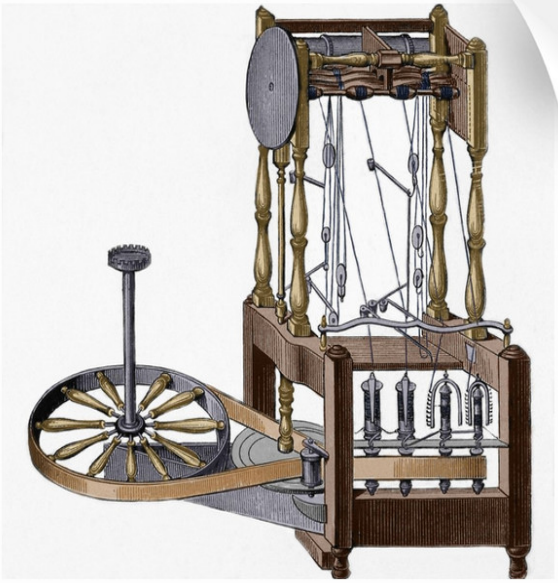
History

Find out about North Street's past…

Hello! Welcome to North Street! My name is William and I'm 10 years old. I lived in number 10 North Street in 1777. My dad used to be a miner but he saw an advert in our local newspaper saying a cotton mill had been built in Cromford by somebody called Richard Arkwright. The new mill needed a supervisor and so dad applied for the job and got it – hurrah, no more dirty mines!

North Street had been built specially for the workers of the mill so when we moved in it was brand, spanking new – it seemed like a palace compared to our last home!

There weren't schools for the likes of me so I got a job in the mill with my dad. My mum and two younger brothers later got jobs here too, beating the cotton clean ready for spinning. My sister had to crawl under the machines to collect bits of cotton and fluff. Talk about a family industry!



A picture showing the first spinning frame developed by Richard Arkwright in 1767.

Fact:

The **spinning frame** was invented in the 18th century by Richard Arkwright and a clock maker called John Kaye. It was a water-powered invention of the **Industrial Revolution**. It was a mechanised machine – this meant that you didn't need a person to operate it - for spinning fibres of cotton or wool into thread.

To **doff a bobbin** means to take the full bobbin off the machine and replace it with an empty one. Imagine doing only that for a whole day!

The **dinnerhouse** was a large kitchen with big stoves – mums and wives brought workers' food to this room and it was then given out by boys who worked in the mill.

My job was to **doff the bobbins** on the **spinning frames.** I started work at 6am – it was so early I don't know how I managed to drag myself out of bed! Me and some other boys used to have our tea in the **dinnerhouse** in the mill at about 5pm and then it'd be back to work until 7pm. By the time I'd finished work I was so exhausted I just wanted to collapse into bed – zzz!

Working in the mills sounds alot less dangerous than working in the mines, but it had its own dangers. None of the machines had guards or emergency brakes. One of my friends was badly hurt when he got his hand trapped in one when he crawled underneath to clear a blockage. He had to take a lot of time off work and there was no sick pay so his family had to go hungry that month!

In hot weather the work was even worse; it was so hot and sweaty – the mills had to be kept warm and damp to stop the threads from snapping. It was also very noisy, the click-clack-click-clack of the machines often gave me a headache.
Dad had hoped that the bad cough he got when he was down the mines would clear up but there was so much cotton dust in the air at the mill, it almost seemed to make it worse!

North Street as it appears today – note the long windows on the top floor to maximise light.

Fact:

An **earth closet** was a type of toilet – basically just a hole dug in the ground where you'd do your 'business'! You then covered it with either earth or sand. Every so often we had to dig the pit out and the contents would be emptied into a local river – eww! Talk about smelly.

Although working in the mill was often boring and tiring I know how lucky I was that our family was given a home on North Street. The houses here were like none I'd ever seen before – they had been built solidly and we even had our own private **earth closet** outside. At our last house we had to share the closet with four other houses. Imagine having to clear up four other families' poo! Yuk!

Mr Brown next door to us couldn't get a job in the mill so he earned his money knitting stockings on a frame in the top room.

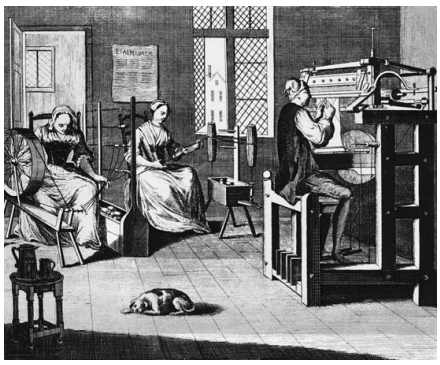
Have a look at the windows in this room – they are much bigger than anywhere else on the house. The houses at Cromford were designed like this so that the men who worked the looms could make full use of the daylight hours. They'd be up at the crack of dawn and didn't finish until the sun went down and the last of the daylight faded away - no wonder everyone around here was always so exhausted!

A brief look at the Industrial Revolution

Rise of the machine…

The Industrial Revolution marked a major turning point in history – every aspect of life was, in some way, changed by it. Average income and population increased and the standard of living rose consistently throughout this period.

There was a change from making things by hand and **cottage industry** to using machines instead. Lots of inventions and an increase in steam power helped the rise of factories, where everything could be done under one roof for maximum efficiency.

