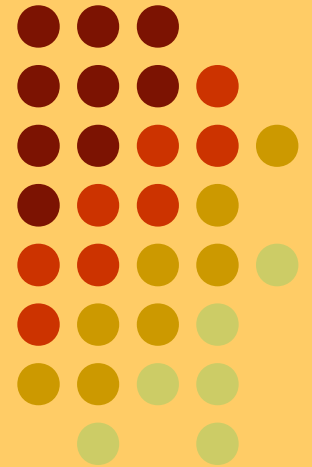


# Unit 5

# The Industrial Revolution

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**Social Studies – ESO-4**



# The Industrial Revolution



## Introduction

- Inventions

## Before the Industrial Revolution

## Inventions that fuelled the Industrial Revolution

- Flying Shuttle
- Spinning Jenny
- The water frame
- The steam engine
- The locomotive (train)

## Life during the Industrial Revolution

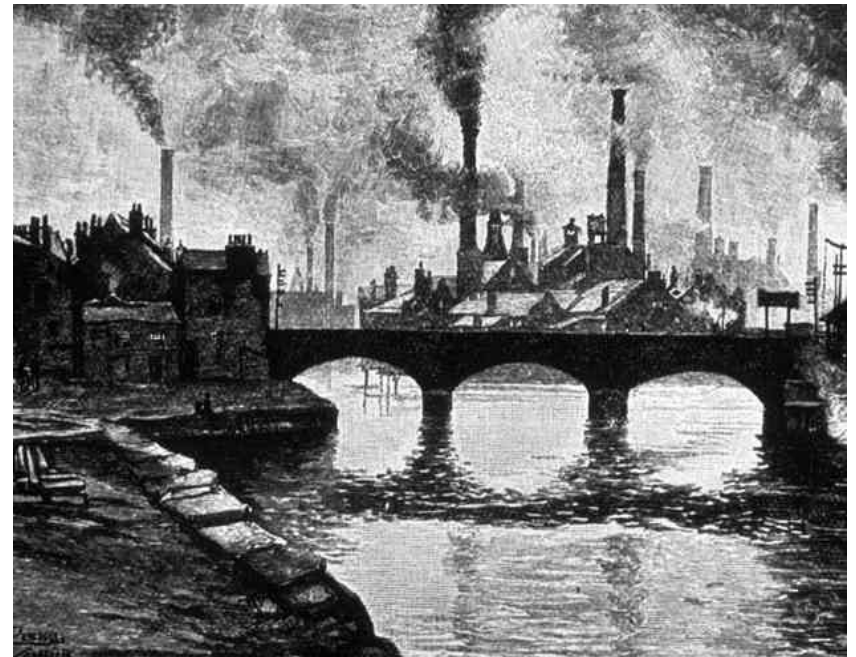
- Homes of the wealthy
- Homes of the poor
- Middle class

