

# THE INDUSTRIAL AGE

## INTRODUCTION:

-between 1850-1940 there was a period of economic growth

-This helped to start industrialization: it opened the « age of machinery »

-So, living and working conditions changed

**What was the Industrial Revolution and how did it affect people's life from 1850 to 1940**

1/ Definition

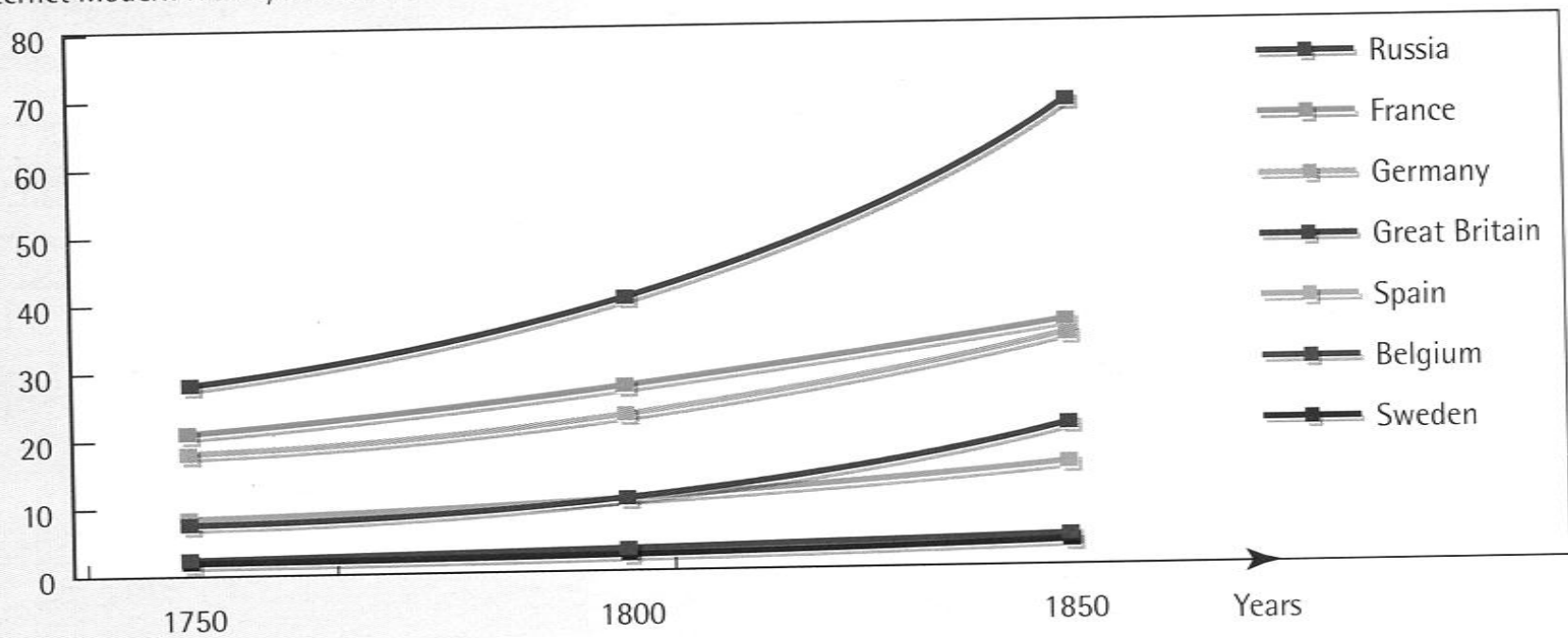
2/ Changes: positive effects and drawbacks

3/ How did low class people try to improve their condition ?

DOCUMENT 1

## ■ Evolution of the European population (tentative estimates in millions)

Source: Internet Modern History Sourcebook.



## I/ What was the Industrial revolution ?

### A/ A favorable/ favourable context:

1- Demographic dynamism work on the graph

**How did the European population evolve from 1750 to 1850?**

The curves raise/ climb. To increase- To double - To reach –  
To stay stable- To stagnate- To reach a peak

**Why ?**

Death rate – Birth rate- Natural increase- demographic transition – fertility index - immigration – technical progress

# I/ What was the Industrial revolution ?

## A/ A favourable context

### 2- the agricultural revolution

New techniques : increased yield, new varieties, selective breeding....