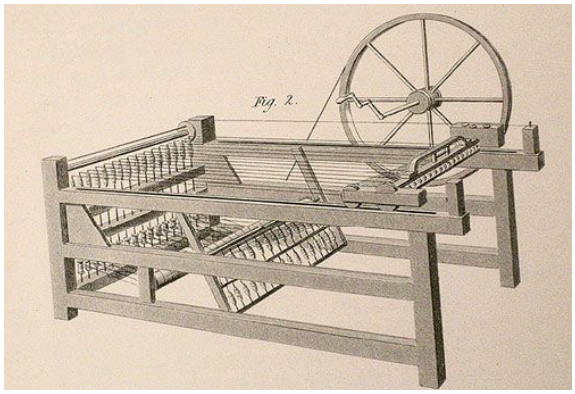


Not everybody was happy with the rise of the Industrial Revolution. The Luddites were a radical group of textile workers and weavers who didn't want change. They broke into factories in Nottingham and destroyed the machinery. This movement spread across the country and lasted from 1811 to 1816. Factory owners took to shooting protesters and eventually the army became involved to halt the destruction.

An 1812 engraving of the leader of the Luddites, said to be a Nedd Ludd – although many say he was a fictional character.

Fact:

Cottage industry refers to small businesses, which were run from someone's home, particularly ones that involved crafts such as pottery or knitting.



James Hargreaves' spinning Jenny, named after his daughter.

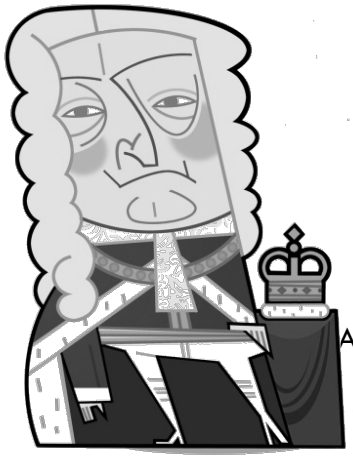
Important developments for the cotton industry…

- 1764 - James Hargreaves invents the spinning Jenny – this allowed a worker to produce more than one spool of thread at a time
- 1767 – Richard Arkwright develops the water spinning frame
- 1781 – James Watt patents an improved steam engine – a useful power source in factories
- 1779 – Samuel Crompton invents the spinning mule
- 1793 – Eli Whitney invents the cotton gin to increase the productivity of processing cotton

Unruly Rulers

Who were the Georgians?

The ***Georgians*** were nobles from Germany. George I was King James I's great grandson. So when Queen Anne died with no heirs George became king. They are called ***Georgians*** because they are all called George (apart from William – but he wasn't meant to be king anyway!) Their surname was ***Hanover*** so this time is also called the ***Hanoverian*** *(say 'han-o-ver-ee-an')* period.

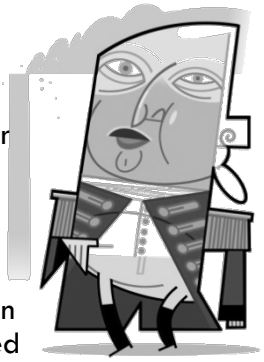


1714 **King George I**
A king from Germany who couldn't speak much English. He kept his wife in prison for 32 years - how mean!

King George II **1727**
A boring king who only liked to fight battles. He died on the toilet of constipation, pooh!

1760 **King George III**
A popular king who went mad. He started talking to an oak tree in Windsor thinking it was Frederick the Great! Poor Georgie, he had to stop ruling as he was so mad.

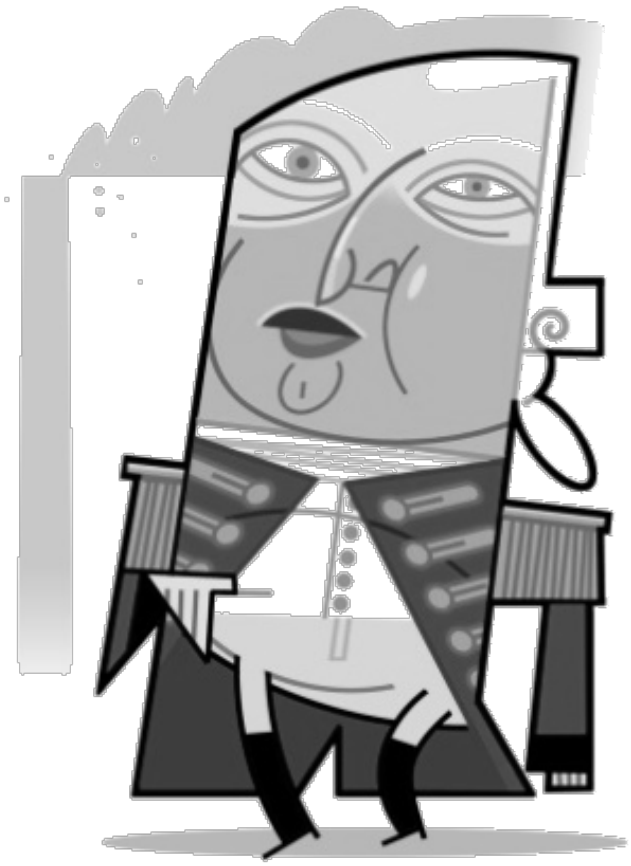
George III's son George IV had to step in and rule as Prince Regent. This was called the ***Regency Period.***



King George IV **1820**
A bad king who ruined all his dads' hard work. He loved to drink, eat and party!

