

Big Idea: 6. STEAM: Mastering the 4C's of 21st century learning will unlock opportunities throughout our lives.

You will be using the 4c's - creativity, critical thinking, collaboration and communication to complete your design challenge. Using STEAM activities, you will work with others to solve problems, which is an invaluable life skill.

Can we learn from the past and build a house which is both stable and strong?



In 1666, there was a terrible fire in London. The houses at the time were built using wood and were very close together. You'll be using your history skills to find out about how and why the fire started and spread so quickly. We'll look at first-hand recounts of the fire to understand the impact on the people living at the time. The legacy of the Great Fire of London still impacts how houses are built today and we'll be learning about that through our history work, as well as our DT lessons.

You will be creating your own Tudor-style house and focusing on designing and making it to be stable and strong, using carefully chosen materials.

We'll be visiting a real Tudor-built building and trying to understand the circumstances of the Great Fire of London.

Once our houses are finished, we will be setting them on fire to see how they would fare during the Great Fire!

You will be imaginative with your designs and solve problems as you encounter them. You will need to take risks and use fresh thinking to overcome obstacles.

You will work together with a partner to design and build your bridge. You will need to support each other, recognising your strengths and working towards a common goal.

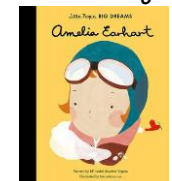
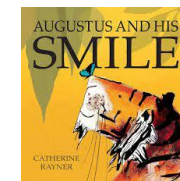
Broadening our experiences:

You will visit Exeter to see real Tudor-built buildings and understand what life was like for people in the Stewart era. You will get the chance to spend a morning creating your own Tudor building.

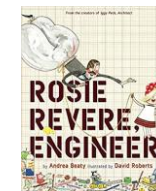
Our Key vocabulary:

structure	A combination of materials and/or parts that create a 3D shape.
engineering	Designing, testing and building of machines, structures and processes using maths and science.
material	Any substance that has a name, e.g. chalk, paper, wood, iron, air, water, clay, plastic, rubber, stone, leather, wax. Everything is made up of materials.
model	A small exact copy of something, often used as a guide to making the thing in full size.
design	A plan or outline showing how something is to be built or carried out.
stable	Not break or fall over easily.
adhesive	A substance that holds materials together.
textiles	A manufactured material, such as cloth or fabric.
Chronology	The arrangement of events or dates in the order of their occurrence.
Significant	Something of great importance; to be worthy of attention; noteworthy.
Legacy	Anything that is passed down from ancestors or someone who came before.
Civilisation	The ability of people to live together harmoniously in cities, in social groupings.
Recount	A type of writing or speaking that retells past events, experiences, or adventures in chronological order (the order they happened).

Texts that we will be reading in school:



Recommended texts to share at home:



History Sticky Knowledge

The Great Fire of London started on 2nd September 1666 on Pudding Lane & lasted 5 days.

In 1666, lots of people had houses made from wood which burns easily. Houses were built too close together and there was no organised fire brigade.

Samuel Pepys was a significant individual during the GFoL due to his preserved diary entries (primary source).

King Charles II made a decree that houses should be made from brick rather than wood & made further apart following the Great Fire of London.



Design & Technology Sticky Knowledge

Designs are an important part of the engineering process because they help to solve a problem.

Triangles are frequently used when building as they provide a strong structure.

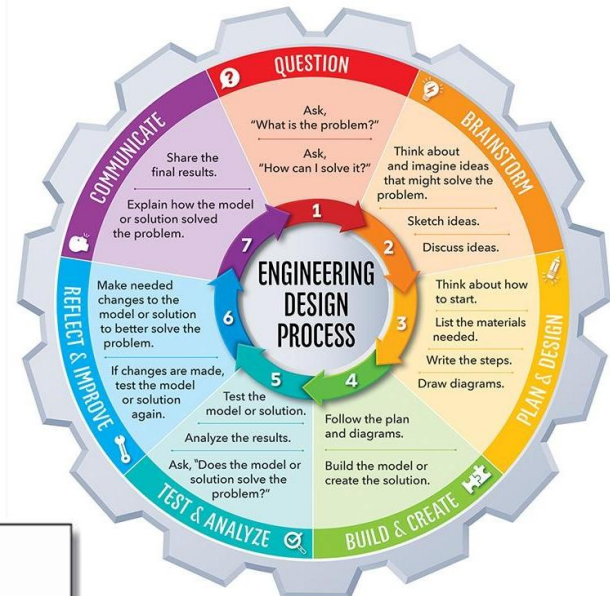
Sir Christopher Wren was a famous architect of new houses in London after the Great Fire of London. He worked for the king and built St Paul's Cathedral.

Models are built and tested to reflect and improve a design.

Houses are built of strong and durable materials.



ENGINEERING DESIGN PROCESS



A Tudor House

