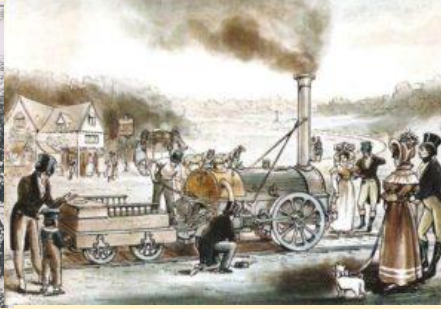
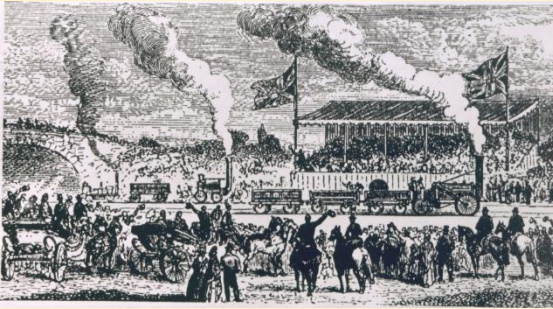


Lesson 1: What were the Rainhill trials?

Vocabulary- **Locomotive**: a powered railway vehicle used for pulling trains.

The meanings of words in bold can be found in the glossary below.

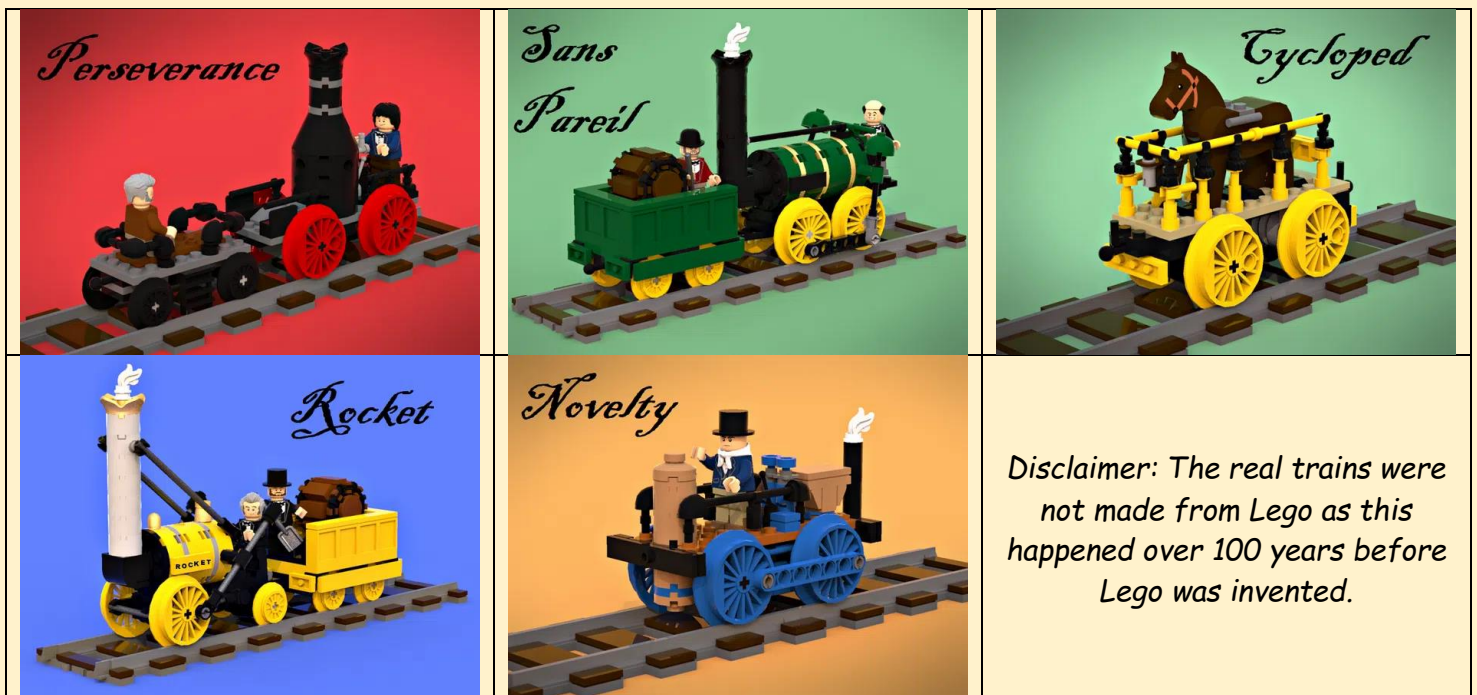


In 1829, when the Liverpool and Manchester Railway was approaching completion, the

directors ran a competition find the best way of pulling the carriages. **Locomotives** that were entered were to be subjected to a variety of tests and conditions. Several tests of speed, strength, and efficiency were run over a period of days to see which **locomotive** would best suit the railway. A prize of £500 (worth over £11,000 today) would also be awarded to the entry chosen.

Have a look at the competitors.

Who do you think won and who do you think lost? Which do you think was the fastest? Which was the most efficient? (used less fuel) Which ones do you think broke?



Activity: Read what happened to each of the locomotives (on the next page) and then either write a diary, draw a picture or make a model of what happened that day.



Cycloped was the only entry of the five that ran that did not use steam power. It instead relied on a horse-powered drive belt. Built by one of the railway's former directors, people believed it would have an unfair advantage. Cycloped was disqualified for not meeting the contest's rules.



Perseverance was the second entry to drop out. It was damaged en route to the site of the trials, and its builder spent five days repairing it. Perseverance eventually ran, but it failed to reach the required speed of the contest. Its builder was given a £25 consolation prize anyway.



Sans Pareil was over the maximum weight allowed for entries, but it competed anyway. It ran eight trips before cracking a cylinder and being forced to drop out. Despite this, the railway purchased the locomotive for use for two years.



