| Year 2/3 - Woodpeckers S1(B) | Science: Scientist Study: George Stevenson | How does the science of the past influence the science of today? |
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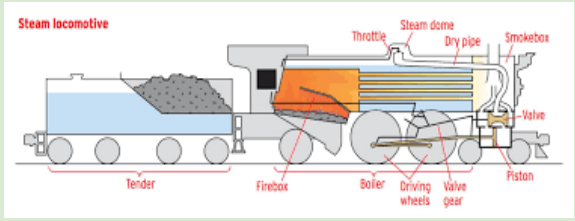
What Should I Already Know? The children have done a Scientist study before on Mary Anning who discovered fossil in rocks which is how we know about extinct animals such as dinosaurs. They have looked briefly at friction as part of their Science learning about forces. The children have looked at everyday materials and their uses which will inform their ideas for the enquiry questions in this topic. The children are currently learning about The Victorians and The Age of Steam in their History unit this half term

| Enquiry Questions: | Key Vocabulary: | National Curriculum: |
|---|---|---|
| Who was George Stevenson and why is he important to Scientific history?<br><br>How does steam power work?<br><br>How can we make a vehicle go faster?<br><br>How does the structure of a bridge affect its performance?<br><br>  | **Design**:a plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is built or made<br>**Engine:**a machine with moving parts that converts power into motion<br>**Engineer:** a person who designs, builds, or maintains engines, machines, or public works<br>**Force:**strength or energy as an attribute of physical action or movement.<br>**Friction:**the resistance that one surface or object encounters when moving over another<br>**Industrial revolution:** a time when the manufacturing of goods moved from small shops and homes to large factories.<br>**Invention:**the action of inventing something, typically a process or device.<br>**Locomotive:**a powered rail vehicle used for pulling trains.<br>**Pioneer:**develop or be the first to use or apply (a new method, area of knowledge, or activity).: "he has pioneered a number of innovative techniques<br>**Revolutionary:**involving or causing a complete or dramatic change.<br>**Steam**:(of a ship or train) travel somewhere under steam power | Working scientifically:<br>.<br>**KS1:**<br>Ask simple questions, and recognise that they can be answered in different ways.<br>Observe closely, using simple equipment.<br>Perform simple tests<br>Identify and classify<br>Use observations and ideas to suggest answers to questions.<br>Gather and record data to help answer questions.<br><br>**Lower KS2:**<br>Ask relevant questions and use different types of scientific enquiries to answer them.<br>Use straight forward scientific evidence to answer questions or to support them.<br>Make systematic and careful observations and where appropriate take accurate measurements using standard units, using a range of equipment including thermometers and |

Steam power explained through diagram of Stevenson's locomotive.

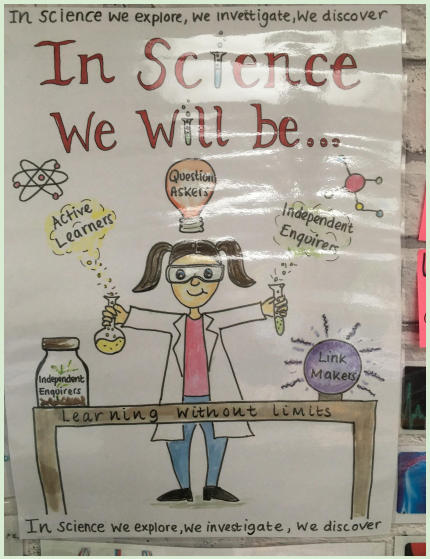



Bridge designed by George Stevenson

**Streamlining:** To design or provide with a form that presents very little resistance to a flow of air or water, increasing speed and ease of movement
**Structure:**the arrangement of and relations between the parts or elements of something complex
**Surface:**the outside part or uppermost layer of something
**Tension:**the state of being stretched tight
**Thrust:** a propulsive force
**Travel:**go from one place to another, typically over a distance of some length
**Viaduct:** a long bridge-like structure, typically a series of arches, carrying a road or railroad across a valley or other low ground.
**Victorians**:a person who lived during the Victorian period


**Stevenson's invention**


data loggers.
Identify differences, similarities or changes related to simple scientific ideas and processes
Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
Record findings using simple scientific language,drawings, labeled diagrams, keys, bar charts and tables.
Gather, record, classify and present data in a variety of ways to help answer questions.
Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.




Cross Curriculum Links: History- Victorians, travel and transport, significant individuals
. Literacy- Non Chronological Reports.