## Migration during the Industrial Revolution

## Working conditions in the Industrial Revolution (Factory Acts)

## Riots against the Industrial Revolution

## The importance of the railways

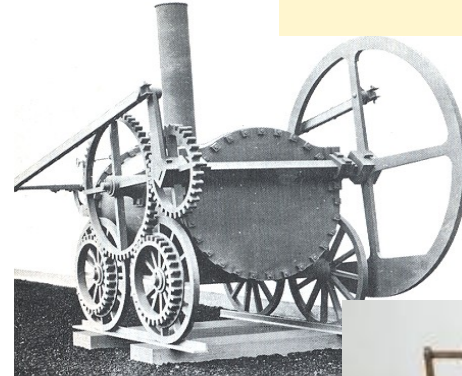


# The Industrial Revolution



- Introduction

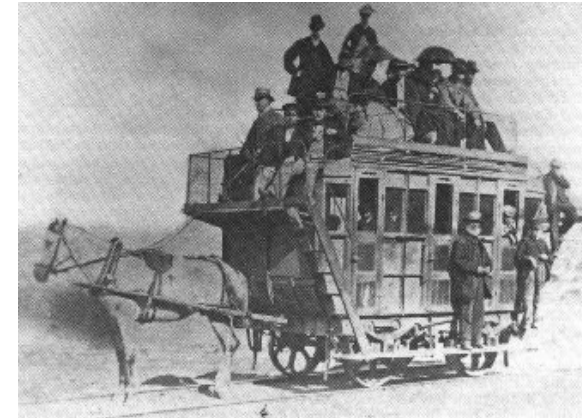
- New inventions for better iron:
  - Coke
  - Steam engine
- Inventions for textile industry:
  - Flying Shuttle
  - Spinning Jenny
  - Spinning Frame
- Towns boomed
- Children worked
- Importance of the railway



# The Industrial Revolution



- Before the Industrial Revolution
  - Different types of roads
  - No trains
  - Little contact with other areas
  - Different cities
  - News spread by travellers
  - Local products were used
  - People were mostly farmers
  - Natural sources of energy (wood, wind...)
  - Only rich people could study



# The Industrial Revolution



- Key inventions for the Revolution:
  - Spinning Jenny
  - Water Frame
  - Steam Engine
  - The locomotive (train)

# The Industrial Revolution



- Life during the Industrial Revolution
  - Only rich people could study
  - The rich were really wealthy
    - Large homes and estates
    - They could study
  - The poor were very poor
    - Small, damp houses in crowded streets
    - Shared toilets
  - Middle class
    - Their homes became better

# The Industrial Revolution



- Migration

- People tried to find a job
- They moved to industrial areas:
  - Manchester or Liverpool (in England)
  - Barcelona (in Spain)
- Many moved to America
  - Mainly from Europe to the USA



# The Industrial Revolution



- Working conditions
  - Working in a factory was dangerous
    - Long hours
    - Hot steam engines
    - Dangerous machinery
  - Children also worked in factories
    - High mortality rate
  - Some reforms (Factory Acts) made working conditions better





# The Industrial Revolution



- Riots against the Industrial Revolution
  - People were afraid of losing their jobs:
    - Common land was enclosed: no land
    - New machines and working methods
    - Better transport
    - Wages were low & food was expensive
    - Soldiers had no job
  - Luddites started riots

# The Industrial Revolution



- The importance of the railways
  - In 1785 the first Boulton and Watt rotary engine was used in a factory



# The Industrial Revolution



- The second industrial revolution
  - From the end of the 19<sup>th</sup> century to World War I
  - Where:
    - Britain
    - Germany
    - France
    - Low Countries
    - Denmark
    - the US
    - Japan

# The Industrial Revolution



- The second industrial revolution
  - Changes in steel, railroads, electricity & chemicals
  - Relevant facts:
    - Bessemer steel from molten iron
    - Petroleum industry → kerosene
    - Electricity → assembly line & lighting
    - Mass production in Ford factory
    - Cheap electrochemicals
    - Steel → railroads
    - Telegraph and telephone lines

# The Industrial Revolution



- The second industrial revolution
  - Socioeconomic impact:
    - Better living standards
      - Cheap food
    - Crop failures→less relevant
    - Tractors
    - Ships could carry more weight→more trade
    - Lower prices
    - Social changes
      - More professional working class
      - Larger middle class

# The Industrial Revolution



- Alternative answers to the industrial revolution
  - Utopian, comunitarian socialism (*Fourierists*)
  - Communism, Marxistm or Scienfic socialism (*Marx and Engels*)
  - Capitalism
  - Anarchism (*Bakunin, Peter Kropottkin*)



# The Industrial Revolution



- The second industrial revolution
  - Final situation:
    - World industrial leaders → US, Britain, Germany, Russia and France
    - Most industrial inventions were from this period

# The Industrial Revolution



- Pictures from *Banco Imágenes ITE*