



# MINE OF INFORMATION

@NatMiningMuseum



Date Issued: April 2020

## WELCOME

Dig deep and have fun learning about your mining past in this educational resource.

## National Mining Museum Scotland

#MuseumsFromHome

#HeritageatHome

#HomeLearning #GoIndustrial

# Contents: Topic 2 – Victorian Miners



## Introduction

National Mining Museum Scotland is a Registered Scottish Charity. Our mission is to preserve and promote Scotland’s mining history and heritage for current and future generations. This resource has been created for educational purposes only, in order to support families and learners during these unprecedented times.

In this resource pack we have included:

- Section 1: Victorian Miners – Facts!
- Section 2: Related, fun and hands-on **Activities** you can do at home
- Section 3: Wellbeing Check-In
- Section 4: Awards you can achieve at home!

Our activities include a mix of **STEM**, **Social Studies**, **Arts & Crafts** and **Outdoor Learning** topics. Our intention is for the whole family to be able to take part in at least one activity per section – no matter your age!

As a charity we are reliant on admission, shop and café sales so while the Museum is closed due to Covid-19 restrictions, please consider supporting us by donating the cost of entry here: <https://buff.ly/2WIIJR5>

## Subjects Include:

Topic 1: Rocks, Fossils and Energy

Topic 2: Victorian Miners

Topic 3: Coalmine Detectives

## Wellbeing Check-In

This is an uncertain time for us all and it’s ok to not always feel ok. Before starting this resource, and at the end, why not complete a Wellbeing sheet to see how you are feeling. If you don’t feel great, we have loads of suggested activities you can do in Section 3.

## Awards

You are doing such great work, so why not apply for an Award?! Please see Section 4 for how to apply to us for your own “Mine of Information” certificate or how to apply to Archaeology Scotland for your Heritage Hero Award.



# Section 2: Victorian Miners

## Fact Sheets



*Photo: Children dressed as Victorian children in the Race Apart Exhibition at National Mining Museum Scotland.*

## Section 2: Victorian Miners!

We know that people have been using/burning coal for a very long time, starting with monks who collected and burned coal for salt panning. [Salt panning was the process of evaporating sea water for salt. The salt was sold or used to preserve food.] However, with the Industrial Revolution, demand for coal increased dramatically!

**Digital Learning** - discover more about the Industrial Revolution at [BBC Bitesize here](#).



Photo: The Lady Victoria Colliery from NMMS's Recognised Collection.

### Early Coalmining

Before 1842, who do you think early coalminers were?

Answer: .....

*Continue reading to find out if you were correct!*

Historians argue when the Industrial Revolution started, but by the Victorian era (1837-1901) it was undeniably underway as technology and industry were advancing quickly, fuelled by coal! Early coalmines at this time were often shallow, bell pits, or drift mines, i.e. tunnelled into the side of hills. As time went on, and demand for coal rose, coal seams were discovered deeper underground and deep coalmining began in earnest.

These early coalmines were owned by private landowners and later by coal and/or iron companies. Men, women and children – whole families – were employed as miners. We know that children as young as 5 years old were sent down the mines.

Mining was very dangerous, there were no safety measures, and it was extremely hard work but mining families were poor and needed to work in order to earn money.

Watch our film, ***Children in The Mine***, made in partnership with Newtongrange Primary School, to find out more. (Simply click on the embedded film below and wait a few seconds for it to begin playing).



Listen carefully and then answer the quiz questions afterwards!



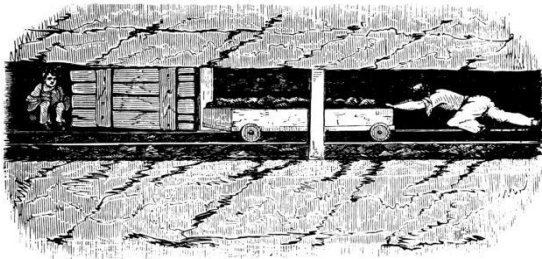
(This video can be found on our Vimeo channel here: <https://vimeo.com/user15723289>)

### Quiz:

1. Can you list the three main jobs that children did underground?
2. How long would the children usually work for?
3. Did the children attend school?
4. Did the children enjoy the work?
5. In what year was the Royal Commission to investigate the working conditions of the mines set up?
6. From the children's stories, what were some of the dangers faced underground?
7. In 1842, who was banned from working underground in coalmines?

