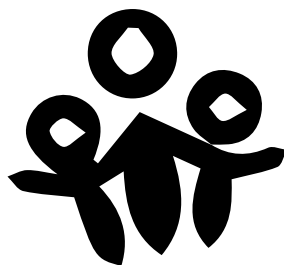
- Who works for you?
- What are your working hours?
- Do you use any new inventions?
- Why should I invest in you?
- How old are your workers?
- How do you treat your workers?
- What is your product and why is it so good?

Ask children to discuss what could have improved their proposals

Children are looking to impress the investor (teacher) so they invest in their factory

EQUIPMENT

- POWERPOINT
- VISUAL AIDS (E.G. PHOTOGRAPHS)
- COMPUTER



SUBJECTS

- HUMANITIES
- LANGUAGES, LITERACY AND COMMUNICATIONS
- EXPRESSIVE ARTS

SKILLS

- COMMUNICATION
- INVESTIGATION
- ORACY
- READING
- WRITING





Thomas Williams of Llanidan 'The Copper King'

Write you first impressions around the picture




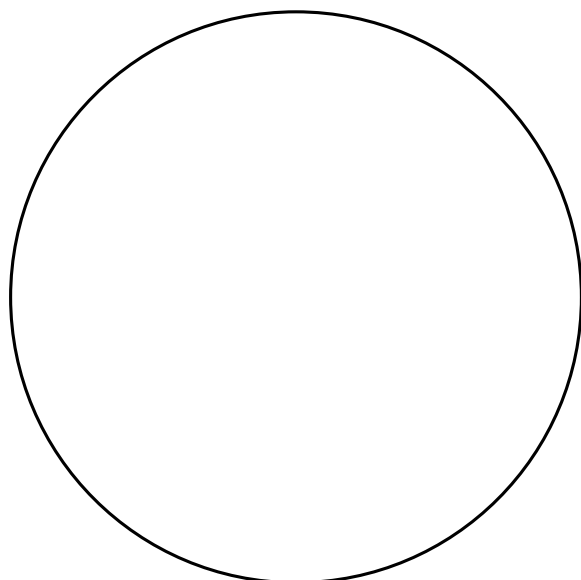
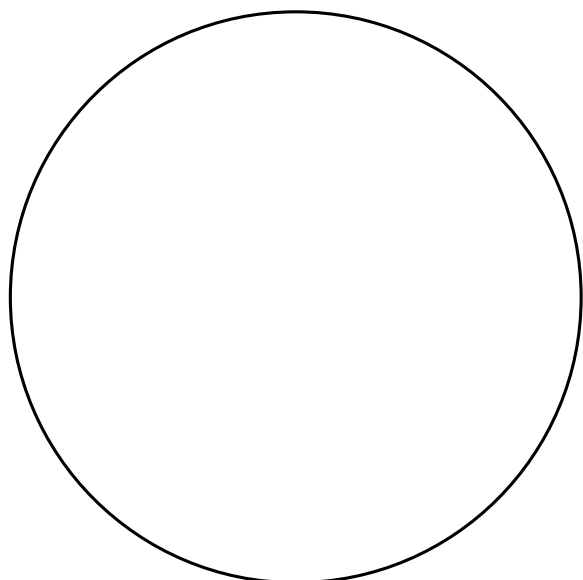
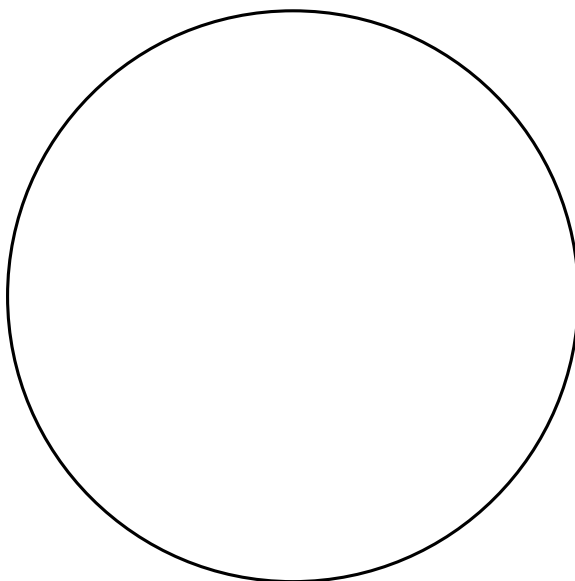
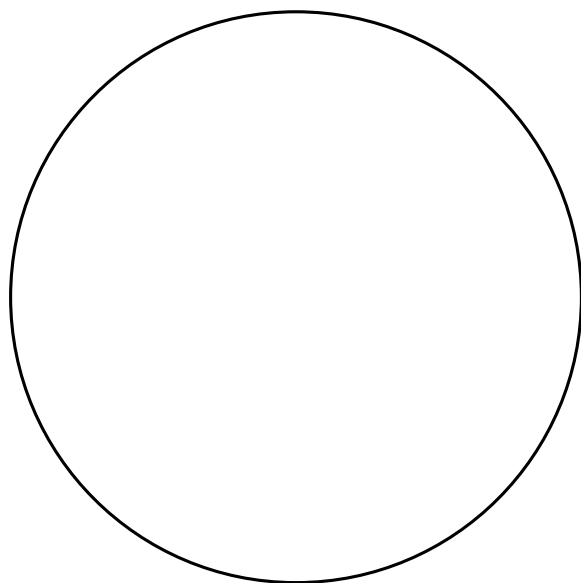
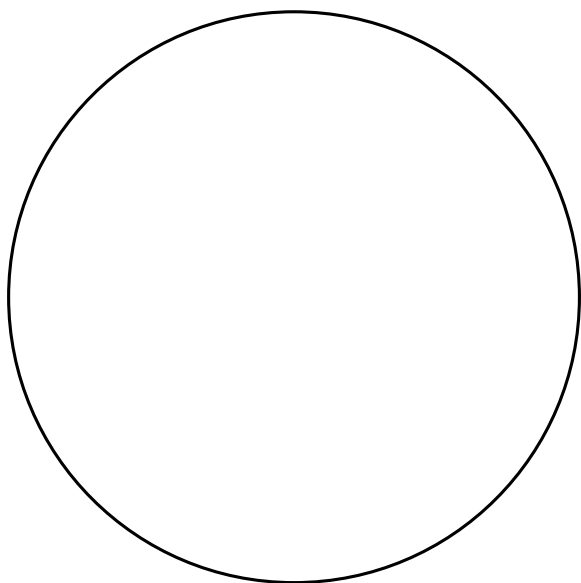
Questions I could ask

