WHAT IS OUR ENQUIRY CURRICULUM?

It is a whole school curriculum that has been devised by our class teachers. It is based on the relevant skills that need to be taught to a specific year group and children's own interests. It makes use of the national curriculum and individual subject skill progression to ensure children are taught a broad range of skills across subjects. This approach encourages children to find answers for themselves through collaboration with their peers. The school's writing and computing curriculum are weaved throughout each enquiry to ensure all children know the audience and/or purpose for their work. In addition to his opportunities for LOTC (Learning Outside the Classroom) are linked. Across the year three whole school enquiries are undertaken, each focusing on a subject from the Arts (Art, Music or D&T), Sciences (Science, P.E or Computing) or Humanities (R.E, History or Geography), with a view to also include national or global events.

How is it planned?

A question is developed for children to answer, with a starting lesson that sparks curiosity and an exit point to celebrate learning. A sequence of lessons are planned by the teacher to:

- Harvest Knowledge
- Allow pupil research
- Provide practical tasks to develop skills.
- Produce an end product for a target audience (a piece of writing, exhibition or performance etc)

DOCUMENTING LEARNING

Throughout this enquiry we wanted children to develop an understanding of how an inventor develops an initial idea. To do this children have had to document the different stages of their learning by creating sketches, developing models, experimenting with different materials, writing annotations, developing reflections and collecting inspirations from the world around them. Each class has then chosen how to visually represent this.

CREATIVITY

Throughout the enquiry our children have been given the opportunity to experiment with a range of resources and materials, to allow them to design and create their own unique pieces. They understand that an invention is creating something new that may never have been made before.

THE EXHIBITION

The children were fascinated by the idea of the Great Exhibition at the Crystal Palace in May 1851. They looked at drawings and plans of the building and as a school we discussed how the exhibition transformed people's views of the world. Our hall has become our very own "Crystal Palace" to showcase our children's work.

UNSWORTH PRIMARY PRESENTS

"THE CURIOUS MINDS OF UNSWORTH'S YOUNG INVENTORS"

Thursday 16th March 2017

AN EXHIBITION TO CELEBRATE THE DESIGN & TECHNOLOGY ACHIEVEMENTS OF ALL OF OUR CHILDREN DURING OUR WHOLE SCHOOL INVENTION ENQUIRY

WHAT HAS EACH CLASS WORKED ON?

RECEPTION

The children focused on the idea of robots. They had lots of opportunity to examine different robots and what they might be used for before then inventing their own.

YEAR 1

Across the two weeks children worked on how materials can be joined together to make moving parts. Children then brought in their own moving story books and used these to invent some class moving picture books.

YEAR 2

The children looked at what vehicles are and how axles work to make a vehicle move. Their challenge was to then invent their own unique vehicles. Throughout this process the children were developing their understanding of fixing and joining materials.

YEAR 3

The children were tasked with investigating the world of pneumatics and the types of things that make use of this type of system. Children spent time practically exploring how pneumatics work, before designing their own invention that incorporated a simple pneumatic system.

YEAR 4

As a starter to their enquiry the children looked at where electricity came from and the different inventions that make use of it. Children started to focus on lighting systems and explored how they could incorporate a circuit into their own lamp. They worked in groups or individually to invent their unique lamps.

YEAR 5

Across the two weeks children have considered how inventions can bring fun into our lives. Their focus has been fairground rides. The children looked at different rides and have investigated how cams can be used to make a moving model. As a class they have created their own fairground with a range of rides that they have invented.

YEAR 6

The children have focused on the idea of structures and have been tasked with creating their own structures in small groups. As a class they examined famous structures from around the world, to use as inspiration for their own.

OUR AIMS

Across the two week enquiry we wanted children to:

- Understand what the Great Exhibition was and how it showcased British inventions as well as inventions from around the world.
- Understand what an invention is and develop their own based around a specific D&T skill area from our scheme of work.
- Understand how to design, develop a prototype and then a final piece which is evaluated.
- Develop technical knowledge through undertaking small practical tasks.
- Contribute to a group or individual invention.
- Develop an understanding of how to document their learning through sketches and collaboration.