

# LOCAL HISTORY – CROMFORD MILLS

## Knowledge Organiser



### Sir Richard Arkwright:

- Richard Arkwright was born into a large working class family.
- He began his working life as a barber and wig-maker.
- The first mill at Cromford was built in 1771.
- Cromford was chosen as a site because it offered flowing water for Arkwright to power his machines.
- It was chosen as a site because it offered flowing water for Arkwright to power many machines at once.
- In Arkwright's factory design the preparing, spinning, storing the cotton happened in one place. The cotton yarn was spun by the water frame machines.
- Weaving was done by hand.
- Arkwright's invention and factory system was so successful that people paid him money to use his designs. His mill inventions and designs spread to Scotland, Europe (including Cromford, Germany) and America

### Mill construction and water power:

- The first Mill was five storeys and the second Mill was seven storeys high.
- The Mills used water from Cromford Sough and Bronsall Brook. The water flowed from the Mills into the River Derwent and to Cromford Canal.
  - Arkwright built aqueducts and underground tunnels to control the flow of the water.
  - The water flowing through the double wheel under the second mill powered twice as much machinery that the single wheel on the first mill.
  - In the 1780s a warm air heating system controlled the temperature of the first and second mills.

### Transport:

- All the materials needed to build and operate the mill would have been delivered by road
- Rural roads were in poor condition at the time the mill was built.
  - Arkwright re-routed the road to make way for the second mill
  - The canal was built in the 1790s, opening in 1794
  - The railway at Cromford opened in 1831

### Life and work at home in the 18<sup>th</sup> & 19<sup>th</sup> century;

- Arkwright built cottages with allotments for workers, a pub, market area and lock up.
- When the Mills first opened children as young as 7 were employed.
- From 1806 children had to be 10 years old before they could start work at the Mills.
- Children worked the machines and on carding, sorting cotton.
- Festivals and celebrations were organised for workers.
- Mills were often cold, dusty places with poor air conditions and quality of food.
- Cromford working conditions were better compared to other mills.
- Cromford did not employ apprentices.
- Before the mills were built women would have spun cotton yarn on spinning wheels at home.