Mechanization: ex: mechanical seeder by Jethro Tull

Drift from the land

More investment

## **B/ Definition**

**Read source 1 and explain what was the industrial revolution**

**Definition:** It's a movement which caused drastic changes in producing things thanks to

- new techniques, new machines and inventions
- new energy resources: coal, oil and electricity

It's a move from the **Domestic system** to the **Factory system**

(things were no longer made by hand in people's home but in factories by machines)

# Use source 2 to give precise example of drastic changes brought by this revolution

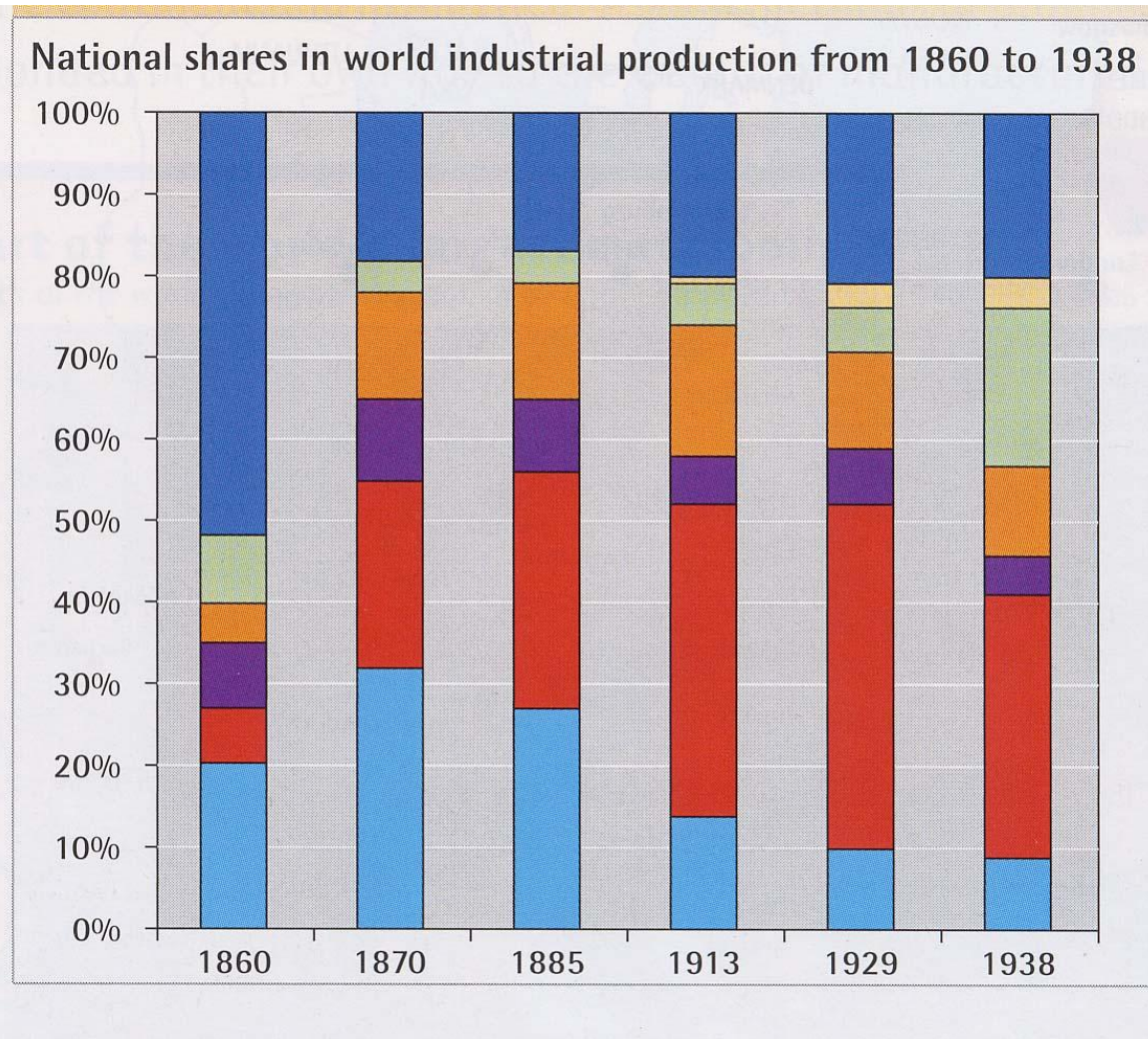
Date	Inventor	Invention	Explanation
1846	Elias Howe	Sewing machine	<b>Sews faster than by hand. Textile factories were created.</b>
1867	Christopher Sholes	Typewriter	<b>Writes faster than by hand and changed the way people worked in offices and women could work as typists</b>
1876	Graham Bell	Telephone	<b>Sends spoken messages through wires. Improves communication</b>
1877	Thomas Edison	Phonograph	<b>People could hear music and speech that had been recorded, as often as they wished to.</b>
1879	Thomas Edison	Bulb	<b>Makes light from electricity and candles were no longer needed</b>
1888	George Eastman	Kodak Camera	<b>Takes a photograph.</b>
1903	Wright brothers	Airplane	<b>Transport people and things by air. First successful flight in 1903.</b>
1911	Frederick Taylor	Taylorism	<b>Frederick Taylor wrote <a href="#">The Principles of Scientific Management</a> in 1911, these principles became known as Taylorism: it was work on assembly lines. It increased yield and productivity</b>