It wasn't easy being a Victorian miner and all the stories in the film are from real children who were interviewed about their lives in 1840. You can read extracts from the Royal Commission Report from **your local area** here on the Scottish Mining Website:

<http://scottishmining.co.uk/16.html>



**Activity Sheet: Victorian  
Colouring Sheet**

*Photo: Drawing from 1842 Royal Commission Report showing a trapper (child opening and closing ventilation door) and a putter (child pushing the coal cart). Cameras hadn't been invented yet so the Commissioners wrote and drew what they saw.*

**Reflective Activity** - based on what you have heard, do you think it was a good thing that women and children under 10 years old were banned from working underground? *Work through the next section to help you decide.*

Children around the world have rights. These are explained in the 54 Articles in the **United Nations Convention on the Rights of the Child** (UNCRC). Everyone has rights and they make sure people are treated well and fairly. You can read about your Rights and what the Scottish Government does to help [here](#).

Do we think those children who worked underground had rights? Compare your life today to what you have learned about those children who used to work underground:

1. Do you go to school? Did the children working in the mines? *Article 28 states every child has the right to an education*
2. Did you have breakfast, lunch and dinner yesterday? Did those children eat regularly? *Article 24 – right to good food, clean water and to see a doctor if you are ill*
3. Do you feel safe when you go to school? Were those children safe when they were working underground? *Article 19 – you have a right to feel safe*
4. Do you like playing? *Article 31 – you have the right to relax and play*



Let's return to our question. Overall, yes it was a very good thing that children under 10 were banned from working underground. They had better lives as they could now stay safe, live healthier lives, attend school and play. However, the families relied on everyone in the family earning money and so many women and older children had to continue working at the surface of the coalmines. A few years later boys under 12 were banned but it was many years later before children under 15 were stopped from working underground too and for those men still working underground, life as a Victorian coalminer was still very dangerous.



**Activity Sheet: Build Your Own Coalmine Fort!**

**Literacy:** *You Wouldn't Want To Be A Victorian Miner* by John Malam

*Photo: Image from 1842 Royal Commission Report. Camera's hadn't been invented yet, so the Report included interviews and drawings of what the Commissioners saw. Here are children working as Putters – pushing and pulling the coal tub along the coal tunnel.*

## Dangers Underground

We heard in the video that the men, women and children all faced many dangers underground. After women and children under 10 were banned from working underground, for those still working underground the dangers were very real. Coal was dug using pickaxes and wooden pit-props to hold the roof up. Accidents, cave-ins and floods were common dangers, however -

What other major danger did miners face? *Hint: you can't see it!*

Answer: .....

Watch our video below to find out if you were correct:

### Origins of The Safety Lamp Film:



Film: NMMS films can be found on our website here: <https://nationalminingmuseum.com/collection/films/>

As you have just learned, methane gas was one of the biggest dangers miners faced. Methane gas was known as **fire damp** to miners as it is flammable and can even cause explosions. Fire damp is formed with coal over millions of years and can be released as coal is mined, when pockets of gas seep into the pit. It was especially dangerous before the invention of the safety lamp, or Davy Lamp as it is often called, when miners carried candles or tallow lamps to see with!



**Activity Sheet: Make Your Own  
Lamp**

Methane gas is colourless and has no smell. It is lighter than air, so rises to the top of the coal tunnels, but in a well ventilated mine methane should not build up. The flame safety lamp was developed as a safe means of lighting in mines that may have methane present. The flame safety lamp not only provided light without the risk of explosion, but it could also be used to test for methane. There were different versions of the safety lamp but the most common used in Scotland was called the Glennie Safety Lamp.

The below film shows **how miners used the Glennie to test for firedamp** (made and filmed at National Mining Museum Scotland, featuring Sinclair, one of our ex-miner Tour Guides):



As we heard in the film, another dangerous gas miners faced underground was **Blackdamp** or Carbon Dioxide. The Glennie could also test for this gas, which would lie at the bottom of the coal tunnel. Even after the introduction of underground lighting, Glennies were still used by miners for gas detection until the 1980s.

Question: how did miners detect blackdamp before the safety lamp was invented?

Answer: .....

*Read below to see if you were correct!*

## **Animals in the Mines**

### **Canaries**

Blackdamp, carbon dioxide and carbon monoxide, are poisonous gases which are colourless and have no smell. Blackdamp affects small animals more quickly than people and so caged canaries were used as a simple way of detecting carbon monoxide. The birds would fall from their perch before the miners were affected, and they could move quickly to an area of fresh air. The canaries who breathed in carbon monoxide were often revived using a canary resuscitator.





