

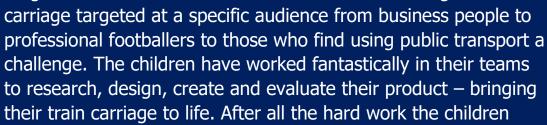
### **Fulwell Junior School**



Respect, Aspire, Achieve – Be the best that you can be



Our Spring Design & Technology focus has been full steam ahead this week, with us diving into the world of trains linking to our Wheels in Motion project. The children began their week researching the work of Robert Stephenson and his success at the Rainhill trials in the year 1829. They have explored how his locomotive model 'Stephenson's Rocket' has shaped and influenced the world we know today. Following this the children have set out to invent and design a train









have needed to measure, saw and join it was brilliant to see their delight when their train carriages began to move!

# Faculty of STEM

**British Science Week 2023:** 



For the theme of connections this year, we created our own investigation for a bubble experiment, measuring and recording our results accurately. Year 6 participated in exciting Science workshops at Sunderland College, experiencing chemistry, biology and physics lessons in science labs.

Well done to the following children who were selected from their class to be submitted into the **'If I were an engineer...'** competition: *Anna Butler, Alexander Mentias, Alex Frost,* 



Yasmin Haq, Amelia Dunning, Josie Matthews, Jasmine Singh, Lucy Batten, Jessica Holmes, Sebestian Wolf, Olivia Dalton, Ruby Jones, Arran Cronin, Harshita Mahamuni, Jessica Houghton-Low, Matilda Smith, Harry Cook, Liv Ellis, Indie Ray, Emmeliea Smith, Georgia Scott, Izzy Cook, Betsy-Rose Jeng, Isaac Warrener, Will Colley, Oliver Jennings, Jersey Ratcliffe, Lizzie Bowmer, Travis Martin-Davis, Lily Waine, Darcie Henderson, Sophia Wormleighton, Mason Bewick, Katie Batten,

Isabel Dunning, Ellie Mowbray, Jessica Shields, Scarlett Wrightson, Emily Preece, Hollie Morrow, Isaac Marsden.

Their entries have been submitted for the **Primary Engineer's Award** and we will find out in the Summer term whether they've been awarded a pass, merit or distinction.







# Faculty of the Arts



Earlier this term, a group of Year 5 more able artists were chosen by school to take part in a national competition launched by 'Historic Royal Palaces' to design a Coronation bench for the King. The children worked collaboratively on a design that brings together our school values alongside values that we thought would be relevant for the country moving into a new royal era.

Our design was chosen as one of the 15 (out of 1500) entries to be made into a bench that will be displayed at the Tower of London during the Coronation celebrations in May. It will remain there until September before being transported back to school to be displayed forever as a lasting legacy of the Coronation.

The children will work with a group of artists 'Wild at Art' during the week beginning 27<sup>th</sup> March to turn their design into reality – creating the bench that will then be transported to the Tower of London.

As part of their prize, the pupils will receive a VIP trip to visit the Tower of London in the Summer Term where they will have the opportunity to see their bench and take part in themed activities. The standard of entries was extremely high – so to have been selected from so many makes us feel very proud. We are looking forward to taking the children to the Tower in the Summer.

#### About the design:

Our entry design was based on **4 core values** that we felt reflected the tradition and history of the past whilst also capturing the values for the future and our own school values:

Aspiration, Resilience, Unity and Renewal

Each element of the seat reflects an aspect of at least one of these values.

The children were keen to have a strong thematic approach to the overall design – they chose the theme of **coast** – **seas and rivers** – all elements have a strong connection to our locality on the North East coast. They were inspired by the presentation on values and symbols to research and generate symbolic imagery and meaning linked to this theme.

We look forward to sharing the finished product with you all as soon as it's complete!!