## II/ What changes did it bring ?

### A/ Rivalries in Europe: source 4

From bottom to top :

The UK, The US, France,  
Germany, Russia, Japan  
and other countries.





We can see in 1860 the UK is in a **leading position** with 20 % of the world industrial shares closely followed by France with slightly over 10%.

This was because the first Industrial revolution based on coal and steam occurred= happened in the UK.

Moreover France and the UK had huge colonial empires so they had access to cheap raw materials.

The other countries were not industrial powers yet.

In 1938 the situation is totally different.

Indeed the USA is the major industrial power with one third of the world industrial production whereas the UK is **in a fall back position.**

Indeed, the second IR occurred in the USA based on electricity and oil. In addition, the USA used Taylorism which increased its industrial production **dramatically.**

Germany and the USSR don't do too bad with respectively 12% and 20 % of the world industrial shares.

There Hitler and Stalin gave priority to the industry in order to prepare for war.

Stalin is known for his **five-year plans** putting the stress on the industry.

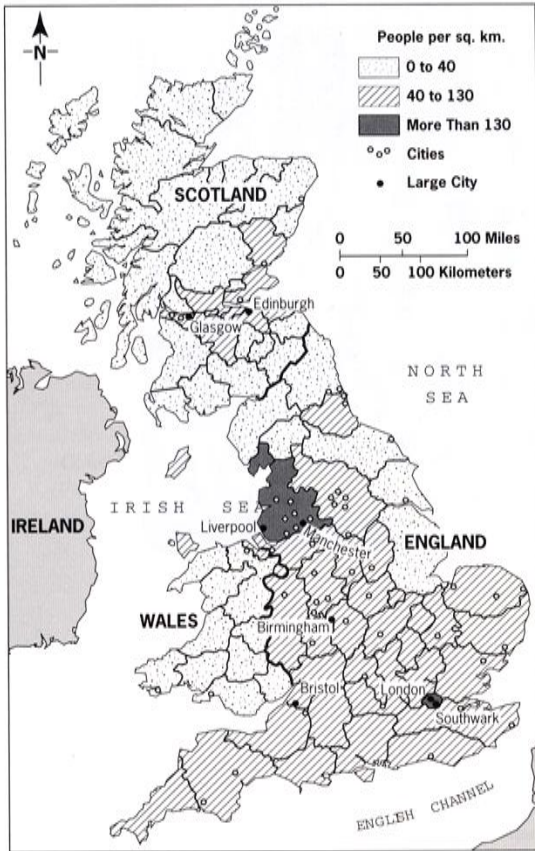
The UK and France are in a fall-back position and had sluggish economies **because of the 1930's economic crisis.**