1. -----
2. -----
3. -----
4. -----
5. -----

What have I found out



 Cut out the templates





BECOMING BATTERY ROW/CENSUS STUDY - FAMILIES

Battery Row number 21:

John Yarnell 52 - shot maker
Catherine 47
William 21 - shot maker
Thomas 19 - copper works
John 15 - copper works
Robert 12 - copper works
Mary 9

Back battery row:

John Evans 40 - copper works
Elizabeth 40
Ann Thomas 15
William 10 - brass nail foundry

Battery row number 16

Thomas Bagnell 55 - Blacksmith
Elizabeth 50
Sarah 20
John 18 - copper works
William 15 - copper works
Samuel 13 - copper works
Llewelyn 9
Henry 7

Back Battery Row:

Hannah Jones 45 - pauper
Thomas 20
William 18 - Tailor
Edward 15 - Bricklayer
John Jones 11

Battery row number 10

Richard Bellis 62 - sawyer
Deborah 72
Samuel Williams 15 - brass nail works
John Bagnall 15 - smith

Battery row number 23

William Davies 70 - lead pipe carter
Daniel 25 - brass carter
Marion 25
Mary 7
Ann 5
Elizabeth 4
Thomas 3 months

APPENDIX 3A

Battery Row number 12

John Hughes 40 - copper works
Jane 45
David 20 - copper smith
Hugh 15 - copper smith
Robert 14 - brass nail works
Mary 12
Marion 9
Thomas 7
Emma 3
Amelia 8 months

Battery row number 17

William Davies 40 - copper works
Catherine 36
Robert 15 - copper works
Edward 14 - copper works
Margaret 10
Aled 8
Sarah 3



THE PEOPLE OF BATTERY ROW

You will be given 9 houses from Battery Row

1) How many different occupations can you find?

