Victorian schooling

In the early 19th century, there were no state-run schools, and no law to say children had to go to school. Few working-class children had any formal education. By the end of Victoria's reign, the government had recognized that working people needed an education, and made all children attend school until they were 13.

School funds

Church-run or charity schools provided education for the poor, but parents often could not afford to let their children stop work to attend. In 1870, a national system of Board Schools was set up, funded out of local rates (taxes).

Dinner time at a ragged school



Ragged schools
Founded in 1780 by philanthropist Robert Raikes, Sunday Schools for the poor spread rapidly. Known as "ragged schools", they provided free basic instruction, meals, and clothing for thousands of poor children until Board Schools replaced them with weekday education.

Pupils faced the blackboard and copied lessons on to a slate using slate pencils

Slates were used in schools as they were cheaper than paper

A white cotton apron kept school clothes clean

Not all parents could afford to buy school boots – some children went barefoot

Pupils sat in rows at metal-framed wooden desks

School subjects

To equip them for work, poor children were taught reading, writing, and arithmetic – the "three Rs". They also did sport, geography, and history. Girls learned how to cook; boys took woodwork lessons.



Religion and reading
In many schools, the school day, which ran from nine to five o'clock, began and ended with prayers. Pupils also read from the Bible and studied its teachings.

Children learned about the animal kingdom from this Bible



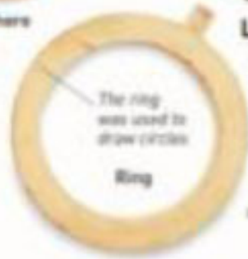
Public schools
Sons of rich families went to expensive public schools, such as Eton, Rugby, or Westminster (above). Pupils were taught classical subjects such as Latin and Greek, and educated to become leaders and statesmen. There were few schools for rich girls, who were taught mainly by governesses at home.

The properties of geometric shapes were learned by heart



Sphere

Cone



The ring was used to draw circles

Ring



Pupils used a counting frame, or abacus, as a calculator

Learning by heart
All children learned arithmetic, or mathematics. Teachers wrote maths problems on the blackboard, and the children copied them down. They learned by heart, chanting aloud their times tables and other facts, over and over again.

Teaching practice

Early Victorian teachers had little formal training and were poorly paid. Sometimes older pupils would repeat the lesson to the younger ones. From 1839, the government appointed school inspectors to check standards, and test children's progress.

Teachers used canes, or leather straps, to strike naughty pupils

Teacher's bamboo cane

Punishment
Discipline was strict. Pupils who did not learn their lessons stood in a corner, wearing a large cone-shaped hat called a dunce's cap. Talking was forbidden and teachers could hit children if they misbehaved.

Good attendance medal

Good attendance
Children often skipped school because they had to work, or look after younger children at home. In 1880, school became compulsory for all children aged 5 to 10 years old.

Education reforms
As industry grew, the state saw the need to educate working people, and introduced school reforms. These were mainly for children aged 5 to 13; after that, most working-class children went out to work.

1833
Government provides first grant to church schools.

1839
Government appoints first school inspectors.

1840
First teachers' training college opens in London.

1844
Factory Act states children in factories must have six half-days' schooling a week.

1870
Education Act sets up a nationwide system of Board Schools; their school fees are abolished in 1891.

1880
School is made compulsory for children aged 5 to 10; the leaving age is later raised to 13 years old.

1891
School fees abolished in Board Schools.

The railways



Transport of all kinds, on land and sea, developed rapidly in the Victorian period, but the arrival of the railways had the biggest impact on British society. By moving raw materials and finished goods quickly around the country, railways boosted industries, trade, employment, the growth of towns, and a new world of travel. Goods, people, mail, and ideas travelled faster than ever before.



Isambard Kingdom Brunel

A great engineer

One of the greatest Victorian engineers, Isambard Kingdom Brunel created the Great Western Railway, planned the Clifton Suspension Bridge, and designed the *Great Western*, the first trans-Atlantic steamship, as well as the *Great Britain*, the first screw-propelled, ocean steamship.

Steam power

In 1803, the first steam railway locomotive was invented. Coal burned in a boiler and heated water to produce the steam that powered the engine.

Gases from the firebox left the locomotive via the chimney

Steam whistle

By opening the regulator valve the train was propelled forwards or backwards

Coal burned in the firebox

The train driver stood here

Coal regulator to stem the flow of coal

Coal was stored in this truck

Columbine steam locomotive

Steam drove the pistons back and forth

Piston, linked to rod

Rod drove wheels around

Coupling rod

1868

Railway "mania"

Most of Britain's railways were built during the 1840s and 1850s. Private individuals built separate lines, forming companies to raise money. Shareholders then shared in the profits. During the railway "mania" of the 1840s, people made profit from investing in the railways. By the 1850s, the boom, and profits, were over.



London, Chatham, and Dover Railway insignia



Great Western Railway station master's hat



Lancashire and Yorkshire Railway whistle

Holidays by train

In 1842, Queen Victoria made her first train journey. Soon, increasing numbers of people used trains to travel to work and go on holiday, and seaside resorts were developed.

Railway stations

Stations appeared as railway lines arrived in different cities. This painting, *The Railway Station* (1853) by English artist William Frith, captures the excitement and bustle of the Victorian station at Paddington, in London.





Navvies worked with picks, shovels, and barrows

Building the railways

Railway planners such as George Stephenson and Isambard Kingdom Brunel hired huge gangs of skilled workmen, known as navvies, to build tracks, bridges, tunnels, and embankments.



Workman's shovel

Workman's pick

The navvies

Some 250,000 navvies built the Victorian railways. Named after the "navigators" who had built the canals in the 18th century, they lived in shantytowns beside the tracks.

Travelling conditions

Early trains were uncomfortable. Third-class carriages were little more than boxes on wheels. In the 1870s, upholstered seats were fitted. Steam heating came in 1884, and restaurant cars in 1892.



First-class compartment

Cost and speed

Train travel was faster and cheaper than long-distance horse travel. From 1844, third-class travel cost a penny a mile (1.6 km). By 1885, speeds averaged 112 kph (69.5 mph).

Train ticket



Ticket clippers

19th-century transport

Before the 1830s, people travelled long distances in horse-drawn transport. In the Victorian period, forms of public transport changed dramatically.



1850s

Double-decker bus

In 1829, the first horse-drawn omnibus appeared in London. By 1850, buses were open-topped double-deckers. By 1902, motor buses had replaced them.



1863

Underground

The world's first underground railway opened in London in 1863. Steam engines pulled carriages along the roofed trenches.



1870

Penny-farthing

The first pedal bicycles appeared in 1839. Later, "penny-farthings" were popular. By 1885, bicycles had equal-sized wheels and a safety chain.

1885

Electric tramcar

Horse-drawn tramcars on rails came into use in the 1860s. Later, steam replaced horses. The first electric tram hit Blackpool in 1885.



1886

Motor taxicab

The first successful car, made in Germany in 1886, looked like a horseless carriage. Gradually motor cars spread to Britain, too.