

# The Industrial Revolution

## Phase #1

Agenda:

1. Causes of the Industrial Revolution Notes



# Today's Goal:

- Analyze the causes for the Industrial Revolution
- Understand why it began in Great Britain

# Before 1750

- Life was primarily rural
- Short life expectancy
  - Men 31 years
  - Women 33 years
- Feast and famine
  - Availability of food depended on success of crops every year
- Limited trade
  - (because of transportation)



# Causes of the Industrial Revolution

- Agricultural Revolution → More food
  - Enclosure movement → unemployed farmers
- Population Growth
  - Unemployed farmers → labor force for factories
- New Technologies → Steam & Coal
  - Transportation, powered industries
- Remind you of anything?

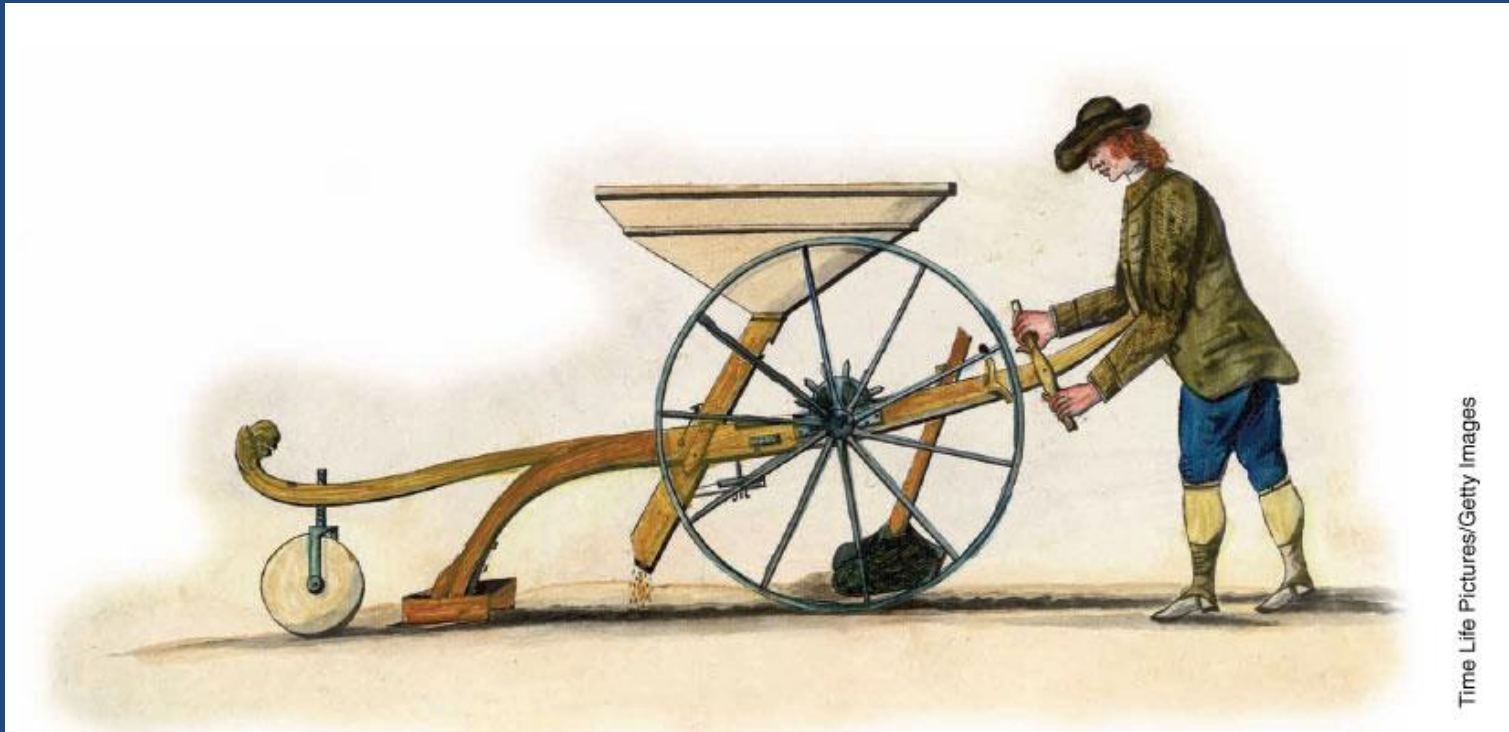
# Agricultural Revolution

- Agricultural Revolution made the Industrial Revolution possible
- Agricultural Revolution:
  - Drastically improved farming
  - Made it possible for fewer people to produce food for many more people