1830 **King William IV**
A simple king who wanted to be a sailor but was too stupid to command a ship. He would sometimes offer people a lift in his carriage!

Meet King George III
– who ruled when North Street was built.



Hi Georgie!

So when did you become king?
I became King on 25 October 1760 when I was just 22.

What are you most famous for?
I went mad, don't you know!

What is your favourite thing to do?
I like playing with my youngest children. I had 15 in all!

What is the naughtiest thing you've ever done?
I tried to tax the Americans in the colonies and do you know what? They declared their independence!

Design

What does the North Street look like?

Can you walk all the way around it?

Can you use any of these words to describe the building? Draw a circle around the ones that do.

Does the North Street look like other buildings in the area?

Castle	Tall
Pretty	Industrial
Stone	Brick
Symmetrical	Home
Square	Elegant
Friendly	Low

North Street was built in 1776 by a man named Richard Arkwright. He chose the town of Cromford as the site for his new cotton mill and to attract workers he built new houses for them.

North Street is the earliest example of such planned industrial housing in the world. The houses are three storeys high and made from **gritstone.** Each one was built with a room for a loom for knitting in the attic.

Facts:

Gritstone is a hard, course-grained type of sandstone. British gritstone was used to make millstones to mill flour.

An **allotment** is a plot of land used to grow fruit or vegetables.

The attention to detail in the sash windows and good square door frames impressed workers who were used to much worse houses. They were equally glad that each house had its own small yard and an **allotment.**

What is North Street built from?

Stone is the solid foundation of the earth. It exists as huge mountains, rocks, stones or small pebbles washed smooth by water. There are lots of different types of stone, with different colours and textures. Some are better to build with than others.

Fact:

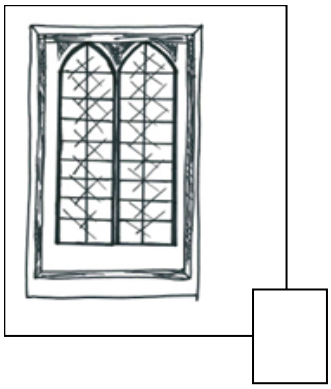
Some buildings were built from stone that was dug out of the ground when farmers ploughed the fields, other buildings were made from stone that was quarried and cut into neat shapes and sizes. There are still many stone quarries around the country today, where people get stone out of the ground.

Stone houses were once cheaper to build than brick ones. Once we could transport bricks up and down the country on the canals and railways, brick buildings become cheaper and more popular.

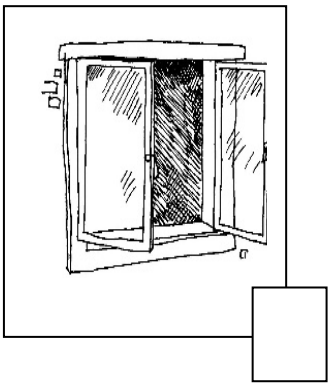
In medieval and Tudor times, stone was still taken out of the ground by hand. By 1776, when North Street was built, a quarry would have been a place where stone was blasted out of the ground with explosives! The one in the picture shows what quarries look like now.

People who work with stone are called stonemasons. They build walls, carve the stone into shapes or add patterns to its surface. They use a mallet and special tools called chisels to shape the stone. The picture on the right shows a stonemason carving stone.

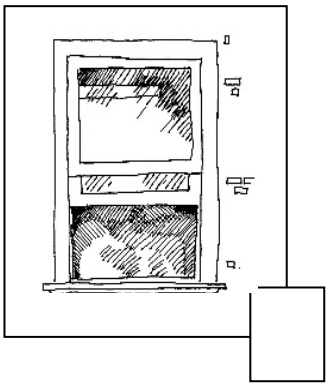
The size and shape of windows tells you a lot about the age and style of the building. What type of windows does North Street have?



Fixed Picture



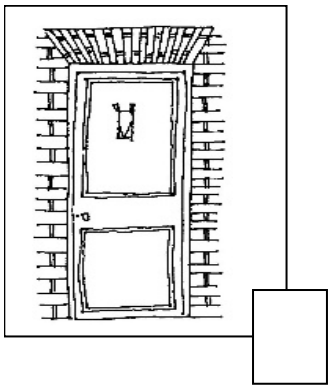
Casement



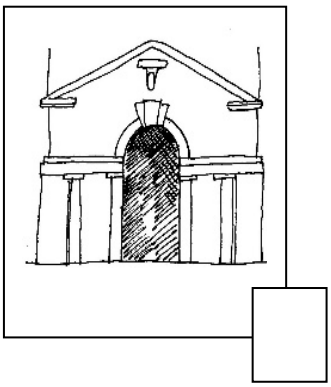
Sash

Fact: The long windows on the top floor of the houses at North Street were designed to let in the maximum amount of light. This was so that weavers at the loom could make the most of the daylight hours.