**Pupils:** Isaac Warrener, Emme Smith, Evelyn Rudd, Oliver Jennings, Isabella Johnson, Isla Kelly, Lizzie Bowmer, Seamus Cockburn and Jenna Saharni

#### <u>Light Fantastic!</u>

Year 3 put their knowledge and understanding of Light to the test by taking part in a Light Fantastic workshop at The Centre of Life in Newcastle. During this workshop, we recreated some of the most famous scientific experiments in history. Pupils used light boxes to carry out optical experiments involving reflection, refraction and colour mixing. We watched how convex and concave lenses changed the direction of light and we even got to create rainbows! Towards the end of the workshop, we learned about how the James Webb space telescope uses a giant mirror to gather light from stars at the very edge of the visible universe.

We were also lucky enough to explore the planetarium,

where we had a show about stars and their constellations,

well as a tour round the life centre, including the brandnew STEM themed "WOW" area.

Charlotte Barker- "I really enjoyed the new WOW zone because this had lots of STEM activities, especially the gigantic conveyer belt machine because you had to work as a team to make it run."

Archie Horn- "I didn't realise that the experiments we were doing were ones that Isaac Newton actually did in his bedroom to learn about light."



#### A Visit to Monkwearmouth

This year for British Science week the theme was connections! We took part in three different activities hosted at Monkwearmouth Academy related to this

theme. We were so thrilled to sit in the real science labs and use some equipment we had never seen before. Our first activity was collecting a DNA sample from a strawberry.



#### Time to Battle!

In history this term, Year 3 have been learning about the Bronze and Iron Age.

We have loved looking at how life evolved from the Stone Age and their discovery of metal in Britain. We have learnt about the Amesbury Archer, a Bronze Age man discovered just 2 miles from Stonehenge as well as some other artefacts found closer to home. Our favourite has to be our Iron

Age battle where our enemy tribes were wanting more land, cattle and weapons. We learnt about druids and how important they were. Did you know that it is rumoured that they could walk in the middle of any battlefield and stop a war?

#### Year 3 Light Photography workshop:



A group of Year 3 pupils had the opportunity to apply their learning from their recent Science topic of Light during a Photography masterclass day with Mark Lloyd. They explored using shadows and different translucent and opaque materials when taking photographs. They also experimented mixing two different coloured translucent lenses. Check out the results!

Ethan M C1- My favourite part was when we used the translucent coloured panels to create pictures that had more than one colour!

Thomas C2- We were using honeycomb grids to make sure the light was travelling straight towards the people we were taking photos of.

Charlie C3- Light is so important when taking photos and it travels in a straight line. We also learned that when taking photos you can get something called split





lighting where one side is one colour and the other side is the other colour.



#### Magnificent Writing!



We have explored a lovely narrative in Year 4 this term. The Midnight fox, the story of a boy who find his love of animals through his own adventures on Aunt Milly and Uncle Fred's farm. We started the term exploring the issue of fox hunting. The children created superb discussions, presenting both sides of the argument and finally coming to their own opinion. We explored some very tricky concepts! Can your child tell you what *bias m*eans? We were also inspired to write an exciting narrative based on the chapter 'The Stormy Rescue' Year 4 teachers were blown away by the children's

superb figurative vocabulary and emotional writing. Our next topic is a famous local legend about a mysterious creature... Whisht lads 'ad ya gobs and 'al tell ya aboot the worm...

#### **Rotten Romans!**

The history detectives were at it again this term, investigating, exploring and enquiring all about Roman Britain! The children have drawn up their very own battle plans to attack the South East coast of England and learned about (all three) Roman emperors who tried to invade Britain. Can your child tell you their names? Top Tip! All of their names begin with C! We have learned all about the fearsome Celts and how they protected their land from Roman legions and about Boudicca's great rebellion! We can't wait to see our most famous local artefact before the end of term- Hadrian's Wall!

#### The Wonderful World of Stories!

In reading lessons, we have looked at a variety of texts, including websites all linked to the Lambton Worm. We discovered facts about the Lambton Estate, Lamb Bridge, wildlife in the River Wear and Penshaw Woods. During these sessions, we improved our retrieval and inference skills. We also studies texts linked to engineering week and World Book Day and started to use Fiction Express as our home reader.