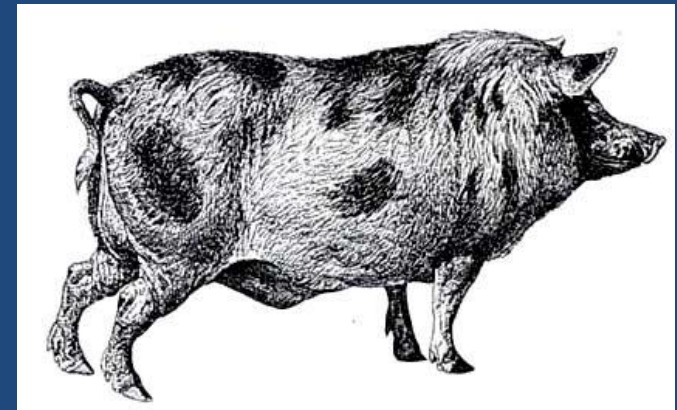
# New Farming Technologies

- New technologies like the Seed Drill added farming.
- Fertilizer was invented



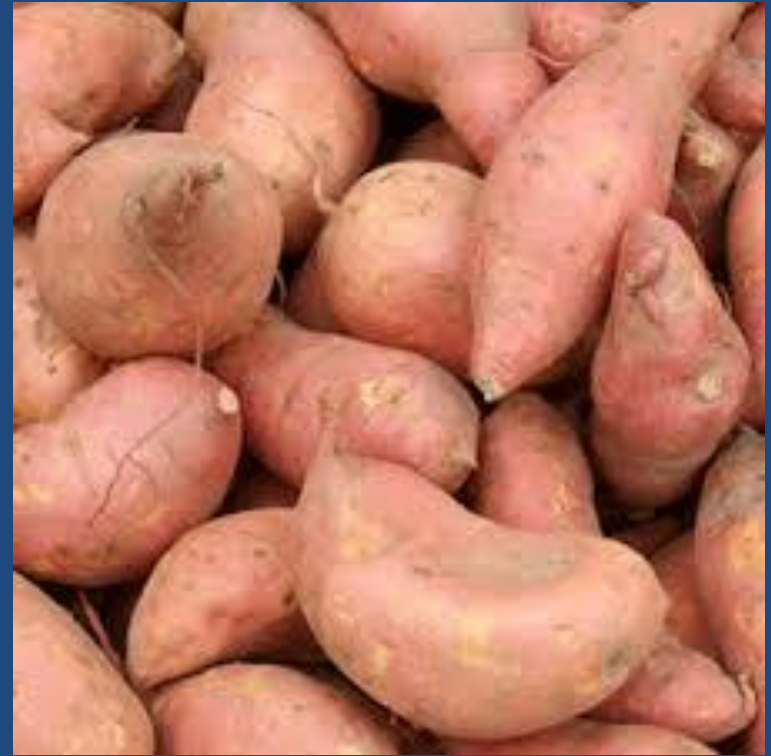
# Agricultural Revolution

- Made possible by:
  1. **Enclosures**: Large farms with better seeding and harvesting methods
  2. **Crop Rotation**: Changing crops every year to improve the land
  3. **Livestock Breeding Improvements**: Only breeding best animals



# Results of the Agricultural Revolution

- Improved food production
- Surplus of food!
- Why do you think a surplus of food is a cause of the industrial revolution?





# Beginnings of Industrial Revolution

- 1<sup>st</sup> phase:
  - Began in England mid 1700's
- Prediction!
  - Why England?



# ENGLAND

- England had all the factors of production:
  - **Land**
    - Bountiful natural resources
  - **Labor**
    - Displaced farmers, growing population
  - **Capital**
    - Wealth – money to invest in industry