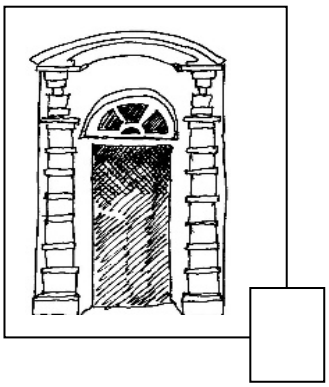
Entrances can be grand or simple. Which of these is most like the front door of number 10 North Street?



Doorframe



Porch

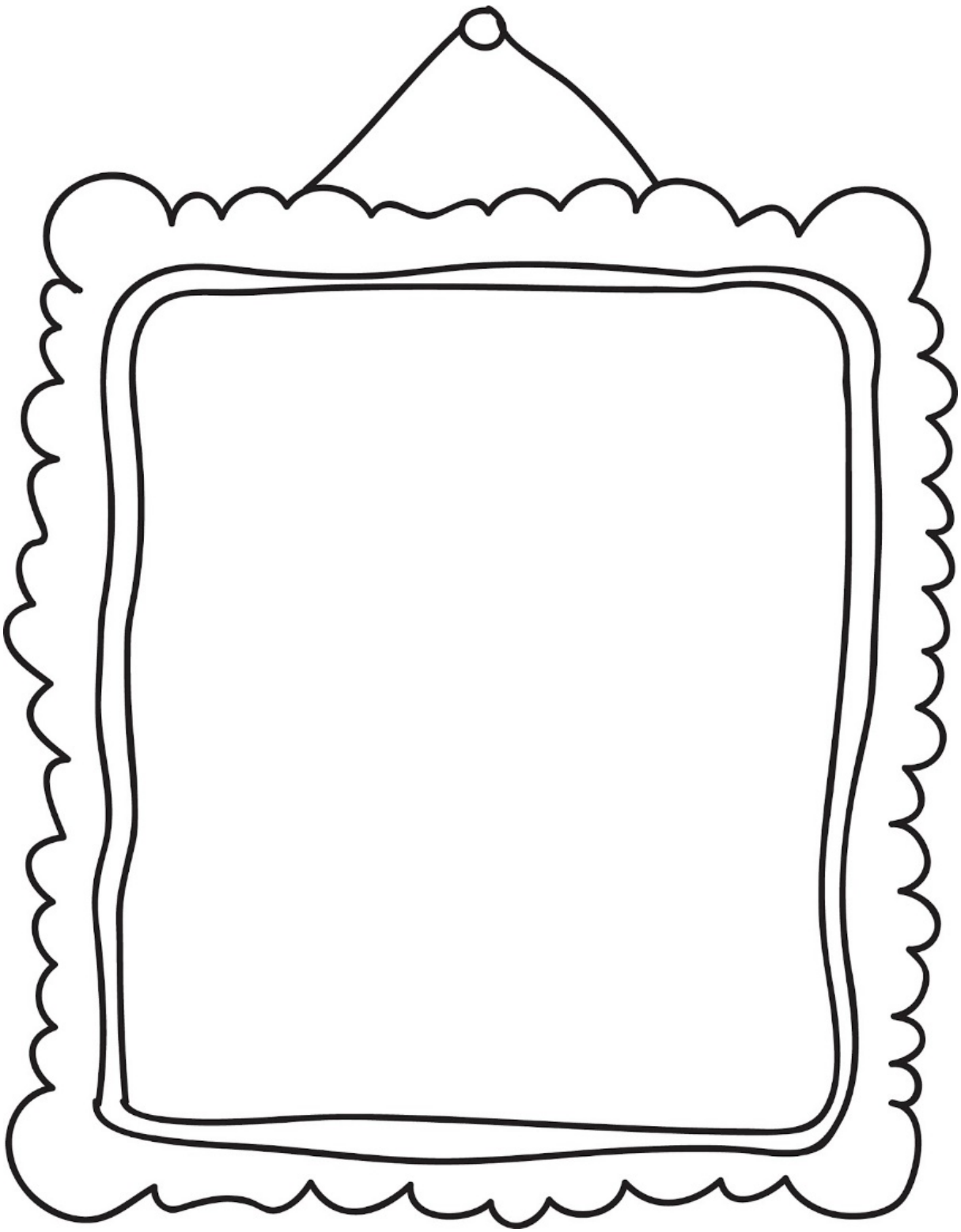


Canopy

North Street used to look far less uniform before Landmark took it on in 1974. The front doors were all different styles and colours and many of the top floor windows had been partially blocked – Landmark opened them up wherever possible, so that the street now looks more like it did when it was built.

Buildings are quite easy to draw. They are usually made up of lots of geometric shapes, like squares, triangles and circles.
Have a go at drawing North Street.

Please tell an adult where you are going so they don't worry about where you are!



Quest

Discover more about North Street

North Street has been here for nearly 250 years. In that time, many things have changed both inside and outside. Follow this Quest to discover more about it.

Climbing that staircase…

The cramped 18th century staircase had to be replaced because it didn't meet current **building regulations**. Landmark inserted a new steep staircase and tried hard not to take up too much room with it. How many steps are there? Do your legs ache by the time you get to the very top?

Fact:

Building regulations came into place in 1984. They were put into force to make sure that the buildings people live and work in are safe.

Have you noticed that North Street only has one room per floor? Is your house like this or do you have more than one room on each level?