*Photographs: from NMMS's Recognised Collection. Showing a miner underground with his canary, mines rescue team and a canary resuscitator from our collection.*

## **Pit Ponies**

Before machinery was introduced underground, miners used Pit Ponies to help pull the coal carts from the coal face (where the coal was being hewed/dug out) to the shaft for it to be brought to the surface.



**Activity Sheet: Make a Pit Pony (or unicorn!)**

*Photo: Pit Pony Bit and Bridle from our Recognised Collection.*

## **Rats**

Unfortunately, due to the hay and food brought underground for the Ponies to eat, rats were common underground. It was in part due to the rats, as well as the dust and stones, that miners started using metal "piece tins", these were packed lunch boxes. For lunch, most miners would have jam, or jam and cheese, pieces (sandwiches!). The jam would stop their mouths getting too dry from all the dust.

## **Cats**

With the rats, came cats! The cats helped keep the rat population down. Did you know that there were cats living at the Lady Victoria Colliery? During your next visit to National Mining Museum Scotland make sure to take part in our Cat Hunt to try and find all the Colliery Cats hidden around the Museum.



## Victorian Home Life

Most mining families would rent a place to live from the mine owner. This meant that while the mine owner paid the miners for the coal they produced; they took a percentage back for rent. Most of these homes consisted of only one or two rooms. There were no indoor bathrooms, no running water and no electricity.

The picture right, from our **Race Apart Exhibition**, shows a typical living room. The father of the family would wash first, then the mother, the oldest children and youngest children last. The water wouldn't be changed between washes so it would be very dirty by the time everyone washed!



## Wash Day

How did the Victorian's wash their clothes without a washing machine? It was done by hand! The women in the family would set water to boil at 5am and then hand scrub everything using carbolic soap and a scrubbing board! Each item of clothing was then squeezed through a mangle to ring the water out and then hung to dry. The photo below from our **Race Apart Exhibition**, shows a Victorian washday. On your next visit you can dress up like a Victorian and handle the washday objects!



**Activity Sheet: Match the Objects**

## Victorian Fun

With children under 10 being banned from working underground (and a short while later children under 15 years old being banned), they could attend school and start playing games. Toys were hand-made, often using scrap items and materials.

**Activity Sheet: Victorian Toys and Games**



# Section 2: Victorian Miners

## Activity Sheets



*Photo: Hands-On History event at National Mining Museum Scotland. Families re-enacted a Victorian washday then made their own peg dolls to take home. Follow us on Facebook to keep up to date with all our family friendly events.*

Created by National Mining Museum Scotland for educational purposes only. We are not responsible for third party content. The National Mining Museum Scotland Trust is a Registered Scottish Charity, Number SCO03227. If you have any questions or would like any further information, please contact [education@nationalminingmuseum.com](mailto:education@nationalminingmuseum.com).



## Activity: Victorian Children Colouring Sheet

The below colouring picture shows Victorian children outside the Lady Victoria Colliery. If you don't have a printer you could **draw your own coalmine picture** or use Paint or "Colour By Numbers" App and save the below picture to use.

On your next visit to National Mining Museum Scotland, visit our exhibition floors for your chance to dress up like a Victorian too!

*I saw the Victorian miners at the Mining Museum!*



Created by Blackbird Publishing



## Activity Sheet: Build Your Own Coalmine Fort

Early miners would work for around 12 hours a day underground – this meant they rarely saw sunlight in the winter months! Do you think you could be a Victorian coalminer?

Conditions were very cramped, you couldn't stand up in most coal tunnels, and it would have been hot, dusty and often wet underfoot! There were no windows underground so your only source of light would come from your small candle.

Build your own Coalmine Fort in your house and recreate what it must have been like for the Victorian miners.

Your Coalmine Fort should feel small so we suggest either pushing chairs/sofas together or using a table/desk and covering with blankets – we want it to be dark inside so try using blankets, your duvet, anything at all to cover it completely!

Here are some examples:



### Additional Games:

Once your Coalmine Fort is built, why not dress up as a Victorian in woollen clothes, dark trousers, a shirt or flat cap?

Make yourself your lunch snack to eat in your fort – miners took hard porridge or, if that doesn't sound tasty, a jam sandwich!

Play out all the different jobs that children did underground such as opening and closing the trap door, pushing coal carts or digging out coal!