#### Super Sound!

We carried out lots of investigations this term linked to our topic of Sound. We used rulers, drums, rice and tuning folks in water to observe vibrations. We investigated pitch and volume using test tube instruments we made ourselves. We also had the opportunity to plan and carry out our own investigations linked to



absorbing sound waves. During the topic we also learnt about sound engineers with Canford Audio.



#### Year 4's Electric!

We have been learning about electricity and circuits in science. We have investigated why a circuit might or might not work. We have carried out investigations, like testing different materials to see if they are conductors or insulators —we found out that metals are good conductors. Before the end of term we will be investigating switches and how they can be used for more than turning a light on!



#### **Eruptions in Year 4 Geography!**

This term's exciting topic is earthquakes and volcanoes and we have learned so much! Due to our studies, the children have a greater understanding of what caused the catastrophic events in Turkey and Syria and can appreciate the powerful impact of natural disasters on the lives of others. We have started to discover how and why volcanoes erupt and where they are most likely to be found. All the while, we continue to link our geography studies to other subjects, such as history (discussing Pompei), the local area (we know why we have little seismic activity) and careers (Catastrophe Consultant, seismologist, engineer).



A huge thank you to Miss Birch's year 5 blogging and youtube club for creating the puzzles below. Can you solve them all?

### Guess the celebrity!



- A. Justin Bieber
- B. Ed Sheeren
- C. Gaten Matarazzo
- D. Joe Keerey



- A. Emma Watson
- B. Arianna Grande
- C. Emma Stone
- D. Bonnie Wright



- A. Sadie Sink
- B. Jenna Ortega
- C. Arianna Grande
- D. Millie Bobby Brown.



- A, Harry Kane
- B. Declan Rice
- C. Ross Stewart
- D. Phil Foden

### Quíz!

QUESTION 1 - True or false. The capital city of Canada is Ottawa.

QUESTION 2 - How many times is Betelgeuse bigger than the sun?

A) 100 B) 140 C) 1000 D) 1400

QUESTION 3 - What is the order of the Dinosaur ERA?

QUESTION 4 - ANSWER this problem.  $2 \frac{1}{3} + 4 \frac{2}{3} = ?$ 

QUESTION 5 - Which river runs through Sunderland?

# **Puzzles**





#### Star wars quiz:

1)Who defeats Darth Vader?

A: Luke Walkersky

B: Luke Skywalker

C: Sky Walkerluke

2) Who is Darth Maul?

A: A Sith apprentice

B: A jedi

C: A Sith lord

3) Who defeated Emperor Palpatine?

A: Rey

B: Darth Vader

C: Luke Skywalker

### Ríddles

- 1. Months have me, centuries have me, millennials have me, but days, weeks and years don't. What am I?
- 2. A one story shop was going well in selling, until one day it got robbed, there was three suspects for this crime that work for the shop.

James: I was on my break, Wednesdays are always my off days.

Mary: I was working on the second floor making sure everything was ready for the sale.

Adam: I was working my day-to-day job, I WOULD NEVER!

Who is the liar?



Throughout this edition, there are little easter eggs hidden within the pages. Can you find them all?

#### Vicious Vikings!

This term in history, Year 5 have been learning about the Vikings in order to answer the key question: did the Vikings really deserve their bloodthirsty reputation? During our lessons we've explored their relationship with the Anglo-Saxons, discovered the importance of the longships which allowed the Vikings to travel great distances to trade and settle and even written like the Vikings did by using runes!



In the world of dragons and legendary beings...



During our English lessons this Spring Term we stepped into the world of 'Dragonology' and were given the task of taking on the role of a Dragonologist when creating our non-chronological reports. From Ice Dragons to Forest Dragons to SkyWings, our reports highlighted all the different species of dragon and their incredible features and lifestyles. Our reports have been published

into our own class book ready for all to read!

In the second half of Spring Term, we have explored the legend of Beowulf by Robert Nye alongside extracts from Seamus Henry and Michael Morpurgo. We have used this text to plan and tell extracts of the narrative focusing on using figurative language to develop setting and character as well as the power of alternative viewpoints.



