**Spread of Industrialization**

**Origins**
- Starts in Great Britain
  - Around 1760s
- New Methods of production
  - Manmade to machines
- Reasons for spread
  - Expanding agricultural base
    - More land under cultivation
      - Swamps drained
      - New farming methods
      - Fertilizers
  - Transportation
    - Railroad led to expansion of markets
      - Decreasing shipping costs
      - Catalyst for investment
      - Middle class travel
        - Spas, resorts, casinos
        - Liberalism
          - “The locomotive is the hearse which will carry absolutism and feudalism to the graveyard”
    - Steamships improve intercontinental transportation
      - Quicker travel between continents
      - Colonial control
        - Easier to move around armies and supplies
  - Improved roads
    - Increasing population

**Spread of Industrialization**
- Affected Northwestern Europe more than southern
- Highly regionalized
  - Impacted area but not whole country

**England**
- Industrial Revolution began in England
  - Second half of 18th Century
  - “Workshop of the World”
- Advantages
  - Growing populations
  - Easy access to resources
    - Coal, iron, tin
  - Strong Agriculture
  - Near water
    - Good transport of raw materials and finished products
    - Liverpool becomes merchant center
  - Rich colonial trade
  - Commercial domination
- Entrepreneurs willing to take risks
  - Self-finance
    - Government encouraged banking
- Government Assistance
  o Easier to start business in England than on continent
    ▪ Just by registering with government
  o Laissez Faire economics
    ▪ Government keeps hands off business
      • Except tariffs on goods
- Fewer social barriers
  o Toleration of social classes and religion
- Enclosure Act
  o Common land taken
  o Commercialization of agriculture
- **Cotton Manufacturing**
  o Became mechanized
    ▪ First industry to be revolutionized
  o High demand for cotton clothing
    ▪ Easily cleaned and less expensive
  o Raw cotton from colonies spun in England
    ▪ Half of all exports
- Combination Acts repealed in 1824
  o Strikes legal

**Belgium**
- Modern industries
  o Densely populated and urbanized
    ▪ Easy access to labor supply
  o Resources
    ▪ Coal deposits
  o Rapid railroad construction
- Netherlands on decline
- North Sea ports expanding

**France**
- Worlds’ 2nd largest economy
  o Almost completely agricultural
    ▪ Small family farms still common
    ▪ Investments still made in land
    ▪ People suspicious of big business
    • ‘Mississippi bubble’
  o Late to industrialize
  o Slower population growth
- Political revolution helped business
  o Undermined power of agricultural elites
  o Extremely high protective tariffs
    ▪ Difficult to get raw materials
- High transportation costs
  o Less raw materials
  o Less railroads
- Economic Weakness
  o Bank of France
    ▪ Primarily loaned money to the state not the people
    ▪ Nobody trusted it
  o Private Banks
    ▪ Loaned to government as well
Currency
- 90% of payment in specie
- Smallest banknote is 500 Francs
  - A year’s work for a commoner
- Limited number of Joint Stock Companies
- Difficult to raise capital

Resources
- Limited access to cotton
  - Textiles is catalyst of Industrial Revolution
- Mining increased
  - Mostly located in the east

“Articles of Paris”
- Luxury goods still valued worldwide
  - Jewelry
  - Gloves
  - Haute Couture
  - Bronze
  - Saddlery
  - Musical instruments
- Workshop products
  - Barrels
  - Pipes
  - Watches

July Monarchy
- Louis Philippe
  - 1830-1848
- Helped businesses
  - Protected special interests
  - Government built many railroads
  - Government purchased land to build roads and bridges
  - Bankruptcy laws less harsh
  - Easier to invest and start businesses

Strikes legalized
- 1864

Germanic States
- Industry severely lacking
  - Powerful guilds
  - Many tolls and customs barriers
  - Too spread out
    - Mostly rural, agricultural based economy
  - Textiles slowly developing
    - By mid-1830s on the rise
- Once Germany began to industrialize they went very fast
- Zollverein
  - 1834
  - Customs Union
    - Developed by Friedrich List
      - 4/5 of Germanic states
Krupp manufacturing company
- Slow at first
  - Became very large by 1878
- Made steel goods

Eastern and Southern Europe
- Sparsely industrialized
- Spain
  - Very poor transportation
  - Investment discourage
  - State interference too much with economy
  - Commercial code
    - Stricter laws on businesses
  - After economic crisis Government forbade new business
- Austria
  - Elites too powerful
    - Prevented too much change
    - Society remained mostly agricultural based
      - Developments in Austrian holdings of North Italy
  - Slow development
    - Very few railroads
- Russia
  - Tiny middle class
    - Too many serfs
  - Huge
    - Difficult for transportation
      - Too expensive
  - Church opposed progress
  - Strong growth in first half of 19th century
    - Volga river to the Black Sea
    - Baltic
      - Trade and exports coming out of St. Petersburg

Evils of Industrialism
1. Low Wages
   - Workers paid very low wages
     - Barely livable
     - Entire family had to work
2. Long Hours
   - 15-16 hours a day in a factory
     - No breaks
     - Worked entire week
3. Unsafe conditions
   - No precautions
     - Accidents meant no more work
     - Crippling damage to people
   - No ventilation
     - Sweat shops
4. Child Labor
   - Began work around 6-7 years old
   - Hard Work
     - Because they are small
5. Exploitation of Women
   - Same jobs
     - Paid less
   - Still had to take care of home
6. Insecure Employment
   - Could get fired for anything
     - Accidents
     - Sickness
     - Promiscuity
     - Women
   - Could not count on steady income
7. Slums
   - Tenement
     - Multi-story apartment building
     - Cheaply made housing around factory
     - Not planned developments
     - Low sanitation

All addressed eventually

Responses to Industrialism
1. Unions
   - Workers banded together
     - Collective bargaining
2. Socialism
   - Economic systems
     - Mix between unions and parliamentary system
3. Parliamentary System
   - Government regulation
     - Slow but reliable