Japan asserted as an industrial power

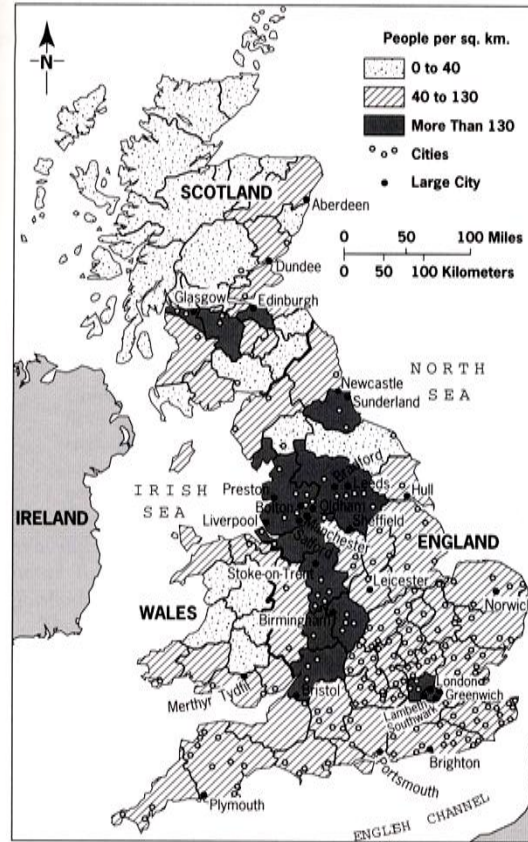
**Japan industrialized by borrowing European capitals in the early 1900's ( the Meiji era)**

**B / Industrialization went along with  
urbanisation**

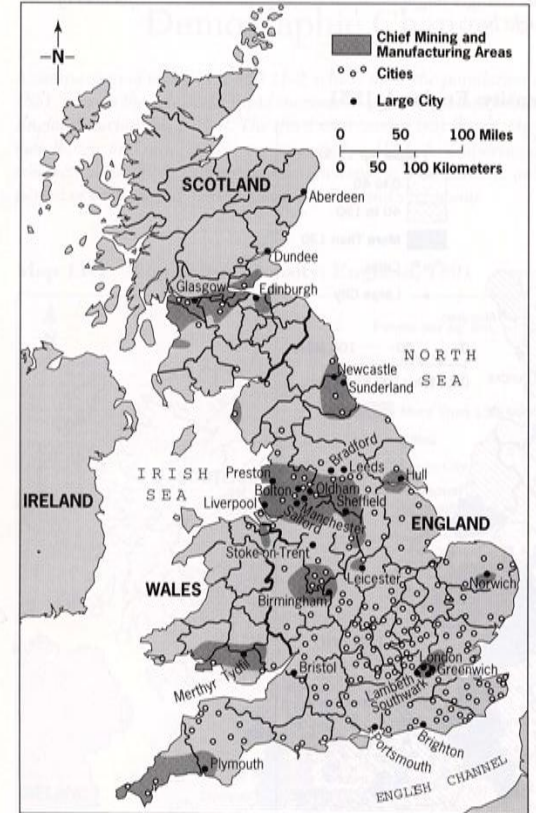
Map 11-1 Population Density: England, 1801



Map 11-2 Population Density: England, 1851



Map 11-3 Concentration of Industry in England, 1851



Present the documents

- 1-Describe the evolution of density increase in the UK from 1801 to 1851.
- 2-What about industrial centres in the UK? Where were they located? Why?
- 3-What is the link between industrialisation and density increase?

Maps from : « Western civilisation » Dennis Sherman. Mac Graw Hill Higher education.

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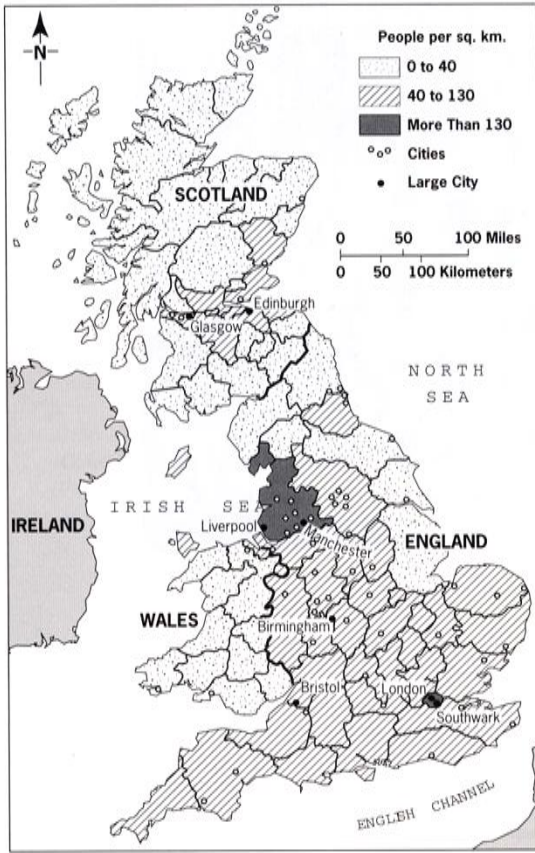
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Context:

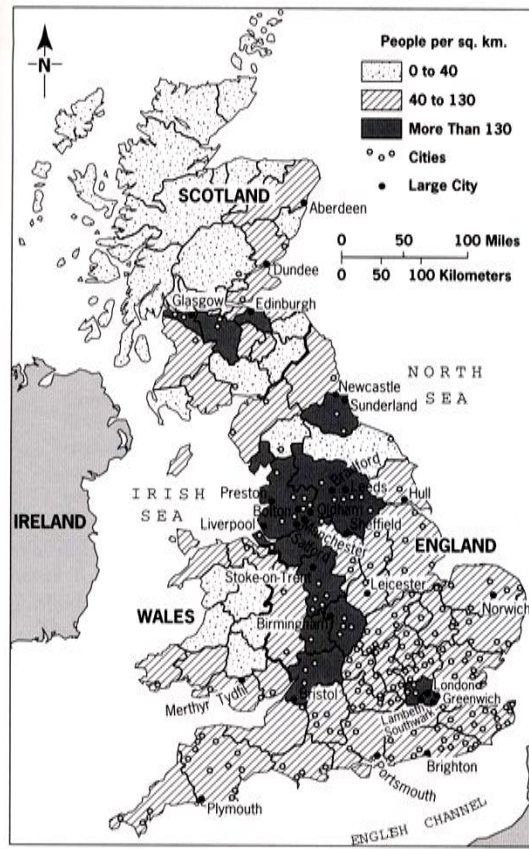
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Context: Western Europe was concerned with the Industrial Revolution. It meant that factories spread quickly. Production increased too thanks to the use of new machines and energy resources.

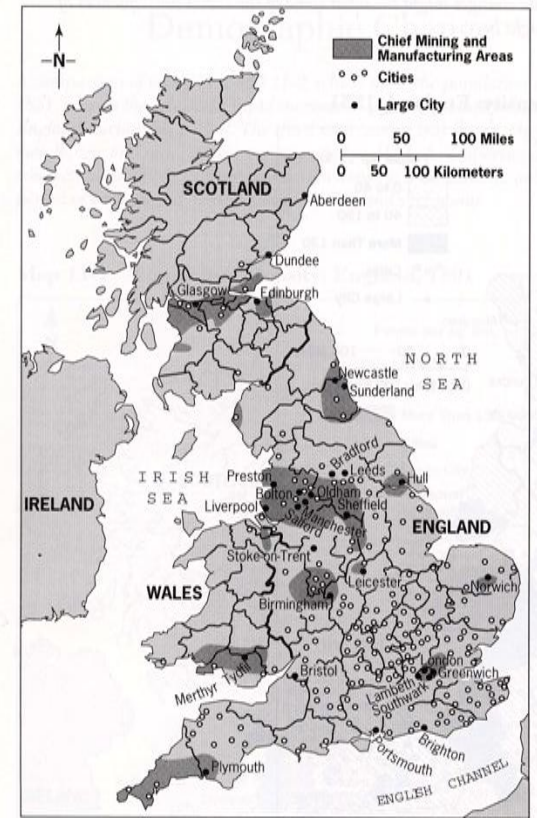
Map 11-1 Population Density: England, 1801



Map 11-2 Population Density: England, 1851



Map 11-3 Concentration of Industry in England, 1851



1-Describe the evolution of population density in the UK from 1801 to 1851.





## QUESTION 1:

In 1801 the British population mainly concentrates around Liverpool and London.

