

Today's Railway

Railway features - Tracks

Railway tracks guide trains from one place to another. The track is made up of many parts.

The rails are joined to sleepers which keep the two rails the right distance apart.

Sleepers may be made of wood, concrete or steel. The rails sit in metal chairs which are bolted onto the sleepers.

Rail clips are used to fasten the rails to the chairs.

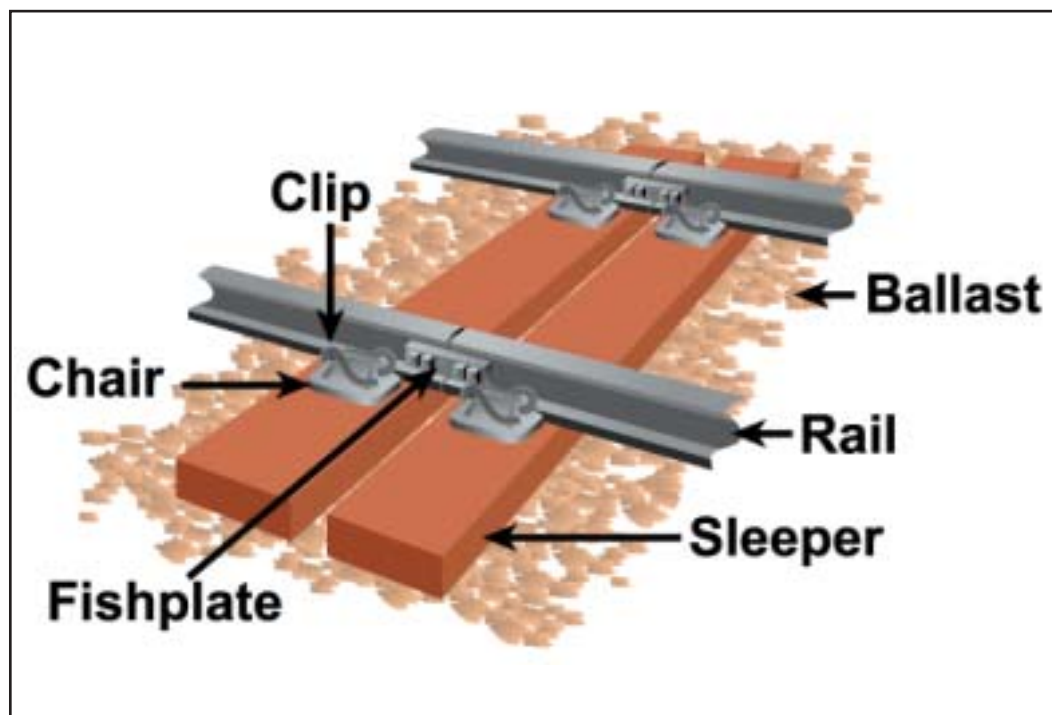
The track is supported by ballast which is broken bits of

stone. The ballast holds the track in place and allows water to drain away easily when it rains.

Rails are joined together by fishplates which are bolted onto the rail ends at rail joints.

Where two railway lines meet, points allow trains to go in different directions.

The points are moved to direct the train along the right track.



Different parts of a railway track



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Railway features - Signals

Signals tell the train driver when to stop and when to go.

Modern colour light signals look a bit like traffic lights and some of the colours mean the same things. Each signal may have up to four lights.

A red light tells the driver to stop.

A green light tells the driver to go.

