

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 18th & 19th 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.