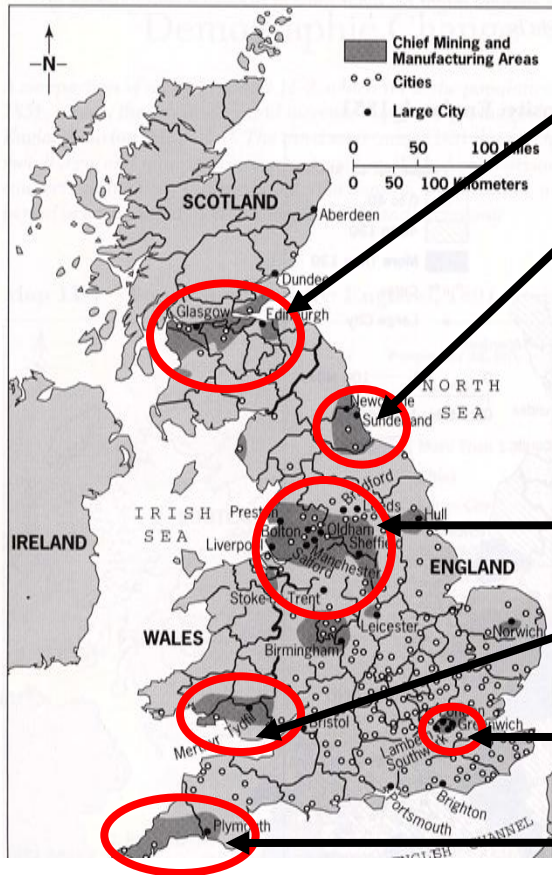
Liverpool was a commercial crossroads and London the capital

In 1851 the situation is different: the UK is far more populated: densities have increased everywhere.

This is linked with step one of the demographic transition.

Moreover, If Liverpool and London remain population centers, others emerged: in Scotland around Glasgow, in Newcastle in the North-East and in the South a densely populated strip can be seen from Liverpool to Bristol.

Map 11-3 Concentration of Industry in England, 1851



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2-What about industrial centres in the UK?  
Where were they located? Why?

## QUESTION 2:

In 1851 there were many industrial centers.

we can see from North to South:

Glasgow in Scotland

Liverpool/Manchester in the « Black country »

Birmingham in the South.

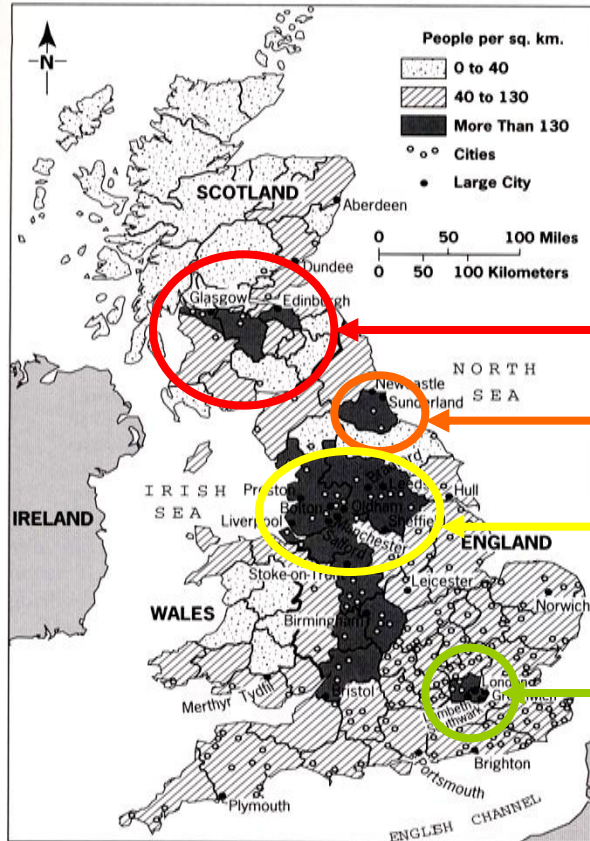
Some industrial centers are also located on the coast:

Newcastle/sunderland in the North/East

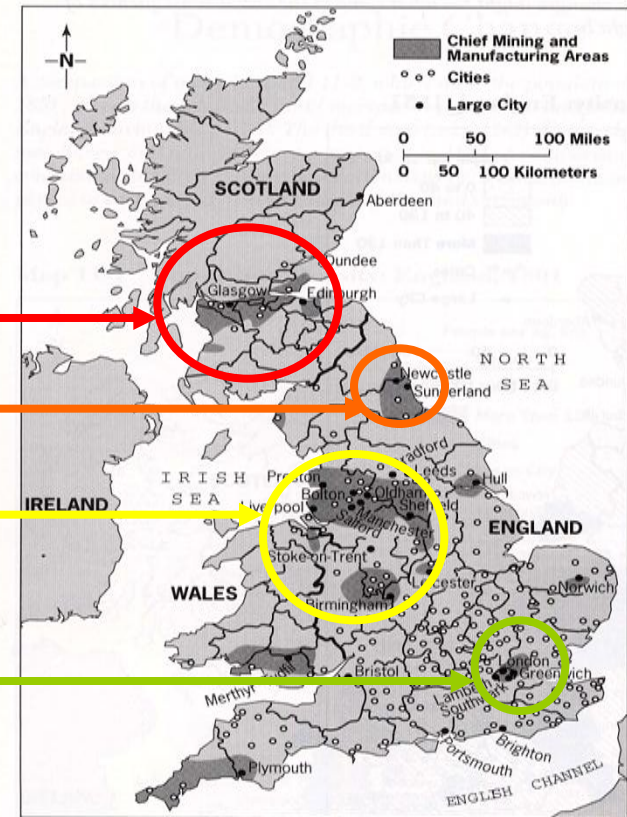
one in Southern Wales

Plymouth in the South-West.

Map 11-2 Population Density: England, 1851



Map 11-3 Concentration of Industry in England, 1851



3-What is the link between industrialisation and density increase?



### QUESTION 3:

We can easily notice population centres correspond usually to industrial centres.

Indeed, When coal was found in a place, quickly factories developed and attracted people who drifted from the land.

Sometimes even when there was no coal deposits, factories liked to settle near markets.

Some industrial centres don't correspond to population centres: Plymouth or Southern Wales for example.

This is explained by the ports: industrial activities settled in ports where goods were imported and imported

It was convenient and saved cost of transport.

So, Industrialisation and urbanisation are inked by a complex two-way relationship.

Both boosted each other

About living conditions in industrial areas:

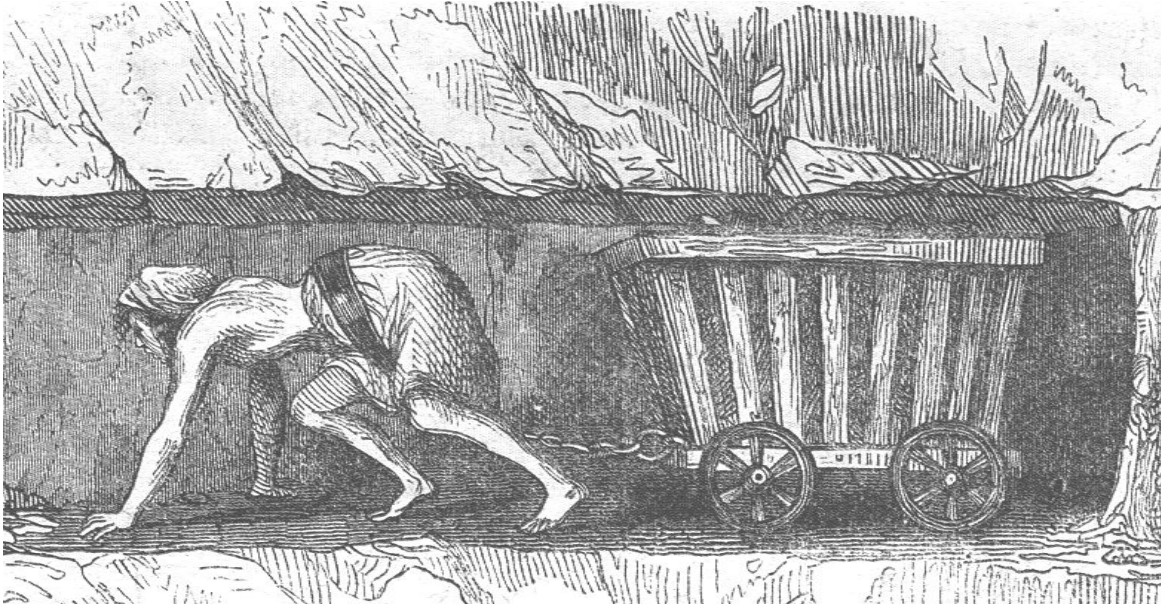
Read Texts 6 and 7 and describe living conditions in the industrial cities.

