

KEY TERMS BY THEME

TECHNOLOGY: Textiles
 spinning jenny
 water frame
 James Hargreaves
 Richard Arkwright
 factory system

TECHNOLOGY: Agriculture
 agricultural revolution
 crop rotation
 seed drill

ECONOMY: Manufacturing
 Industrial Revolution
 industrialization
 cottage industry
 Eli Whitney
 interchangeable parts
 division of labor
 specialization of labor
 assembly line
 enclosure movement
 capital

ENVIRONMENT: Britain
 seaways
 raw materials
 Manchester
 Liverpool



Industrial Revolution
 Industrialization

The dramatic change in society & economics through new technologies
 - increased mechanization of production & social changes
 • Outputs: reshape society / world pop ↑ / farm → city life / production & consumption of goods ↑

Agriculture Improvements

• Agricultural Revolution = food boom: crop rotation - rotate fields each yr. / seed drill - efficient seed placement
 * pop. increase from food being more available = more workers → produce more foods

Cottage Industry / Preindustrial Society

Cottage System

• Establishment of maritime empires = spread of Indian cotton & high demand
 • Britain compete w/ Indian cotton through established slave labor in Americas - picking
 • "putting-out system", merchants provide cotton to women for spinning to finished cloth

Growth of Technology

James Hargreaves
 Richard Arkwright

Invents spinning jenny - more than one thread & water frame - waterpower to drive wheel → Richard Arkwright patents it
 Father of factory system - water frame = movement from home → factory work

Interchangeable parts
 division of labor
 assembly line

Eli Whitney - *originally for firearms* if a part broke, it could be seamlessly replaced → labor developed to other tech
 where workers no longer had to be multi-versed: specialization in one, not multiple, fields of work
 Henry Ford - takes *division of labor* and produces products more efficiently

Britain and Industrial Revolution Adv.

- Advantages: seaways = access to **Import** & **Export** goods (raw → finished goods) / coal deposits = steam engine + iron → steel = better structure
- Splurge in colonies: excess capital leads to commercial ventures of colonies = more resources
- Rivers: inexpensive cross-state transportation of goods
- Fleets: **Strong navy** = strong defense for seamless commercial trade internationally
- Private Property: Assurance that businesses / factories would not be seized by Gov't - legal protection
- Pop + Urbanization: Less hungry & Less farmers;
 - enclosure movement: Gov't push to take village-owned land and fence it in for agricultural use
 - leads to demographic change: Manchester + Liverpool populate; farmers rural → urban

actually enclosing land to keep outsiders out - wealthy buys into this and get great profit

● Growing cities ■ Coal fields

0 100 Miles

0 100 Kilometers