# Land

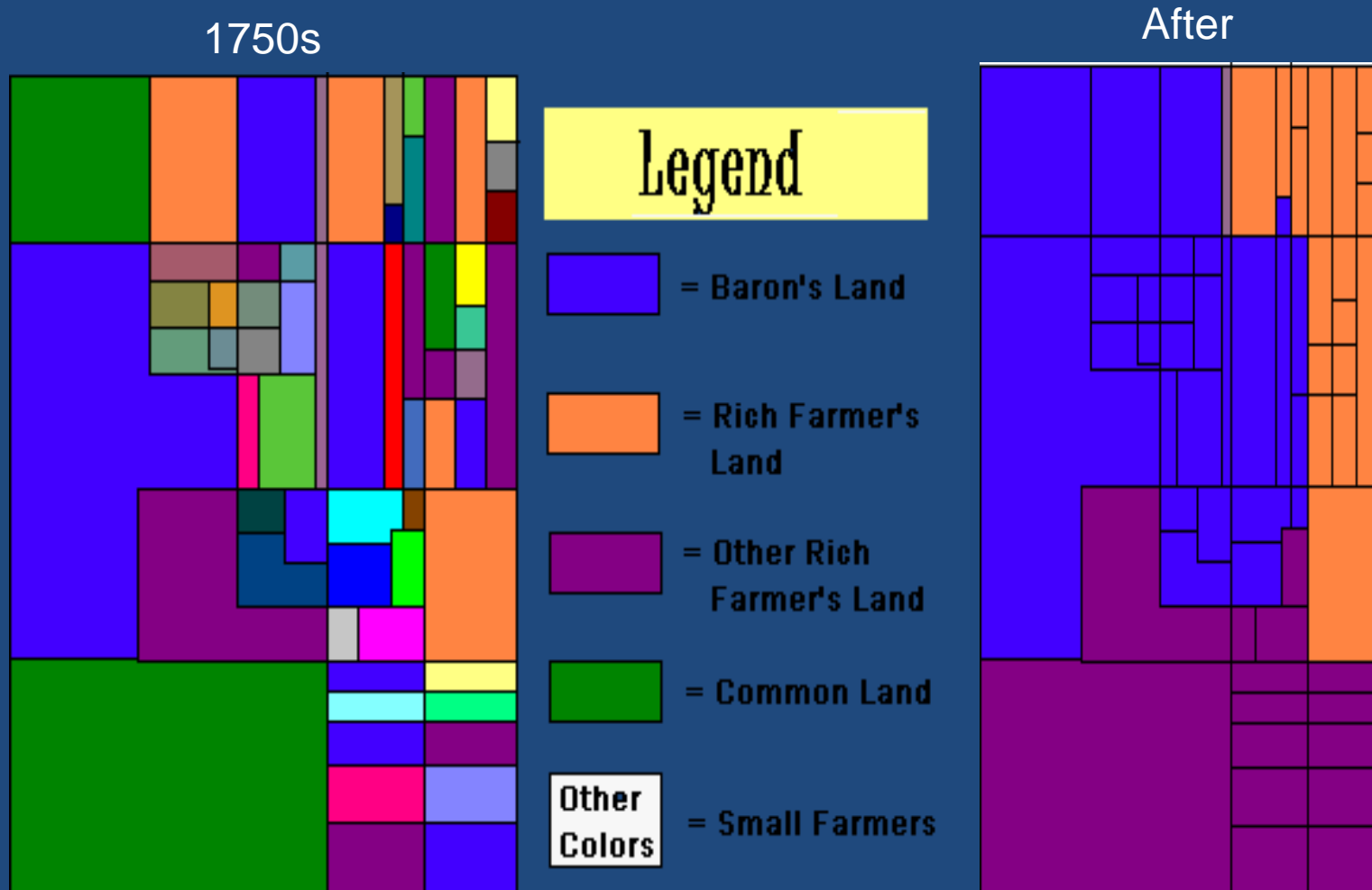
- Britain had an abundance of natural resources
  - Resources: iron ore, coal, etc.
  - Water power and coal to fuel machines
  - Rivers/Canals for transportation and accessibility for trade
  - Sea: able to transport goods cheaply because they had good access to sea ports all around the Island

# Labor

- The Agricultural Revolution had increased England's population
  - Greater food supply = population increase
- 1700's European population reaches 190 million
  - People eat better, healthier babies, better medical care
- Unemployed Farmers - lost enclosed lands → moved to cities; need jobs!

# Enclosures

- Fencing off large tracts of land making farming more efficient



# Capital

- Money to invest in labor, machines and raw materials.
- Entrepreneurs – brought together labor, capital and raw materials – took risks



# Inventions

- New inventions drive Industrial Revolution
  - Textile Industry
  - Flying shuttle and spinning jenny
- Steam Engine
  - Power for industry
  - Power for trains and boats



# Textile Industry

- Inventions speed production of textile goods!
  - Demand for textile goods high, inventors, needed to invent to machines to speed up the process.
  - **Flying Shuttle**: Weaving machine
  - **Spinning Jenny**: Spun many threads at the same time; hand-powered
  - **Water Frame**: spinning machine powered by water.



# Railroad System

Four major impacts:

1. Spurred growth of industry
2. Created jobs
3. Boosted farming/fishing industries
4. New way for people to get around



# Rise of cities

- Industrial Revolution gave rise to urbanization
  - Rapid growth of cities
- Fun fact:
  - The number of European cities with populations 100,000+ more than doubled between 1800-1850



# Factories and growth of cities

- New large machinery needed new large building to fit into.
- Most factories were built close to energy sources
  - Water
  - Coal
- Industrial centers emerge