Some key from transparency 2.1B: The agricultural revolution

Enclosure movement

* Wealthy landlords fenced in common pastures and experimented with new farming technology
* Villages lost common lands and political power, peasants became poorer

Crop rotation

* Fields depleted of nutrients by one crop replenished by planting different crops
* Fields not left inefficiently fallow

Other discoveries

* Seed drill planted seeds efficiently
* New crops: corn and potatoes

Results of agricultural revolution

* More food available
* Population increase

Some key ideas from transparency 2.1C: Cottage industry and early capitalism

Merchant’s role in cottage industry

* Supplied materials- wool and cotton-to cottages to be carded and spun
* Took supplied materials from spinning cottage to weaving cottage to dying cottage to dying cottage to sell finished cloth
* Merchants sell product for more than material and labor costs=profit + larger investment= higher profit

Capitalism

* An economic system based on private ownership, free competition and profit
* Cottage industry is and example of early capitalism

Effects of the cottage industry

* Big profits for new class of merchants
* Alternative source of income for peasants

Some key ideas from transparency 2.1D textile industry and factory system

Textile industry invented

* Cottage industry couldn’t keep up with demand for textiles
* Spinning jenny, water frame, spinning mule improved spinning
* Power loom sped up weaving
* Cotton gin separated seeds from cotton

Rise of factory

* New machines, often too big for homes, were put in factory’s
* Factories located near power source: coal, iron, water

Effects of textile factories in Britain

* Prices of mass produced textiles were much lower than hand produced items
* Britain’s textile industry increased enormously
* Majority of villagers forced to leave to find work in urban factories

Some key ideas from transparency 2.1E: stream engine: energy for the Industrial revolution

The need for energy

* Early factories relied on horses, oxen, and water mills
* Steam engine evolved in response to the increasing need for power

How the steam engine works

* Steam forced from high or low pressure produces power

Effect of steam engine

* Steam power, used where ever coal existed, increased textile production
* Improved mining which increased metals which in turn fueled other industries

Some key ideas from transparency 2.1F: iron and coal: energy for the industrial revolution

The need for iron

* Farming tools, new factory machinery, railways
* Smelting makes iron more pure, but requires carbon

The need for coal

* Carbon necessary for smelting iron
* Steam engines powered by coal

Effect of iron and coal

* Britain produced more iron than all other countries of the world combined
* Coal powered by coal

Some key ideas from transparency 2.1G: transportation

The need for better transportation

* Increased production need to transport goods quickly and cheaply
* Pre industrial society used horses mules and dirt roads

Inventions

* Stone and eventually asphalt roads
* Canals
* Railroad era ushered in with the rocket in 1829

Effects of railroads

* Expanded rapidly throughout Britain
* Cheaper transportation increased production and profits
* Railways fueled other industries: coal, steam engines, iron, steel, and many manufactured products

Some key ideas from transparency 2.1H: why Britain led the industrial revolution

Geography

* Climate good for textile production.
* Plenty of natural resources such as iron and coal
* Separation from the European continent kept them out of the wars

Government

* Internal trade encouraged
* Population allowed to relocate
* Helped build canals and roads

Social factors

* British society less rigid than other European countries

Colonial empire

* Supplied raw material for manufactured goods
* Provided market for goods

Advantages of industrializing first

* No other countries competing for manufactured goods
* Monopoly and technology