#### Out of this World!

Our science learning for the first half of Spring Term took us beyond our earth and into the solar system. We explored the movement of planets in relation to the sun and earth. We studied how advances in technology have supported scientific discoveries and got to zoom in on an area we wanted to research and investigate more. This half term we have linked our learning from the topic space to investigate forces. We have used our prior knowledge of forces to plan and investigate investigations surrounding the mass and weight of objects. We have since began to explore the effects of air resistance when challenging Galileo Galilei's theory before being amazed to find out it is true!

#### Green Screen Animation workshop!



This term Year 5 put their prior learning into practice in a workshop with Mark Lloyd. In Computing lessons, Year 5 had previously learned about video editing and filming techniques. This workshop allowed pupils to take their learning one step further by adding green screens for animation so they could create

their very on weather forecasts! We started by filming content in front of the green screen then editing it and adding in background images using our ipads!

#### The Life Centre trip that blew us away!

As part of our topic of 'Space' this half term in science. We had the opportunity to visit the Life Centre and observe through their planetarium experience, incredible satellite imagery and feel as though we were in touching distance of the planets we have been learning about. We were able to explore the robotics used to fix satellites and found that it was a lot harder to control robotic arms than we first thought! All before we had the chance to taste dehydrated and freeze fried strawberries! Who knew astronauts' food was so yummy!





#### **Magnificent Mountains**

This term in Year 5 we have been learning all about mountains in geography. We discovered how mountains are formed and why the UK has mountains. We explored the different mountains and mountain ranges in the UK and the rest of the world. The pupils produced some excellent non-chronological reports all about Mount Everest.

#### Is it almost Easter!?!?



SATs are approaching. In May, Year 6 children always complete SATs tests. A big shout out to parents who have supported children at home in Maths, Spag and Reading exercises. We know that it is not always easy! Firstly, children who work superbly at school are sometimes more resistant at home. Secondly, the way things are taught change over time and parents have had to adapt to provide this necessary support. All those who teach in year 6 fully appreciate the efforts of both adults and children. Writing is now centre of the agenda as children work on editing and

improving their work. No rest for the wicked!

#### Engineering...

Have you have worked with electronic circuits, used a saw and designed a mechanical product? Well, all children in Year 6 loved the idea of creating their own moving engine. Inspired by Stephenson's Rocket, the children worked meticulously with measurements, wires, and clamps to produce an end product; however, the greatest outcomes were the values shown: teamwork, endeavour, creativity and responsibility. Many children exhibited leadership skills, supporting one another with the intricate tasks.





#### **Careers**

March saw Career's Week in school. At Fulwell, children talk about careers and employment opportunities daily. In every lesson, we look for real world links and which jobs are associated to either skills or subjects. The long-term view is for children to be ambitious and have an open mind; furthermore, we look at providing a pathway or trajectory for them to reach their dream job or desire. The children have been fortunate to have visits and Zoom calls with passionate people who love their jobs.

Career's week was no exception which featured a conversation with an astronaut. All children at Fulwell should aim for the stars!

#### Year 6 are masters in industry!

We have been learning all about the changes in trade and industry in Sunderland over the years. We used old maps and photographs to investigate how the land was used in our local area and then researched which industries are the biggest employers in Sunderland now, using census data. Some of the data tables were quite tricky to read so we made links with our statistics lessons in Maths. We applied our persuasive writing skills to write an advert to persuade people to move to Sunderland for great opportunities in manufacturing, ICT, the University and the NHS.

#### The Legacy of the Greeks!

When studying the Ancient Greeks, it is not unfair to say that you could learn every day for years and still not scratch the surface. The children have shown great enthusiasm when looking at the origins of democracy but were left disappointed with the treatment of women. We have looked at 'legacy' in terms of how the

Greeks are remembered and the physical evidence of artefacts that were left behind. We looked at the 'folly' Penshaw Monument, to show how Greek architecture has been copied, as well as their ideas around theatre and philosophy, too. The Spartans and Athenians provided a great opportunity to look at the contrasting ways that societies develop. The Olympics provided links with the modern day and how other civilisations used sport.