### Tag us in your pics @NatMiningMuseum

## Activity Sheet: Make Your Own Paper Lamp

### What you need:

Coloured paper (or colour in plain paper)

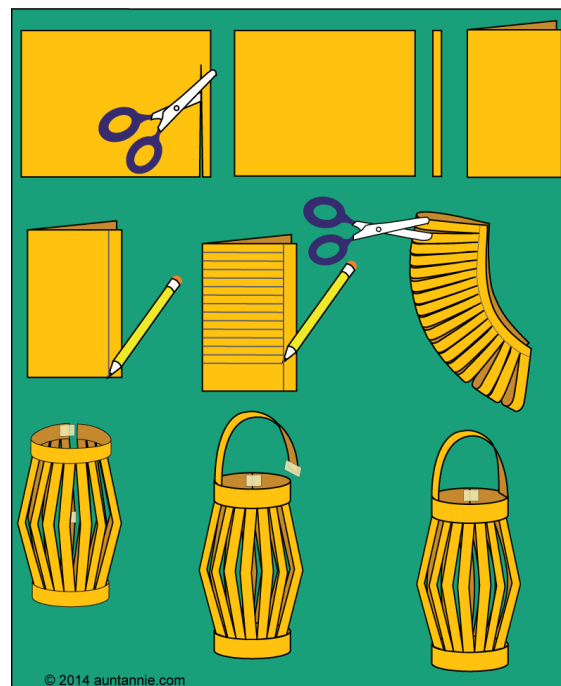
*Optional – additional piece of paper for decoration/inside*

Scissors

Glue or sticky tape or stapler

### Instructions:

1. Cut off one end of the paper and set aside to make the handle
2. Fold the paper in half (long side)
3. Using your scissors, carefully cut along the folded side about two finger widths apart. Leave about 2cm uncut from the top of the paper (do not cut to the edge of the paper)
4. Unfold the paper
5. Curve the paper round to form a cylinder shape
6. Stick or staple the edges together
7. Stick or staple the hand to the top of the lantern
8. Optional – cut strips from your other piece of paper to decorate the top and bottom of your lamp, attach using sticky tape, and/or curve this piece of paper tightly and attach into the middle of your lamp.



## Activity: Make Your Own Pit Pony Mask



### What you need:

Paper plate  
Wool or string  
Colouring pencils  
Scissors  
Hole punch

### Instructions:

1. Decorate your paper plate – remember to draw an eye
2. Cut a wedge (L shape) out
3. Cut where the nose is to make this curved
4. Draw a nose and mouth
5. Hole punch
6. Cut strips of wool or string into equal lengths and thread (with a knot at the end) through the holes
7. Cut a triangle from the wedge you already cut and staple and sticky tape this as the ear
8. Optional – if you want your Pit Pony to be a unicorn cut and stick a horn to your mask as well!

## Activity Sheet: Match the Objects

The Victorians were amazing inventors but they accomplished a lot without electricity! Can you match these Victorian household objects with their modern equivalents? Draw arrows to each pair..



## Activity Sheet: Victorian Games and Toys

Following Government advice, why not play some Victorian themed games outside? These could include a game of hopscotch, skipping, marbles or flying a kite!

### Make Your Own Ball and Cup

What you will need:

*Use items from your recycling where possible!*

Plastic cup or yogurt pot

Wooden bead/ball, a ball you can punch a hole through or tinfoil

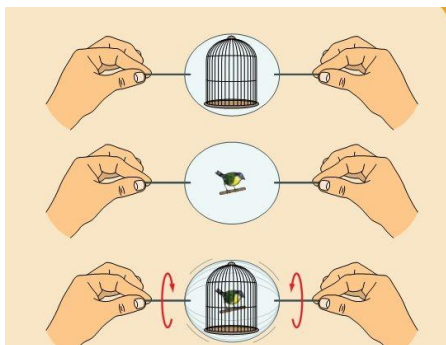
String (about 70cm long)

Instructions:

Tie a knot at the end of the string. Make a small hole in the bottom of the yogurt pot. Thread the string through the hole from the inside of the cup/yogurt pot. Place the other end of the string onto the silver foil and scrunch the foil into a ball (or thread and tie through a wooden bead or ball). Now swing the silver ball and catch it in the cup!



### Make Your Own Moving Image/ Optical Illusion (Thaumatrope)



## Section 3 & 4: Wellbeing Check-in & Awards



*Photo: Apprentice Guides from Gore Glen Primary School, at NMMS, 2019*

## Section 3: Wellbeing Check In

Your family's wellbeing is very important, especially during these uncertain times. Check in with your wellbeing – this could be positive or negative - and use the wellbeing cards for suggested activities if not feeling so great. NMMS is very grateful to Nicola Orr, teacher from Condorrat Primary School, for creating and sharing the great resource below!

