History of the Train

Pre-reading activities: Comprehension strategy - Scanning

- 1 Scan through the text, headings and illustrations and find the answers to the following questions: (a) What is a locomotive? (b) Who built 'The Rocket'?
 - (c) How many underground stations are there in New York?
 - (d) What is the DART? (e) What is Japan's Linear Shinkansen?

Think, Pair, Share: Comprehension strategy - Connecting

- 2 What do you know about trains?
- **3** What would you like to learn from this passage?

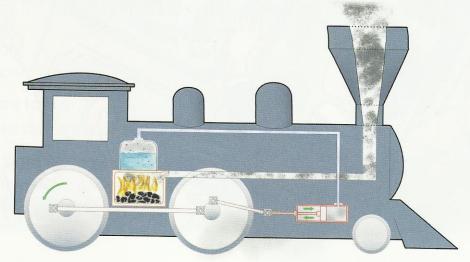
During reading: Comprehension strategy – Determining importance

- 4 (a) What interesting words have you learned?
 - (b) Put these words into sentences to show what they mean.



Steam trains were invented in the early 1800s. The steam was made by burning coal or wood to heat water in big boilers. The steam moved a piston. The piston moved a machine connected to the wheels.

The first steam locomotive (engine) pulled a train of five wagons. When these became more powerful, longer and heavier trains were built.



In 1825, a new railway between Stockton and Darlington opened in England. George Stephenson and his son Robert built the track and the train. It was the first steam train to carry passengers on a public rail line.

In 1829, a group of men decided to build a railway between Liverpool and Manchester. They were unsure whether to use horse drawn carriages or steam trains. They held a competition. George and Robert built 'The Rocket' steam engine. The Rocket moved faster than the other locomotives and did not break down. The Rocket won the competition.

In 1830, the railway line opened. The Rocket could pull carriages of people along the line at 48 km an hour. People had never travelled so fast. The success of the British steam trains served as the model for rail travel around the world. George became rich and famous. Today George Stephenson is known as the 'Father of the Railways'.

The Rocket' train.

In the late 1800s, too much traffic in cities became a problem. Engineers tried to solve this by building railway lines in underground tunnels. The first underground railway line (**Tube**) opened in London in 1863.



At first, steam engines were used. But tunnels were filled with smoke and steam. The electric train solved this problem. By 1880, 40 million passengers a year were using the Tube in London.

From the 1940s to the 1960s, electric and diesel trains $\frac{\text{replaced}}{\text{steam}}$ steam power in many $\frac{\text{countries}}{\text{countries}}$.



Today, the city of New York in the USA has the largest **underground** train system in the world. It has 472 stations!



The DART

The **DART** (**D**ublin **A**rea **R**apid **T**ransit) is an electrified railway system that runs from north Dublin to Bray in Co. Wicklow. On July 23, 1984 the DART made its first journey from Bray. The DART line is 53 km long and serves 31 stations.

The Luas is a tram or light rail system

that runs in Dublin. There are two main lines, the 'green line' and the 'red line'. The green line started operating in June 2004. The red line started operating in September 2004. Around 90,000 Luas trips are made daily.



The Luas

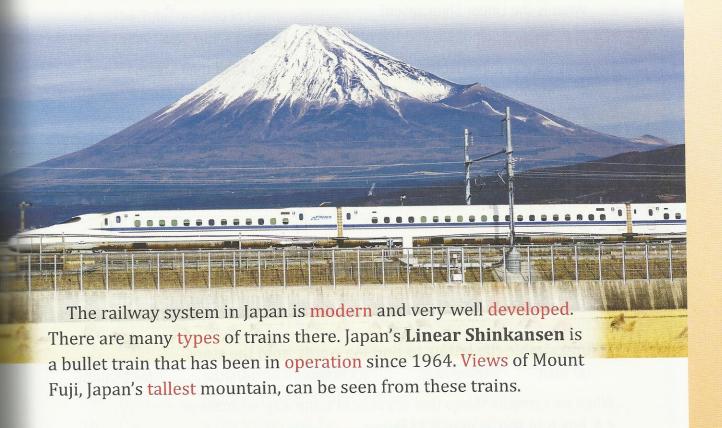


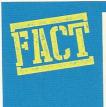
Bullet trains are high speed passenger trains. They are so called because they are supposed to travel as fast as a bullet from a gun! These are the fastest trains in the world. They travel around 250–300 km per hour. In France, bullet trains are known as TGVs.

In 1994, the Channel Tunnel, which links France and England, was opened. The rail tunnel is over 50 km long and over 50 metres below the sea.

A TGV train, called the **Eurostar**, travels through the Channel Tunnel. It goes from Dover in England to the centre of Paris in France. It carries about 50,000 people and 6,000 cars each day. The journey takes only 35 minutes. Up to 400 trains pass through the tunnel each day.







Out of the 50 **busiest** train stations in the world, 46 are in Japan. During rush hour, people called **train pushers** are **employed** to push people on to the trains to make more **space**.

Post-reading activity: Compehension strategy – Summarising What have you learned about trains from this extract?