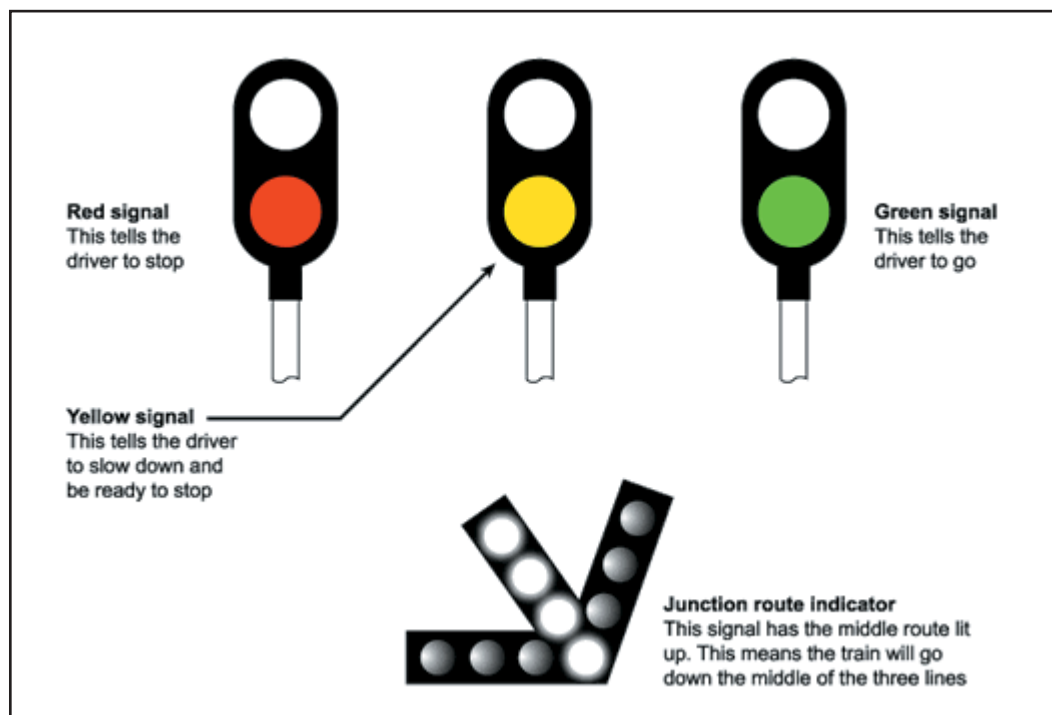
A yellow light tells the driver to slow down and be ready to stop at the next signal.

Some signals can show two yellow lights. This means that the next signal may be showing one yellow light.

Signals also tell the driver which way the train is going at junctions.

A junction is where two railway lines meet.

A junction route indicator lights up, pointing in the direction that the train will be going.



Modern railway signals



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Railway features - Stations

There are more than 2,500 railway stations in Britain. They range in size from tiny stations in the countryside used by a small number of passengers to very busy stations such as London Waterloo.

London Waterloo serves 270,000 passengers travelling on 1300 different train services each day.

Network Rail manages 17 major stations - Birmingham New Street, Edinburgh Waverley,

Gatwick Airport, Glasgow Central, Leeds, Liverpool Lime Street, Manchester Piccadilly and the following London stations - Cannon Street, Charing Cross, Euston, Fenchurch Street, King's Cross, Liverpool Street, London Bridge, Paddington, Victoria and Waterloo.

The rest of the stations are managed on a day-to-day basis by the Train Operating Companies.



Leeds station



National Rail
Britain's train companies working together

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Railway features - Passenger trains

There are different types of passenger trains.

Express trains travel at high speed between large cities and towns.

Provincial trains travel between a variety of large and medium towns.

New trains are being introduced all over Britain's railways.

They are safer and more comfortable than the old trains they replaced.

They have air-conditioning, better information systems, and offer a more comfortable journey for passengers.

If all new trains ordered in the last ten years formed one long train it would reach all the way from York to Manchester - a distance of 67 miles (108 kilometres).



An express train



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Railway features - Freight trains

Freight trains carry large amounts of heavy materials and goods.

Freight can include coal to power stations, containers to ports, waste to landfill sites and gravel from quarries.

Freight trains are very important to many large industries and businesses.

The amount of freight carried by rail has grown by nearly 50% since the mid 1990s. This has helped to keep a lot of lorries off Britain's roads.



A freight train



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Railway features - Timetable

The timetable is the plan by which every train runs on the railways every day. There is also a much more detailed timetable used by railway staff.

It tells them about every train, where they are going, how they are getting there and even what time they will pass each junction.

To plan your rail journey you can get information from National Rail enquiries either by a telephone call to 08457 48 49 50 or online at the website www.nationalrail.co.uk



Train information screens at a large station



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