You can also download this resource as PDF's [from TES here](#).

Right now, I am feeling...

Awesome  
Thrilled  
Cheerful  
Happy  
Grateful  
Proud  
Excited  
Calm  
Ok  
Unhappy  
Upset  
Unwell  
Down  
Lonely  
Worried

I am feeling this way because...

Remember it's ok to feel not so great!  
What do you want to do next? Have a look at the wellbeing cards for some suggestions.

Date:

Right now, I am feeling...

I am feeling this way because...

Remember it's ok to feel not so great!  
What do you want to do next? Have a look at  
the wellbeing cards for some suggestions.



Awesome  
Thrilled  
Cheerful  
Happy  
Grateful  
Proud  
Excited  
Calm

Ok



Unhappy  
Upset  
Unwell  
Down  
Lonely  
Worried



Date:

\_\_\_\_\_



### Doodle it!

Doodle or draw something. How about a pizza loving cat or a lama with a pineapple for a head? Take some time to doodle.



### Make a fort

Make a blanket fort or a den outside!



### Read

Take some time out to read a book, graphic novel or magazine. You could even listen to an audiobook too.



### Chill

Lie down and chill on a beanbag / chair / sofa / bed for 10 minutes.



### Get creative!

Do something you really enjoy! You could make something for yourself or someone else, paint, code, invent, test! It's your choice.



### Take a break

Take a break from everyone and everything. Have some quiet time.



### Cuddle

Give someone a cuddle. It could be a pet, a friend, a family member or a teacher.



### Mindfulness jar

Create a mindfulness jar using water, glitter and dish soap. Shake it and watch the magic happen!



### Mindfulness

Listen to a mindfulness app like Headspace or Calm. This can help you relax when you aren't feeling great.



### Play

Play a card or board game with someone.



### Laugh and laugh some more!

Watch some funny videos on YouTube. Animal ones are my favourite!

Tell some jokes or ask a friend, family member or teacher to tell you some!



### Bubbles

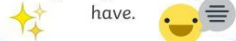
Blow some bubbles. Watch them fall and blow away in the wind. Or try to catch as many as you can!



### Talk it through

Share how you feel with a family member, a teacher, a friend or someone else that you trust.

You could tell them about how proud you are of something or you could talk through any worries you have.



### Shred it!

Try writing worries or negative thoughts down on a piece of paper and shredding them!



### Clear the air...

Go outside and get some fresh air. You could go for a walk, a jog, a bike ride, play in the park or just watch the clouds go by.



### Rock Out!

Listen to your favourite songs! Dance, sing, rock out or just listen and enjoy!



### Memes!

I have a collection of AWESOME memes for every occasion. If you think these will help, choose this card.



### Wee note...

Need a wee note of positivity, kindness and encouragement? Or a terrible joke? Choose this card and I will write a wee note for you!



## Section 4: Awards

Well done on completing this topic. We hope you had fun learning!

Please remember to tag us on social media with any photographs or work you have done – we would love to see and share what you have accomplished! Find us on Facebook, Twitter or Instagram @NatMiningMuseum



*Photo: Members of Y2K, youth group based in Mayfield and Easthouses, who took part in the Mayfield Explorers Project and achieved their Heritage Hero Awards!*

### Awards

If you have completed any of the topic activities – well done! Please get in touch by email to [education@nationalminingmuseum.com](mailto:education@nationalminingmuseum.com) and we will send you a personalised “Mine of Information” certificate of completion.

Please include the following information in your email:

1. Which resource you completed and any activities
2. The name of the child(ren) for the certificate(s) – please double check spelling as names will be copied and pasted into the certificates
3. Any photographs of your work (we would like to share these on social media but we will not share any names given)

Please note – your email will be permanently deleted once you confirm receipt of your certificate. Certificates will be sent by email as PDF attachments. Please feel free to tag us @NatMiningMuseum with your certificates!

Alternatively, if you are working on a heritage or archaeology themed project, why not apply for your own **Heritage Hero Award from Archaeology Scotland**? It’s easy to sign up to and full instructions are on their website here:

<https://archaeologyscotland.org.uk/heritage-resources-portal/wp-content/uploads/sites/5/2020/03/Heritage-Hero-Award-remote-.pdf>