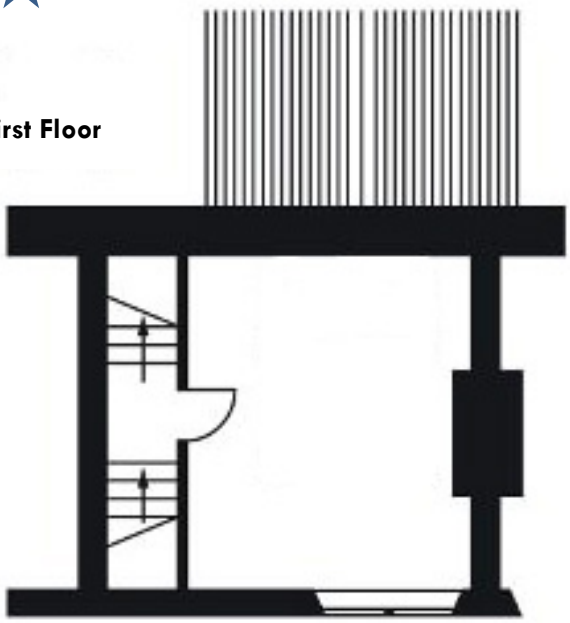
How many fireplaces can you count?

There was no central heating when North Street was built and so almost every room had its own fireplace to keep them toasty through the cold Derbyshire winters.

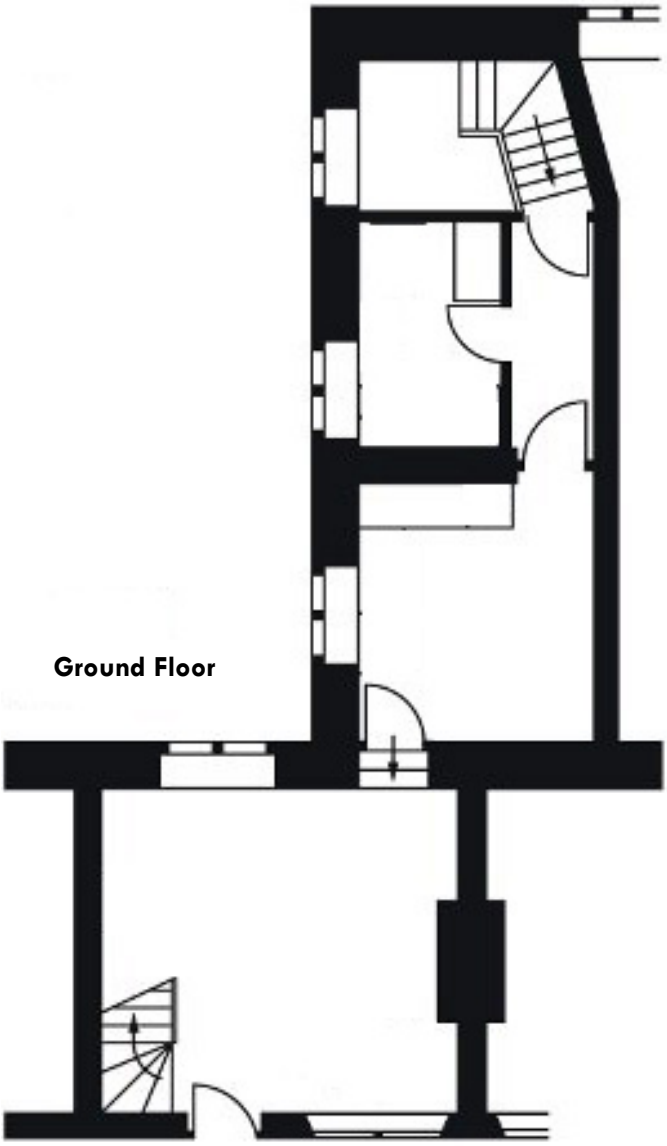
Living in North Street

The floorplan of a building is a map of the rooms. North Street has three floors. The plan below shows you the shape of each room. Take a walk around and write on the plan what each room is used for. Mark your bed with a star!

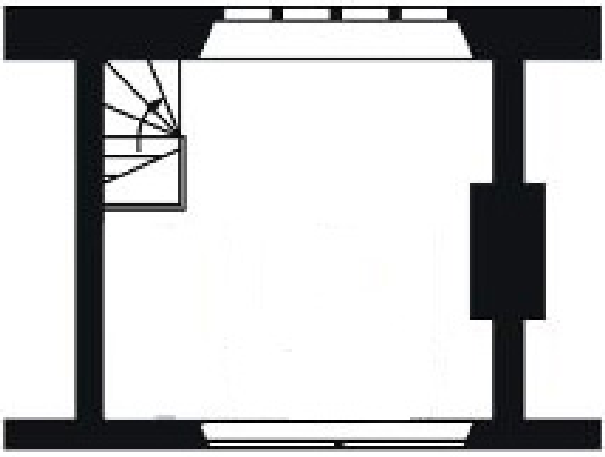
First Floor



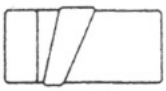
Ground Floor



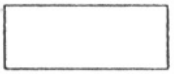
Second Floor



We use these symbols to show where beds, tables and bathrooms are. Draw the symbols on to the floorplans to show where the furniture is.