#### Science Sparking our Interest!

This term, we have been focusing on both light and electricity. We have investigated how light travels and how we see a light source. We researched Isaac Newton and learned about his invention of the first reflecting telescope. In groups, we made our own periscopes in order to show how to see around bends and corners, as they were used during World War I. In electricity, we are currently learning about how a circuit is complete with a closed switch and how a circuit will not work if a switch is open. We are going to investigate whether the number and voltage of cells has an impact on the brightness of a lamp or volume of a buzzer.

## **Careers & Aspirations**

#### **Faculty Focus and Money Matters**

Our Faculty Focus this term has been Critical Thinking, which is such an important skill that really challenges us! We know that we tend to use our critical thinking skills a lot in school, particularly in Maths and Science, but we need to use it in the wider world as well. We have worked on finding different solutions to a single problem (because our best idea is rarely our first), the links between cause and effect and making logical justifications behind our thinking. In Money Matters, we have been thinking about the link between jobs and money, and Year 5 worked on calculating deductions from a payslip! Unfortunately, it was more than we

thought it would be!



#### Canford

In Year 4, we have been working hard on our Science topic of "sound" this term, learning all about how sound is made from vibrations and how pitch and volume can be altered. Not only did we carry out some fascinating investigations linked with this topic, but we were also visited by a company called Canford Audio, who are based in Washington. During their visit, they told us all about what careers there are in this field, and allowed us the opportunity to interact with some of their hi-tech equipment. Canford Audio were then kind enough to invite a small group of Year 4 children to their workplace.





During their visit, these children had a tour of Canford where they were able to see a variety of equipment that is made there, like "level limited" headphones which make a sound if the volume is turned up to high, forcing the user to turn it down - the BBC actually buy lots of them. They also make recorders for the police, and camera cables for Formula 1 and bands like Coldplay. Thanks for having us, Canford!

## **Careers & Aspirations**

Sunderland University - Microscopes

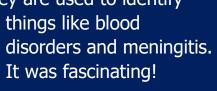


During our Art focus week earlier in the year, we had the opportunity to use some microscopes in

school to help us to really "zoom in".

Some children were really interested in this, and so they got the opportunity to spend the day at Sunderland University.

The University Ambassadors gave them a tour of City Campus and spoke to them about what university life is like, and then they got to spend some time in the Bioscience department. They learned all about how microscopes work, why microscopes are so important in Healthcare Science and how they are used to identify





#### **Careers Week**

On 6<sup>th</sup> March, we celebrated Careers Week. There are so many options available to us in our futures, and we were lucky enough to have some visitors into school to share their exciting careers with us! Year 3 met Detective Lauren, who talked about her former career as a response

officer and her current career of a detective! Some of the children even got to try on some of her uniform! Year 4 were visited by Greg, who is a Senior Crown Prosecutor and Year 5 were visited by Richard and Debra, who run their own businesses and told the children all about what it's like to work for yourself!



#### Northern Rail

As part of our DT focus week, in which we made our own train carriages, we were visited by Northern Rail to learn all about careers in the rail industry. We couldn't believe how many roles there are — Northern Rail alone employ 6,500 people. Be it a train driver, a conductor, an engineer or even a finance specialist, there's something for everyone!

# Our Award-Winning Choir!

In February, our amazing FJS choir were chosen to represent Sunderland in the North East Choir of the Year Competition at Durham Cathedral. We wowed the judges with our version of the song 'One Day' by Matisyahu and were delighted to be awarded 2<sup>nd</sup> place with a special commendation. To get the chance to sing in such a prestigious venue was a reward in itself but we couldn't be happier to receive our certificate which has taken pride of place on our music display outside Mr Speck's office.



Fulwell Junior School Sea Road, Fulwell Sunderland, SR6 9EE



Wishing you all a very happy Easter break!

We look forward to having you back on Monday 17<sup>th</sup> April 2023.