2) Can you list them?

3) Who is the eldest and what age?

4) Who is the youngest and what age?

5) Are any of the people female?

6) Do they have a job and if yes which job?

7) Can you guess what their relationships are?

8) What other information can you find out?



Brass Nail foundry

Nails were very important for making furniture as well as shoes. In the industrial revolution, brass nails could now be made in large quantities in factories and the machines made a loud clattering sound which was deafening

Bricklayer

Lays bricks to build buildings. Bricks are made by hand out of clay. They can be uneven so the bricklayer has to be skilled at making sure the walls are straight and uses a string line to guide him.

Carter

A carrier of goods by horse drawn wagon. Large loads of goods went up and down the hill.

Tailor

Makes and repairs clothes, mostly for men. They have to be skilled at choosing and cutting material. They use a large pair of scissors and a tape measure to make sure the clothes fit the customer perfectly.

Shotmaker

Works in the foundry where metal is made. It is a hot and smelly place. The metal workers have to wear thick leather aprons to protect themselves from the hot metal and sparks.

Copper smith

Makes goods from copper and brass. Giant hammers are powered by waterwheels which batter the copper into bowl shapes held by a copper smith. It is very dangerous as the smith can't control the speed and has to work quickly to avoid his fingers being injured.

Sawyer

The sawyer takes timber logs and cuts them into planks using a large saw. This can be done with a double saw using two people, one at each end.



Smith

Works in the foundry and shapes the metal into objects. The smith heats the metal in the furnace and then uses hand tools like a large hammer and anvil to beat the metal into shape. The smith can mend and make tools for the foundry as well.

Pauper

A very poor person who may have received help under the Poor Law Amendment Act 1834 which said relief should only be given in a workhouse. The workhouse was not a very nice place and the poor had to wear a uniform, the food did not taste very nice and they were made to work very hard. Holywell Union warehouse was built in 1838-40.

Blacksmith

Makes and mends metal objects in iron and steel. There was a Blacksmith in almost every town as they provided an important service. In the 1800s work declined as many everyday things like tools and nails were now made in factories. The work was then mainly making metal shoes for horses and oxen.

Copper works

Here the copper ingots were melted down and made into different products. Copper is a soft metal and can be hammered flat or made into wire. The metal can be cut into strips and passed through large rollers to make thin sheets. The bottom of wooden ships were covered with these copper sheets to prevent the wood rotting and being eaten by sea worms.