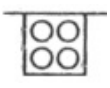


Bed

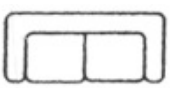


Rectangular (or a round) table

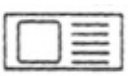
Bathroom



Cooker



Sofa



Kitchen sink

Can you find an example of each of these things inside North Street. Describe, or draw the object when you find it.

Your favourite piece of furniture

Your favourite window

Draw the pattern of a rug on the floor

In the box below, have a go at drawing the street using **perspective.**

Puzzle

Can you answer these questions correctly?

1. **Who was on the throne when North Street was built?**
   (Psst… Look at Unruly Rulers)
   Victoria | George III | Elizabeth I | Henry VIII

2. **Who invented the Spinning Frame?**
   Richard Arkwright | James Hargreaves | Samuel Crompton | James Watt

3. **When was North Street built?**
   1256 | 1588 | 1776 | 1890

4. **What does 'doff the bobbin' mean?**
   Replacing full bobbins with empty ones | Singing | Dancing | Fixing a machine

5. **Which group rose up against the Industrial Revolution in 1811?**
   Babylonians | Luddites | Helots | Irish

6. **What is an allotment?**
   A game | Plot of land used to grow vegetables | A legal document | A small town

7. **In what year did The Landmark Trust take on North Street?**
   1965 | 1985 | 1974 | 2002

8. **What was cottage industry?**
   House building | Estate management | Small businesses run from home | Pie making

9. **Which girls name did James Hargreaves' spinning machine have?**
   Jane | Rachel | Lucy | Jenny

10. **What county is North Street in?**
    Derbyshire | Surrey | East Sussex | Oxfordshire

To find the answers skip two pages…

North Street Word Search

Now have a go at the word search. Think about different parts of the building when filling in the word search. The words to find are at the bottom of the page.

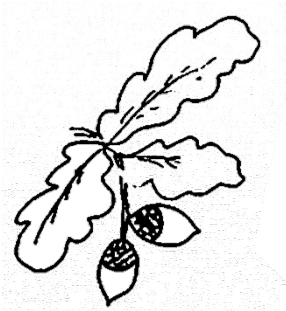
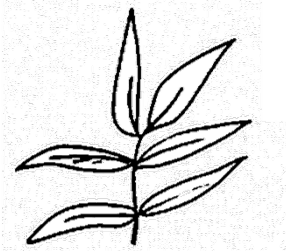
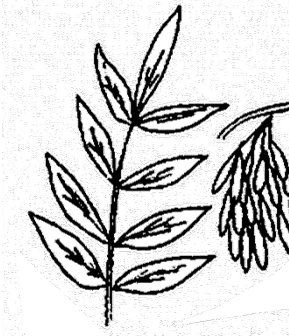
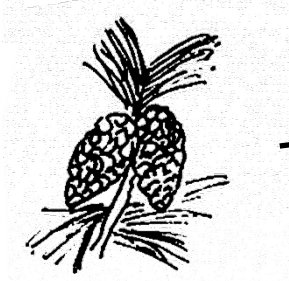
S P I N N I N G J E N N Y
E X S E T I D D U L A O F
A A S W O D N I W H S A S
R F R S Q V R N Q O U E C
K I N T P T S N W Y B R W
W R I A H M D E S O O I T
R E B I Y C L R S M I H N
I P B R Y O L H F H E S E
G L O S O T Q O M H U Y M
H A B M L D R U S Q Z B T
T C L M O D Q S A E N R O
P E O V Q N J E V R T E L
C O T T O N M I L L D L
E N O T S T I R G H S Y A
S P I N N I N G J E N N Y

SPINNING JENNY	DINNERHOUSE	ALLOTMENT	STAIRS
COTTON MILL	BOBBIN	INDUSTRIAL HOUSING	LOOM
ARKWRIGHT	SPINNING JENNY	SASH WINDOWS	EARTH CLOSET
CROMFORD	LUDDITES	QUARRY	GRITSTONE

How many of these words did you find? Put your score in the box. ___/16

Which leaf belongs to which tree?

Match the leaf to the correct tree.

1. 
2. 
3. 
4. 
5. 

Horse Chestnut ☐

Willow ☐

Pine ☐

Ash ☐

Oak ☐

Did you match them correctly? Put your score in the box. ☐/5

Answer sheet:

Quiz answers:

1. George III
2. Richard Arkwright
3. 1776
4. Replacing full bobbins with empty ones
5. Luddites
6. Plot of land used to grow vegetables
7. 1974
8. Small businesses run from home
9. Jenny
10. Derbyshire

How many did you get right? ⁄10

Fact:

Did you know that the county of Derbyshire makes up 2% of England. A large portion of the Peak District National Park is within Derbyshire; it was the first national park in the United Kingdom to receive recognition in 1951.

