Chapter 20
Industrial Growth
Section 1 – Railroads Spur Industry
Pages 574-577

Setting the Scene
Did William Vanderbilt concern himself with how the public felt about his and other railroads? _______________________________________________________________

What did he consider the basic purpose of railroads? _____________________________
________________________________________________________________________

Network of Rails
What were early railroads like and who did they mostly serve?
________________________________________________________________________
________________________________________________________________________

What was the major problem with these railroads when customers wanted to transport goods over great distances? _________________________________________________
________________________________________________________________________

What was the main problem when comparing gauges of northern railroad tracks to southern railroad tracks? _________________________________________________
________________________________________________________________________

What is a network? ________________________________________________________

What had to happen with railroad track gauges before a network could be created?
________________________________________________________________________
________________________________________________________________________

Why was the old system of keeping time risky for railroad passengers? __________
________________________________________________________________________

How is what Vanderbilt did a great example of consolidation? __________________
________________________________________________________________________

Look at the political cartoon on page 576. What devices (picture) does Nast use to portray (show) railroads as evil and farmers as good?
________________________________________________________________________
How was James Hill’s Great Northern Railroad different from other railroad lines?

How did he attract customers to use his railroad?
1.

2.

3.

**Eliminating the Competition**
How does a pool help railroad owners?

How does a pool hurt customers?

**Railroads Fuel the Economy**
Building railroad lines created thousands of jobs. List some jobs that were created.
1. to make
2. to make
3. to make

Railroad companies themselves created thousands of jobs. List some work that was created by the railroad companies.
1.
2.
3.
4.

How did American industry benefit from widespread railroad building?

Section 2 – The Rise of Big Business
Pages 578-582

**Setting the Scene**
Who were the wealthiest citizens of Pittsburgh?

**Growth of the Steel Industry**
What was the benefit of steel rails?
What was the disadvantage of steel rails? ______________________________________
________________________________________________________________________

What was the effect of the Bessemer Process? _________________________________
________________________________________________________________________

Name three other industries that took advantage of cheaper steel.
1.
2.
3.

What problems did steel mills cause? _________________________________________
________________________________________________________________________

**Andrew Carnegie Steel Empire**
Although Carnegie initially earned a modest salary, what eventually made him a millionaire?
________________________________________________________________________

Describe vertical integration. ________________________________________________
________________________________________________________________________
________________________________________________________________________

How did Carnegie help those less fortunate than he?
________________________________________________________________________

**The Corporation and the Bankers**
Where did expanding factories get their money for investment?
________________________________________________________________________

What do stockholders hope to receive in return for their investment?
________________________________________________________________________

How do stockholders face fewer risks than owners of private businesses?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

**Rockefeller's Oil Empire**
Why did Rockefeller not rush to drill for oil? _________________________________
________________________________________________________________________

What three things did Rockefeller do to get rid of competition?
1.
2.
3.

How did Rockefeller form a trust? ____________________________________________
How did Rockefeller form a monopoly? ______________________________________
________________________________________________________________________
________________________________________________________________________

The Case For and Against Trusts
Why didn’t critics like trusts? ____________________________________________
________________________________________________________________________
________________________________________________________________________

How did Congress respond to the distrust of trusts? ___________________________
________________________________________________________________________
________________________________________________________________________

Section 3 – Inventions Change the Nation
Pages 584-589

Setting the Scene
What is a patent? _________________________________________________________

How many new patents were registered between 1870 and 1900? ______________
________________________________________________________________________

To complete the chart below find advances that came about because of new inventions.
For each box, you should be able to find at least three inventions that fit in that category.
Inventions may overlap.

<table>
<thead>
<tr>
<th>Advances in communication</th>
<th>Advances in travel</th>
<th>Advances for homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advances in industry/factories</td>
<td>Advances in entertainment</td>
<td>Advances for the office</td>
</tr>
</tbody>
</table>
Pick five inventions from the chart on the previous page. List those inventions in the chart below. Then, explain the impact that invention had on society.

<table>
<thead>
<tr>
<th>Invention</th>
<th>Impact on society</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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Section 4 – The Rise of Organized Labor
Pages 590-594

**A New Workplace**
What were factories like before the Civil War? __________________________________
________________________________________________________________________

What is a sweatshop? ______________________________________________________
________________________________________________________________________

**Hazards at Work**

<table>
<thead>
<tr>
<th>Textile mills</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mines</td>
<td></td>
</tr>
<tr>
<td>Steel mills</td>
<td></td>
</tr>
</tbody>
</table>

**The Rise of Organized Labor**

<table>
<thead>
<tr>
<th>Union</th>
<th>When formed</th>
<th>Leader</th>
<th>Who could join</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knights of Labor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5
What effect did the Haymarket Riot have on labor movements? 

________________________________________________________________________

**Women at Work**

How many women worked in American factories by 1890? 

________________________________________________________________________

What did Mother Jones do? 

________________________________________________________________________

How did the tragedy at Triangle help future workers?

________________________________________________________________________

**Hard Times for Organized Labor**

What economic hardships existed between 1870 and 1900? 

________________________________________________________________________

________________________________________________________________________

Name and explain two examples of when strikes were used.

1. 

2. 

Name and explain an example when government sided with owners.

________________________________________________________________________

________________________________________________________________________

Why did few Americans support unions? 

________________________________________________________________________

________________________________________________________________________