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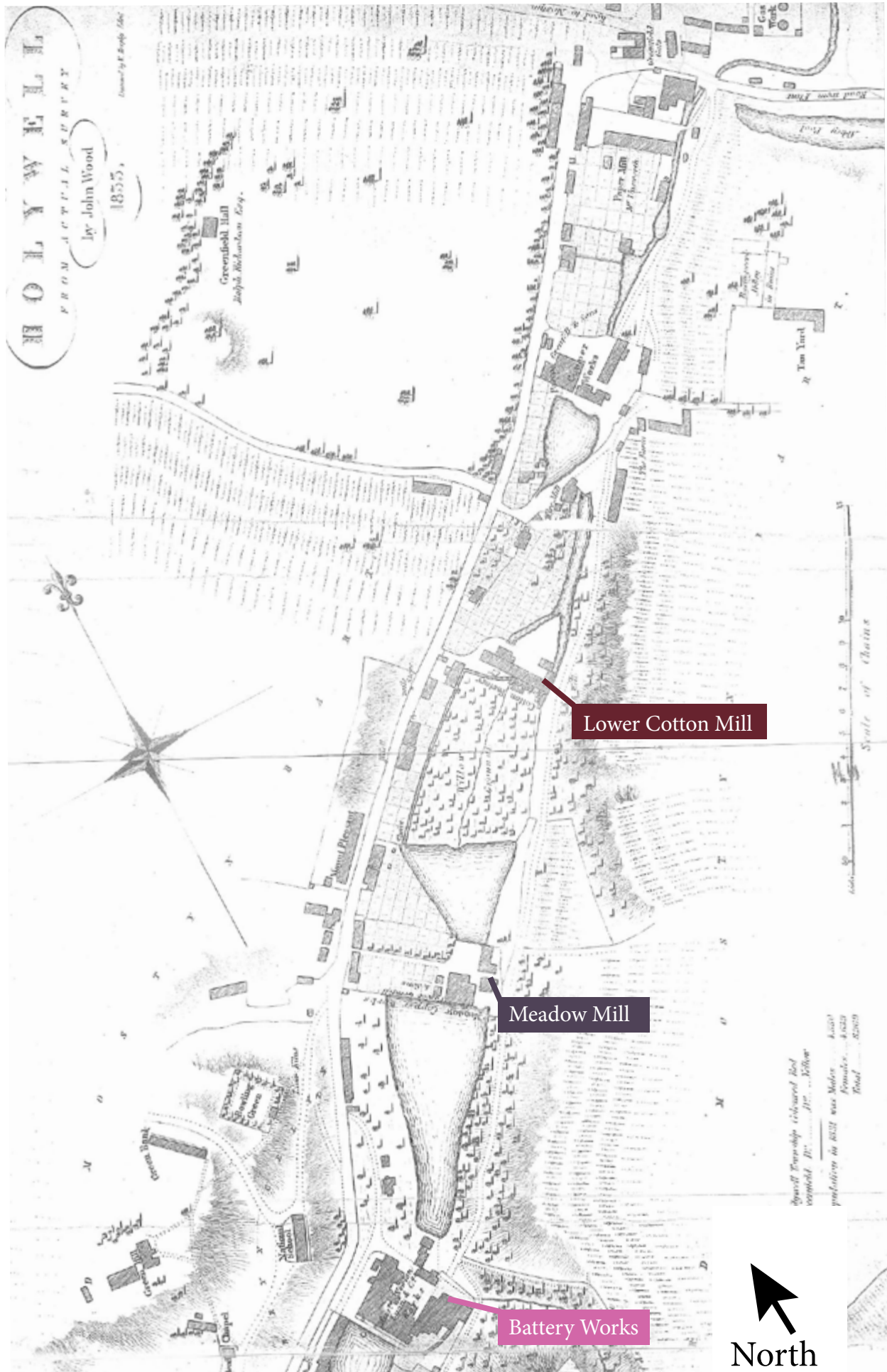
Lower Cotton Mill

