

The Industrial Revolution

1 Rural¹ England

- a) *What does this picture make you think of? Write down what you can see in the picture and what your feelings are about this scene. Here are some words you may need:*

stone bridge

peaceful²remote³

idyllic

no industry

quiet



A stone bridge in Derbyshire

- b) *Read your ideas to your partner and listen to his/her ideas. Discuss this question with your partner: Would you like to live in a place like this?*

- c) *Read the following information. Discuss in class how the look of the landscape⁴ changed.*

The bridge in the picture is very narrow⁵. A bridge like this is often called a 'packhorse bridge' because it was wide enough for a person or a horse with packs, but not wide enough for a cart. In the Middle Ages and later, merchants⁶ bought things that had come to England by ship and took them to markets around the country on packhorses. They took back wool⁷ and woollen cloth⁸ to sell in Europe. English wool was famous. Because wool brought in a lot of money, farmers used more and more land for sheep. At the same time, people cut down lots of trees for fires, and to build ships.

2 Making things at home

In the Middle Ages most people made everything they needed at home. It was a lot of work and it took a long time.



A woman at the spinning wheel



A shuttle on a weaving loom with a piece of woven cloth



Scissors, needle and yarn for sewing

Look at the pictures and the verbs below and describe the work they had to do to make their clothes.

wash / washed / washed • spin / span / spun • weave / wove / woven • cut⁹ / cut / cut • sew / sewed / sewn

¹rural [ˈrʊərəl] ländlich • ²peaceful [ˈpiːsfəl] friedlich, ruhig • ³remote [rɪˈməʊt] entfernt, abgelegen • ⁴landscape [ˈlændskeɪp] Landschaft • ⁵narrow [ˈnærəʊ] schmal, eng • ⁶merchant [ˈmɜːtʃənt] Händler • ⁷wool [wʊl] Wolle • ⁸cloth [klɒθ] Tuch, Stoff • ⁹to cut [kʌt] schneiden

3 More and faster

Read the text. Then read sentences 1–5 and find a good place in the text (A, B, C etc.) for each sentence.

People wanted to produce cloth faster and cheaper. They brought groups of good weavers together and made sure that they always had good yarn to work with. **A** This was useful for men who could no longer find work on the land: Where farmers turned to sheep and wool production, they didn't need so many field workers. You can still see weavers' houses in Britain. **B**

By the end of the 18th century people in Lancashire were working with cotton¹⁰ from America: Lancashire is cool and damp and that makes cotton easier to work with.

In 1733 John Kay invented the Flying Shuttle, which made weaving faster. But the weavers couldn't work faster if they hadn't got enough yarn. In about 1763 James Hargreaves made a machine called the 'Spinning Jenny', which was like eight spinning wheels joined together. **C**

In 1771 Richard Arkwright opened the first cotton spinning factory at Cromford in Derbyshire. He used the water of a small fast river to make the machines work. **D** Cromford Mill¹¹ and the later ones in the same valley are of such historic importance that they are now a World Heritage Site¹².

Arkwright brought workers from all over Derbyshire. The women and children of six and older worked at the spinning mill. **E** The men worked at home and wove the cloth. Mr James Farington, a visitor from Lancashire, wrote in his diary on August 22, 1801: "In the evening I walked to Cromford and saw the children coming from their work out of one of Mr. Arkwright's factories. These children had been at work from 6 to 7 o'clock this morning and it is now 7 in the evening."

People went on inventing machines to make the work faster and cheaper, like Edmund Cartwright's power loom¹³ of 1785. Factory owners started to use the steam engines that had been developed by James Watt and Matthew Boulton to drive the looms. **F** Soon they only needed one man to look after six or eight looms, so many people had no work. But the mills often took on children, because they were smaller and could get under the looms to clean and to tie ends of yarn together. **G** The children did not earn much money and did not get the chance to go to school. The owners paid their workers

less money than before: In Bolton, a man who earned twenty-five shillings a week in 1800 only got fourteen shillings a week in 1811 for the same work. **H**

Things got worse for the workers and many of them tried to get together to stop new factories and machines. In Nottinghamshire, in the knitting¹⁴ industry, they organised themselves under a man who called himself "Captain Ned Ludd" and tried to break the machines. If the owners could catch them, the machine-breakers were put in prison. **I**



View of the New Lanark mill

Some mill owners saw quickly that the system was bad and tried to do things better. At the New Lanark cotton mill in the south of Scotland Robert Owen was mill manager from 1800 to 1835. Owen changed life in New Lanark with his ideas. Children did not work at the mill. The villagers had good homes. There were schools for the children and evening classes for the adults. **J** This was great, but if a worker lost his job there, he lost his family's home, too.