Create 

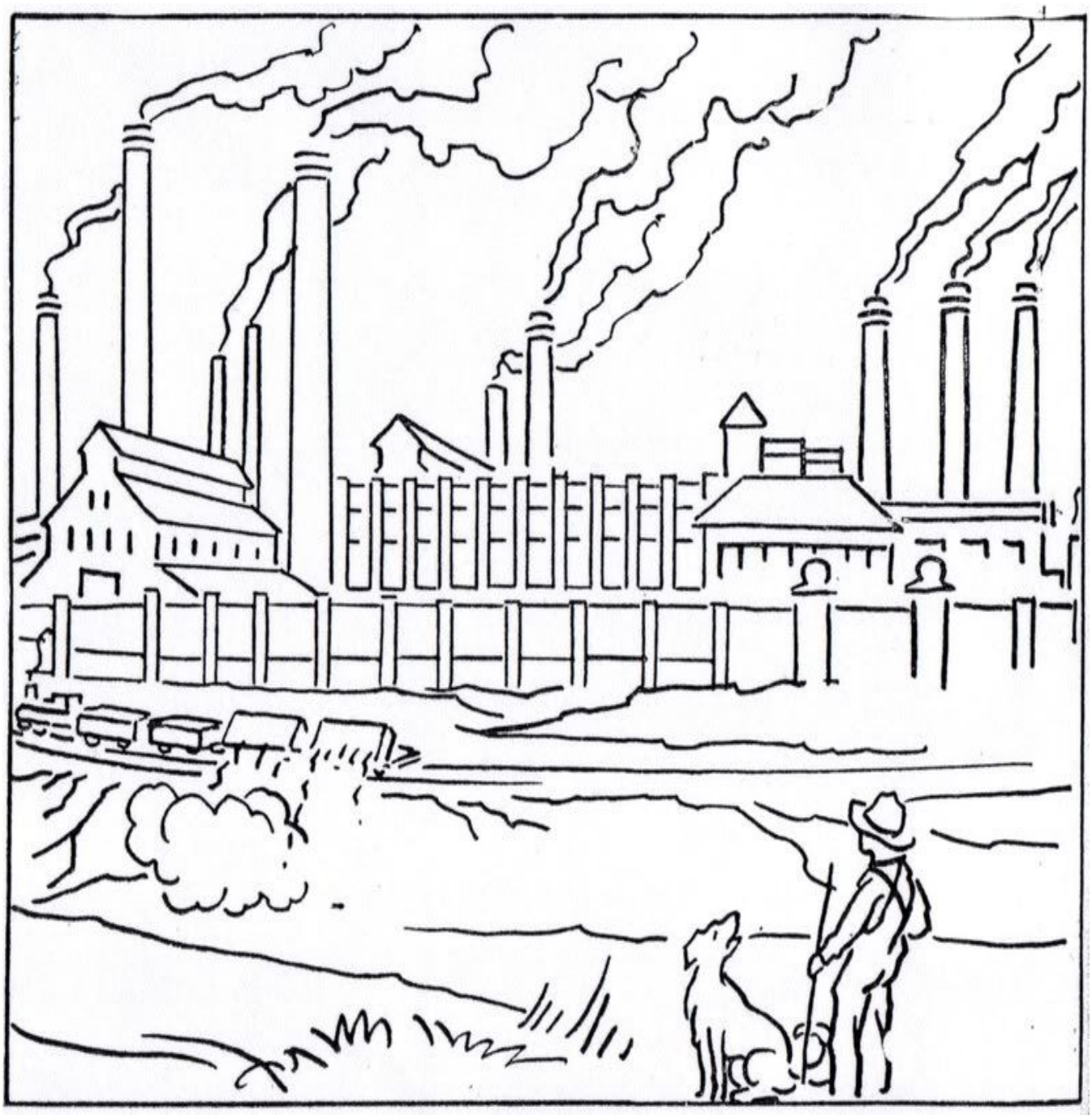
Become an inventor…

The Industrial Revolution saw a big rise in the number of mechanical inventions. People invented these machines to reduce the amount of workers they had to pay and make production faster. The faster you could make a product, the faster you could sell it on to make a profit.

What would you invent to make a chore in your life become easier? Make a plan below complete with sketches and 'sell' the idea to your family and friends…

Colour in this scene

The landscape of England certainly changed as a result of the Industrial Revolution. Large mills and factories were being built all over the country.



Bake a traditional Bakewell pudding

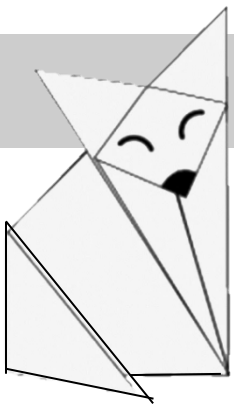
If you've never had a bakewell pudding you are missing out! It's a delicious almond and jam tart. Bakewell pudding was first made in the nearby Derbyshire town of Bakewell!

Here's a simple recipe for you to try. You'll probably need the help of an adult.

500g short crust pastry (you can buy it ready made)
3 tbsp raspberry jam
150g butter
50g caster sugar
3 eggs beaten
1 egg yolk to add to beaten eggs
50g ground almonds
2 tbsp lemon zest
2 tsp almond extract
1 tbsp flaked almonds
icing sugar to dust

Pre-heat the oven to 190 °C, Gas 5.

- Roll pastry out to 5mm thick.
- Grease and line a 20cm tart tin with the pastry. Prick base all over with a fork and chill for 20 minutes.
- Put the pastry in the oven for about 15 minutes so it just starts to cook. (This is called baking it "blind".) Take it out of the oven.
- Meanwhile beat together the butter and sugar until pale. Slowly add the beaten eggs and yolk. Gently fold in ground almonds, lemon zest and almond extract.
- Spread the jam onto the pastry base.
- Pour the mix into the pastry case and gently level it. Bake for 30 minutes, remove from the oven and sprinkle on the flaked almonds. Return to the oven for ten more minutes.
- Sprinkle with icing sugar whilst still warm and enjoy!