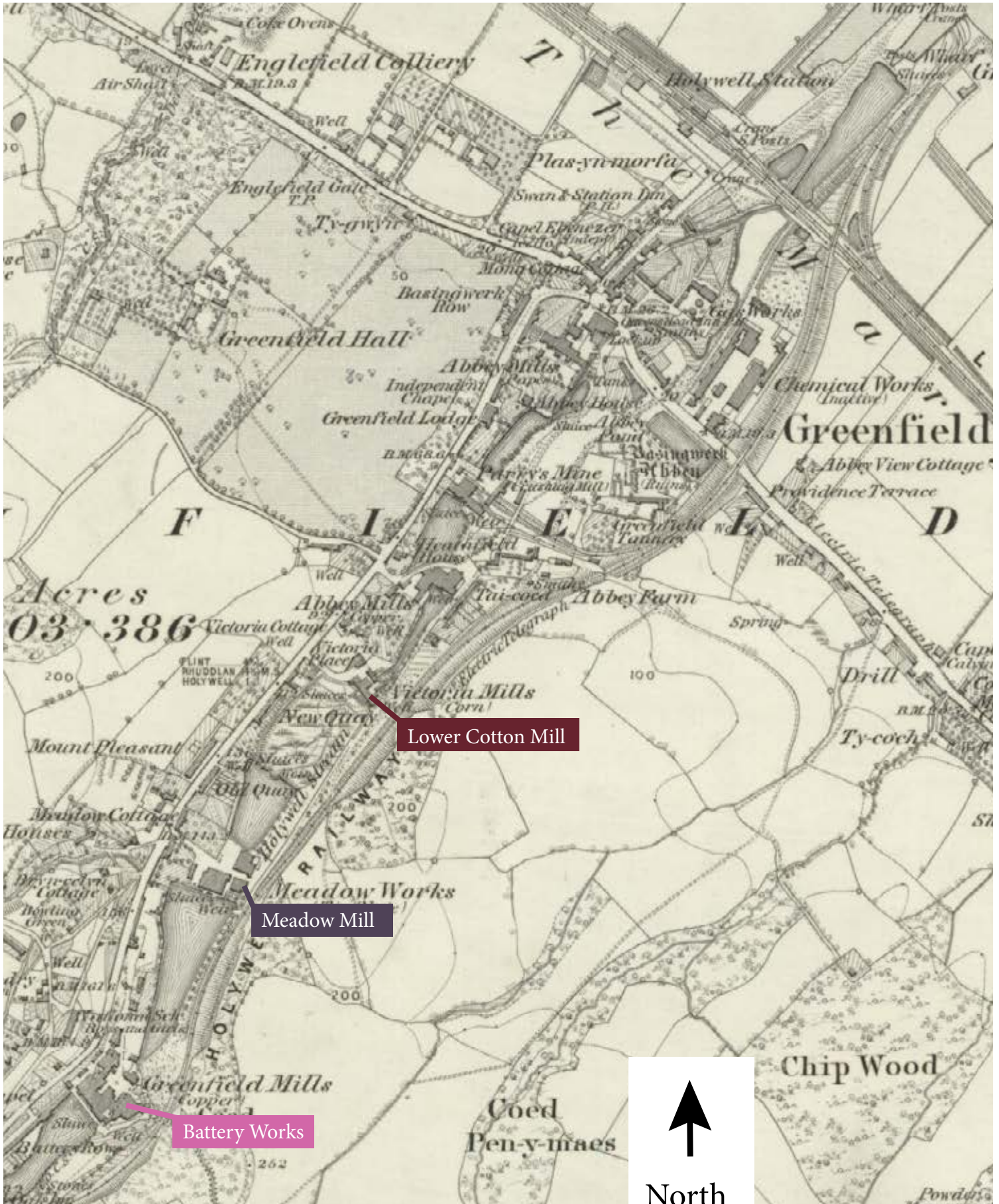
Meadow Mill

Battery Works



North







1



2



3



4



5



6



7



8



9



10



11



12





1



2



3



4



5



6



7



8



9



10



11

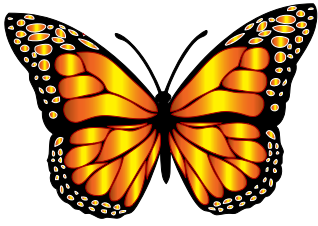


12

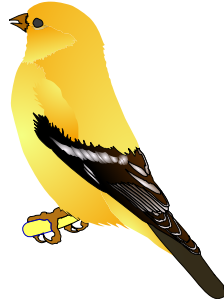




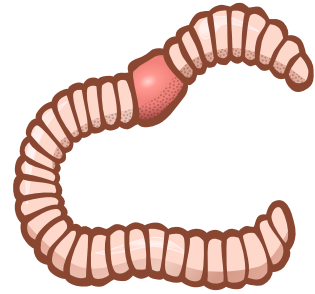
Butterfly



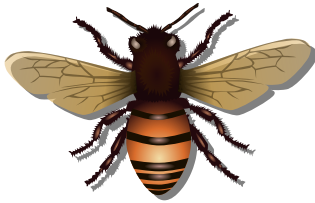
Bird



Worm



Bee



Lady Bird



Snail



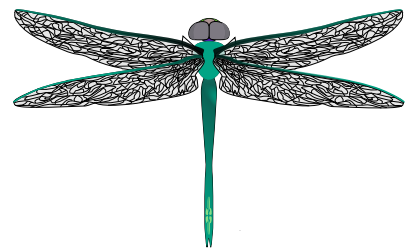
Swan



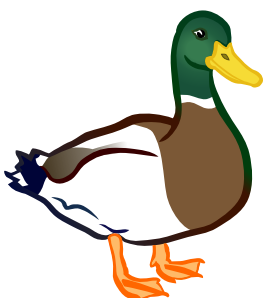