1. They often have big windows in the room where the weaver worked, so that he or she had good light. 80
2. That's why we still call factories like this 'mills', because they worked like the water mills that made flour. 85
3. As you can imagine, accidents could happen easily.
4. If people stole food because they were hungry, they could be hanged.
5. They also had free health care, and good food to buy. 90

¹⁰cotton ['kɒtən] Baumwolle • ¹¹mill [mɪl] Mühle • ¹²World Heritage Site [wɜ:ld 'herɪtɪdʒ saɪt] Weltkulturerbestätte • ¹³loom [lu:m] Webstuhl • ¹⁴to knit [nɪt] stricken

4 A world of industry

a) Read the text and find a heading to suit each part.

In the 18th and 19th centuries towns and cities grew as more people came to work in the factories. Big industries grew up where there was coal and iron¹⁵. Areas of farmland disappeared¹⁶ under the mills and factories and the houses for the workers. Most of the factories used coal for working iron, for making china¹⁷ and glass, or for the steam engines to drive the machines, so there was lots of smoke.

Some places had one main industry, for example in the Midlands the six towns of 'The Potteries'¹⁸, Burslem Tunstall, Hanley, Stoke-upon-Trent, Longton and Fenton, made china and pottery. They grew so that it was hard to tell where one town began and the next ended. (In 1910 they officially became one town called Stoke-on-Trent.)



A bottle oven by a canal

They made the pottery in 'bottle ovens', big buildings that were wide at the bottom and narrow at the top, so that they looked like bottles. At one time there were over 2,000 of these in Stoke-on-Trent, and the air was always full of smoke.

Although at first they used local clay¹⁹ to make the pots, later they wanted the white clay from the south-west of England, because it looked more like china. But the bottle ovens and the factories were in the Midlands, and so was the coal, so the pottery industry stayed where it was and they built canals, roads, and later railways, to bring the clay to the factories.

This transport was also useful for taking the finished articles all over Britain: A packhorse is not the best way to transport fine china!

The things that were made in Britain – the cotton and woollen cloth, the china and pottery, the iron and steel products – went all over the world. British products, from needles to steam engines, went to China, India, Africa and America, and especially to the countries of the British Empire.

In many industries Britain was the first country to develop manufacturing and trade²⁰. This was good at first, and in 1851 British industry was able to show what it could do at the Great Exhibition in London. But other countries developed fast, too, and were able to learn from some of Britain's mistakes. They also had newer machines and techniques.

In 1851 over half the British population²¹ already lived in towns. By 1901 it was over 77%. This meant that all through the 19th century people were building houses for the workers to live in. Often the houses were small and very close together. Living conditions²² were not good. All the members of a family had to work to get enough money live on. If they were ill, they could not work, and then they got no money at all. But even with all the family working, it was hard to make enough money for food and to pay for a house. Although rich people gave money to charity, poor people did not want charity; they wanted better living conditions. Some joined groups to protest against this, but the government did not like this. If they were caught, the people who joined these groups were put in prison, sent to Australia, or hanged!

b) Read the text again and make notes of what we can still see that comes from the time of the Industrial Revolution. Do we still use these things? Do we use them in the same way?

¹⁵iron [aɪən] Eisen • ¹⁶to disappear [dɪsə'piə] verschwinden • ¹⁷china ['tʃaɪnə] Porzellan • ¹⁸pottery ['pɒtəri] Töpfern, Töpferwaren • ¹⁹clay [kleɪ] Lehm • ²⁰trade [treɪd] Handel • ²¹population [ˌpɒpjʊ'eɪʃən] Bevölkerung • ²²living conditions ['lɪvɪŋ kən'dɪʃən] Lebensbedingungen

Lösungen

1

a) In the picture you can see an idyllic place. There is a small stone bridge which leads across a small river. When I look at the picture, I feel relaxed because it seems to be quiet and remote. There is no industry and you can't see any cars. I like the picture because it shows a very peaceful scene.

b) *Individuelle Antworten*

c) The look of the landscape changed because more and more areas were used for sheep. Trees were cut down for fires and to build ships, and the landscape was not peaceful and idyllic any more. Maybe the empty spaces were used for sheep, too.

2

In order to make their clothes people in the Middle Ages first had to wash and spin the wool on a spinning wheel. Then they wove it with a weaving loom and made pieces of cloth. After that they cut those pieces and sewed their clothes.

3

B1, D2, G3, H4, J5

4

a) **Possible headings:**

- The rise of industry
- 'The Potteries'
- Made in Britain
- Competition
- Living conditions

- b) • **towns and cities:** People still live in towns and cities.
- **mills:** There are still some mills but we do not use them any more.
 - **factories:** Factories still produce the things we use every day.
 - **coal:** We use coal today, but mostly for making electricity.
 - **steam engines:** Factories no longer use steam engines, they mostly use electricity. Sometimes we use steam engines to drive large ships.
 - **pottery:** We still use pottery, but today it is more for decoration.
 - **bottle ovens:** You can find some bottle ovens today, but they are no longer in use.