To save, to rent, a flat, housing, an expensive rent, slums, overcrowded, town-dwellers=city-dwellers, newcomers, to fulfill a dream to make a dream come true, to meet someone's expectations, low-standard flats, a two-class society, destitute people, well-off people, wealthy=rich.



## **D / About working conditions...**

Look at source 8 and describe workers' conditions in the mines.



**From:** “Le magazine pittoresque” 1843

To walk on all four, to be skinny, to be bony, to starve, to be dressed in rags, to suffocate, coal dust, lungs infection, harsh = tough, a trolley, to push, to pull, a gale, to crawl.

On this drawing we can see a child work works in a coal mine.

He 's bony and crawls on all fours to pull a trolley full of coal

He's dressed in rags because he cannot afford decent clothes; he has no protection either.

In those days children was the cheapest labour force and their small size was an asset in narrow gales.

This job could be done by horses sometimes : so children worked like cattle !

They suffocated and were in the dark all day long.

They could also get lungs infection because they breathed coal dust.

At that time, there were no laws to forbid child labor/ labour.

In the UK it's only in 1833 that children under nine were not allowed to work

And only in 1847 kids under 15 were limited to work "only" 10-hour days.

In the UK, the government also set up WORKHOUSES in 1834

In workhouses, poor people could work in return of board and lodging.

In practice it seemed to be a social law

But It was in fact a means to take poor out of the streets because they gave a bad image of the cities.

In workhouses, people starved, were exploited and usually beaten up by overlookers/ overseers.

# III/Some low-class workers tried to improve their conditions

## A/ Case study: Chartism in the UK source 9

### ■ Extracts from the Chartist petition drawn up in 1838

"We, your petitioners, dwell in a land whose merchants are noted for their enterprise, whose manufacturers are very skilful and whose workmen are proverbial for their industry... Yet we find ourselves overwhelmed with public and private suffering. We are bowed down under a load of taxes, and our workmen are starving. Capital brings no profit, labour no reward; the workhouse<sup>1</sup> is full and the factory deserted. We have looked on every side to find out the causes of distress, and we can discover none in nature or in Providence. [...] We perform the duties, therefore we must have

the privileges of free men. Therefore we demand universal suffrage. To be exempt from the corruption of the wealthy and the violence of the powerful, the suffrage must be secret. We demand annual parliaments and [...] for every representative chosen, a fair payment for the time which he is called upon to devote to the public service."

R.G. Gammage, *History of the Chartist Movement*, Browne & Browne, 1854.

1. A house for the poor who were required to work, usually without being paid, in return for their board and lodging.

## A/ Case study: Chartism in the UK source 9

The « chartists » as they were called wrote their claims into the « people's charter » but It was not successful.

They claimed:

- lower taxes to pay
- higher wages
- universal and secret suffrage
- the right to have paid representatives in the British Parliament

## B/ Trade-unionism

Workers quickly formed TRADE-UNIONS

A trade union is a pressure group which tries to improve workers' conditions and change legislation / the law.

Union members pay fees ( union fees)

Unions organise boycotts, demonstrations and strikes

## B/ Trade-unionism

.These are some dates to remember when unions were accepted

-1871: in the UK

-1878: in Germany

-1884: Waldeck-Rousseau act in France

-1886: American Federation of Labor was the first union to be accepted



## **B/ Trade-unionism**

Finally look at source 10 and list 2-3 of the advancement brought by trade unionism: try to remember them for the test.

## CONCLUSION

### **What was the Industrial Revolution and how did it affect people's life from 1850 to 1940**

The Industrial revolution was a change in the productive system brought by new techniques and energy resources.

It increased industrial production and helped the assertion of new countries as economic powers.

People's life was changed but not always for the best:

low class workers were exploited whereas a minority got richer and had better living conditions.

When WWII broke out, the USA was a leading industrial power and this partly explains its involvement in the conflict as soon as 1941.