Dog



Dragon Fly



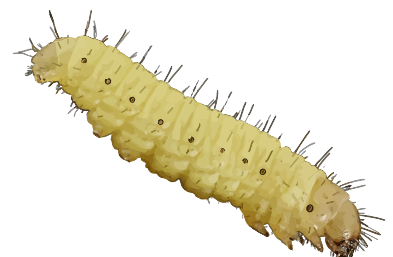
Duck



Squirrel



Caterpillar





mill wheel water cotton

mill wheel water cotton

mill wheel water cotton

mill wheel water cotton

mill wheel water cotton



worker

factory

power

spin

worker

factory

power

spin

worker

factory

power

spin

worker

factory

power

spin

worker

factory

power

spin



copper

ore

hammer

chimney

copper

ore

hammer

chimney

copper

ore

hammer

chimney

copper

ore

hammer

chimney

copper

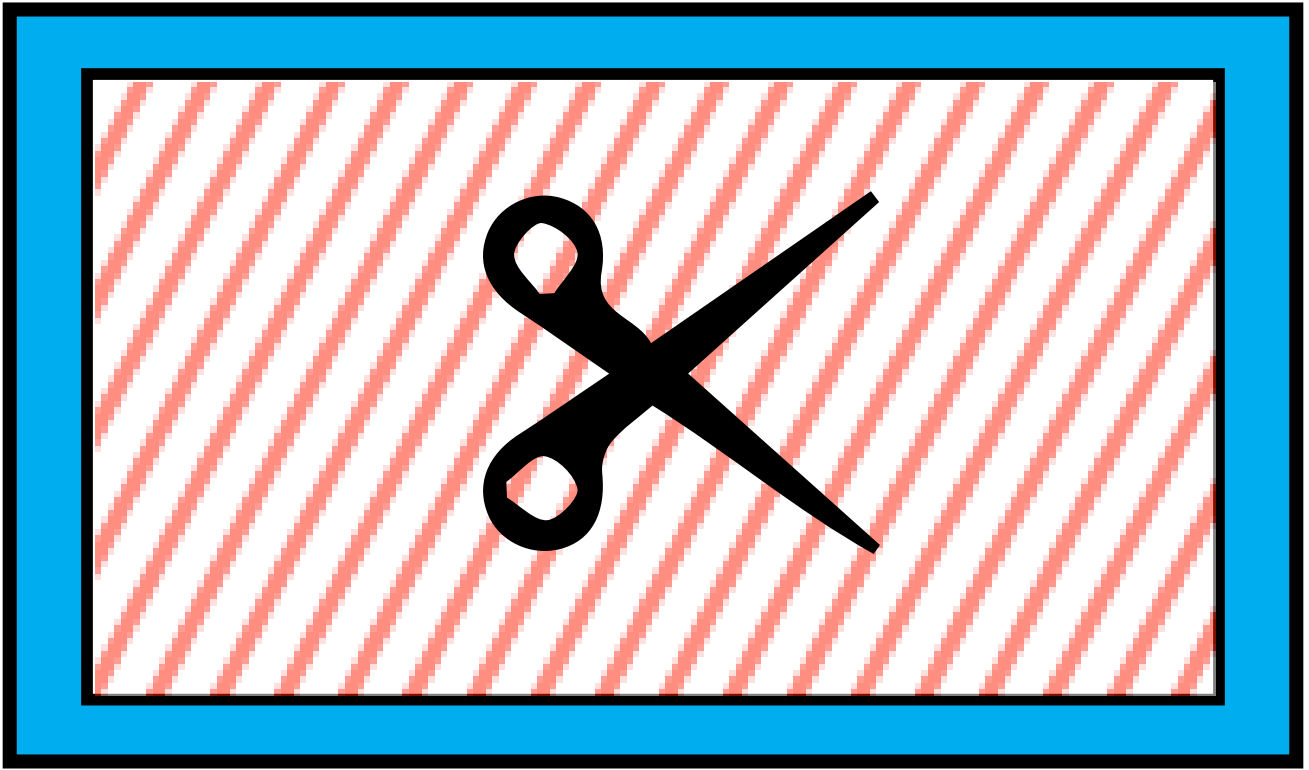
ore

hammer

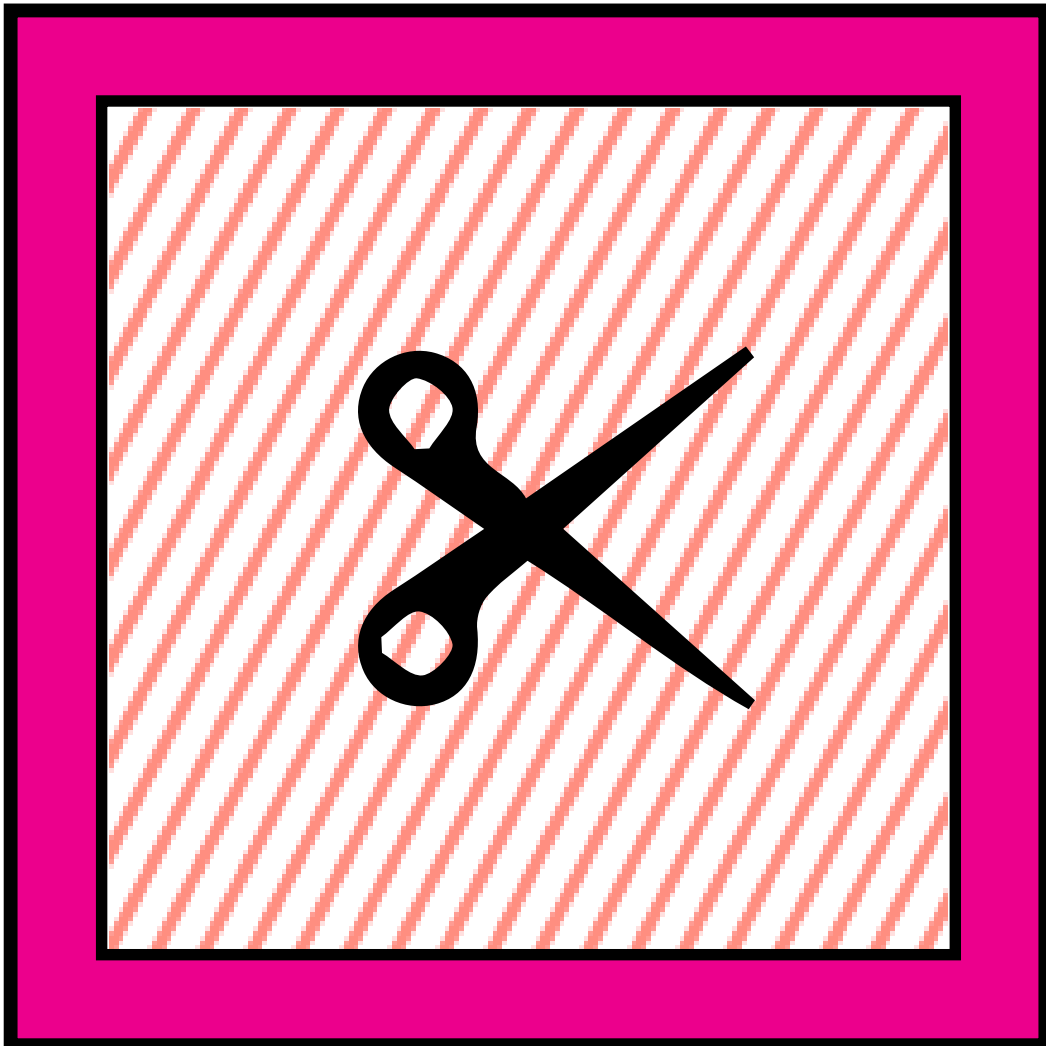
chimney



16:9



Square





Thank you so much to the volunteers who helped with this resource and the making of the short film. Their names are below.

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DAUGHTER 2 -	SARAH PEVELY
WALKING LADY -	CHRISTINA KERNAHAN
WALKING LADY 2 -	LINDA JONES
WASHER WOMAN -	GWLADYS HARRISON
SITTING LADY -	FAITH HAZELWOOD



Greenfield Valley
Dyffryn Maes Glas



Bringing out the best
in each other