Novelty was the last locomotive to drop out from the trials. It was lighter and faster than the other entries and was the crowd favorite to win the competition. Unfortunately, it suffered boiler pipe issues. These were not properly fixed, and on the next run, the engine was damaged severely and was forced to withdraw.



Rocket was the only locomotive to fully complete the trials. It averaged a decent speed, pulled a decent amount of weight, and was declared the overall winner. The railway contracted its builder, Robert Stephenson and Company, to produce locomotives for the railway's use.

Vocabulary Glossary

| | | |
|--|----------------------|--|
|  | locomotive | a powered railway vehicle used for pulling trains. |
|  | carriage | a vehicle with four wheels that is usually pulled e.g. horse and carriage or railway carriage |
|  | goods | items or objects (not people) |
|  | freight/cargo | goods (not passengers) that are carried from one place to another by train, ship, aircraft or lorry |
|  | passenger | a person who is travelling in a vehicle but is not driving it, flying it, or working on it |
|  | diesel | a type of heavy oil used as fuel |

| | | |
|--|--|---|
|  | <p>branch</p> | <p>a railway line that goes from the main railway</p> |
|  | <p>terminate</p> | <p>to stop or end something</p> |
|  | <p>peak hour</p> | <p>also called rush hour the busy part of the day when towns and cities are crowded, either in the morning when people are travelling to work, or in the evening when people are travelling home:</p> |
|  | <p>guard's van</p> | <p>a small railway carriage, usually at the back of a train, in which the guard travels</p> |
|  | <p>guard</p> | <p>a railway official who travels on and is responsible for a train</p> |
|  | <p>goods yard/ loading dock</p> | <p>a space where goods are loaded or unloaded</p> |
|  | <p>shunting</p> | <p>to move a train or carriage onto a different track in or near a station using a special railway engine designed for this purpose</p> |