Make a woodland origami fox

Woodlands have lots of different animals living in them from rabbits, mice and insects to deer, birds and foxes. Have a go at making your own origami fox with the paper on the next sheet.

You will need:

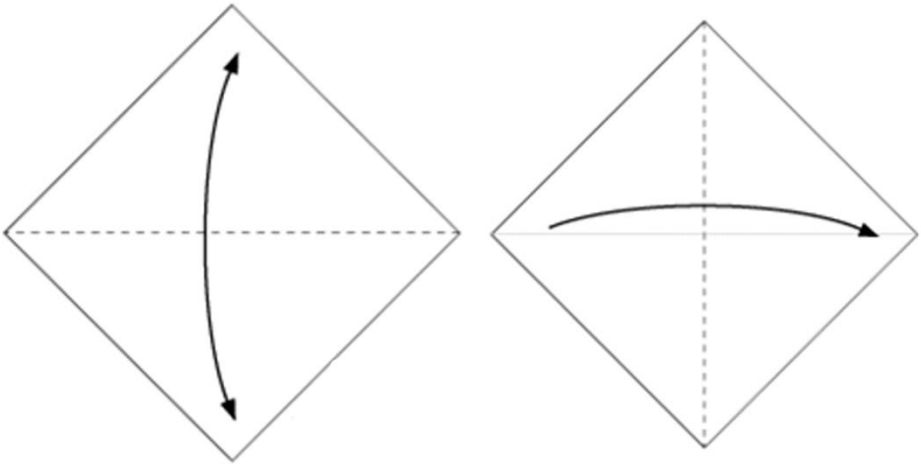
Paper
Scissors
Colouring pencils

Fact: **Origami** (say orr-ee-garmi) is the Japanese art of paper folding.

Step One:

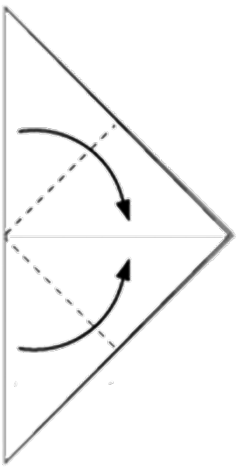
Cut the A4 piece of paper into a square. Follow the dotted lines on the sheet on the next page.

Then fold in half one way to make a crease, then open it up and fold it in half the other way.



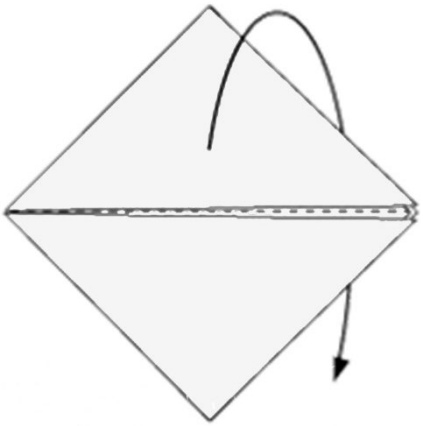
Step two:

Fold both sides in to make a diamond shape.



Step three:

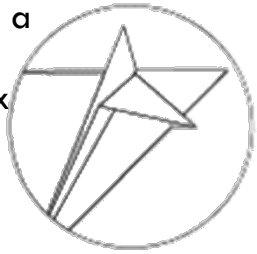
Once you have the diamond shape, fold the paper in on itself in half again so that all the flaps are on the outside edge.

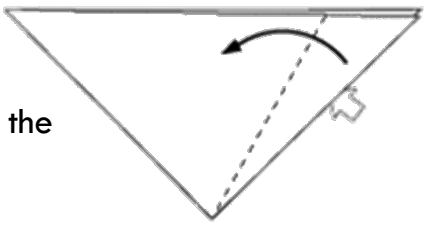


Step four:

Fold the first flap back a little bit like in the diagram to make a fox ear.

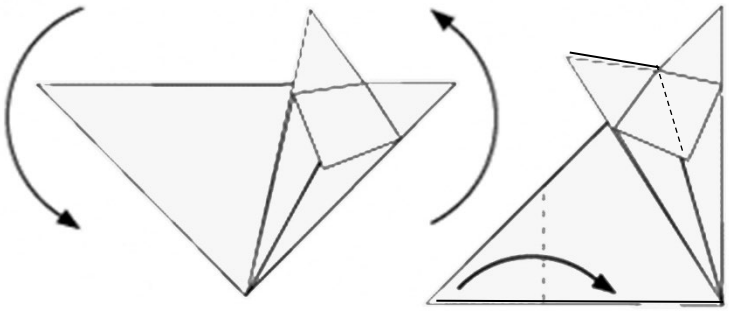
Then with the middle flap push it inwards to make a Diamond shape that will be the fox's face.





Step five:

Turn the paper round so that it is at a right angle. Then fold the other corner inwards to create the fox's tail. Then colour and draw in the fox's face!



CUT OUT TO MAKE YOUR ORIGAMI FOX