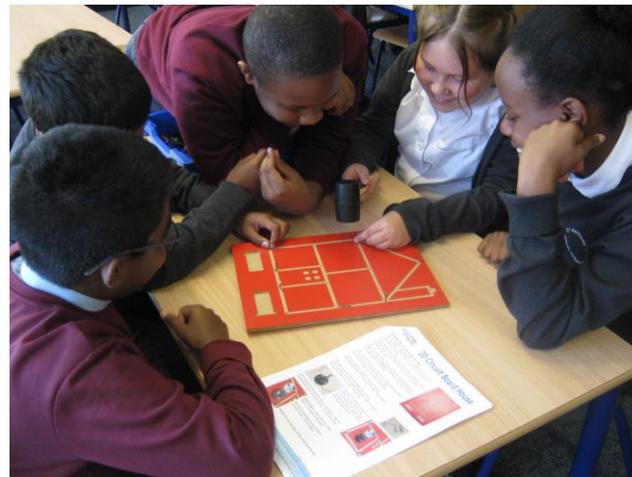


St Anthony's Primary School PSQM Silver Award Evidence Portfolio



A1: There is an effective subject leader for Science.

Mrs Fox, Head Teacher of St Anthony's says....

Everyone has worked really hard to ensure that our children have a first class experience of the science curriculum. I have to thank Mrs Verma for her tenacity in developing our science curriculum and improving our links with other schools. She has been successful in engaging 5 other schools in a project and we hope to develop this even further over the next 12 -18 months.

Our vision is to become a school that showcases good practice in science to other schools, where colleagues can visit and experience outstanding teaching and learning in this area of the curriculum.

We are planning three science fairs next year, one each term. Eventually we hope that these will be totally pupil led, where pupils enjoy practical science so much that they want to share what they have learnt with other pupils from our school and also local visiting schools.

Our new International curriculum will enhance the teaching of practical science and bring back the awe and wonder into the subject. Our commitment and investment to learning outside the classroom has its plans rooted in the science curriculum and this will further enhance and develop curious minds.

Updating SLT and Governors (half termly) on progress and events happening around Science at St Anthony's.

Subject Leader develops her role by attending Primary Science Teach Meets @ MOSI, Manchester. Sharing good practice and developing the skills needed to lead this subject.



Tweet

Great Science Share
@GreatSciShare

Will you join the Great Science Teachmeet in Manchester on 5th March, 6-8pm. Book now and share with a friend! greatscienceshare.org/teach-meet/ @msimanchester @UoMSciEng @UoMSEERIH

What are the strengths of the teaching that have the greatest impact on learners' progress?

- Promoting science across whole school – RSPB visits, Science Fair, Mad Science Workshops and Assemblies, WOW Science Events at St Paul's High School, Year 6 Apprentice Competition with Mcr Airport.
- The inclusion of science specific events and visits this year has pushed Science to the forefront of the school activities and provide many cross-curricular learning opportunities. These engaging opportunities have provided opportunities **all pupils** to develop their science vocabulary skills, both through speaking/listening activities and through creative writing (Golden Books).
- The above opportunities have particularly helped developed the scientific discussion skills of our G&T pupils – gave them the role and responsibility to lead, run and promote their 'stalls' at the Science Fair. This differentiation of roles has helped accelerate their learning above their peers, however this is something that still needs to build momentum and be built upon more thoroughly.

At the end of the 2016/17 academic year, subject leader for Science completed an evaluation and impact statement to reflect on progress made throughout the year and additionally highlight any areas of improvement need – these formed the basis for the individual Science subject development plan. Action plan is regularly monitored and updated to reflect any changes happening to the subject throughout the year – recognised as a working document.

What action is being taken?

- Primary Science Quality Mark Silver Award applied for and work towards this has already begun. Within this award subject leader receives ongoing CPD throughout the year from a designated 'Hub Leader' (Bill Roffey). Give Science leadership a focus and provides subject leader with opportunities to feedback to staff in specific areas (e.g. working scientifically and Assessment).
- Catholic Cluster and MAT Science subject leaders have arranged a series of meetings throughout the 2017/18 academic year to move science forward and develop the teaching and learning aspect of the curriculum. In addition to this, these meeting will work alongside Debbie Eccles (External Science Consultant). The first Science coordinators meeting is at St Paul's 2pm 12th September and then a meeting with Debbie Eccles 21st September.

A2: There is a clear vision for the teaching and learning of Science.

There is a collaborative approach to the teaching and learning of Science; involving parents & carers, staff, governors and most importantly our pupils. They are passionate and value our Science teaching and learning principles

Collaborative



Lightbulb moments

Tweet

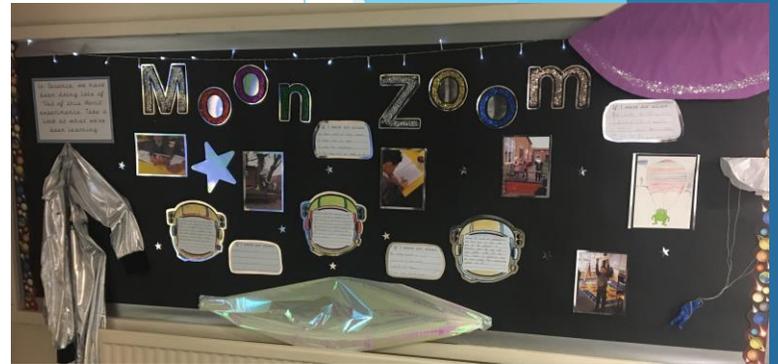
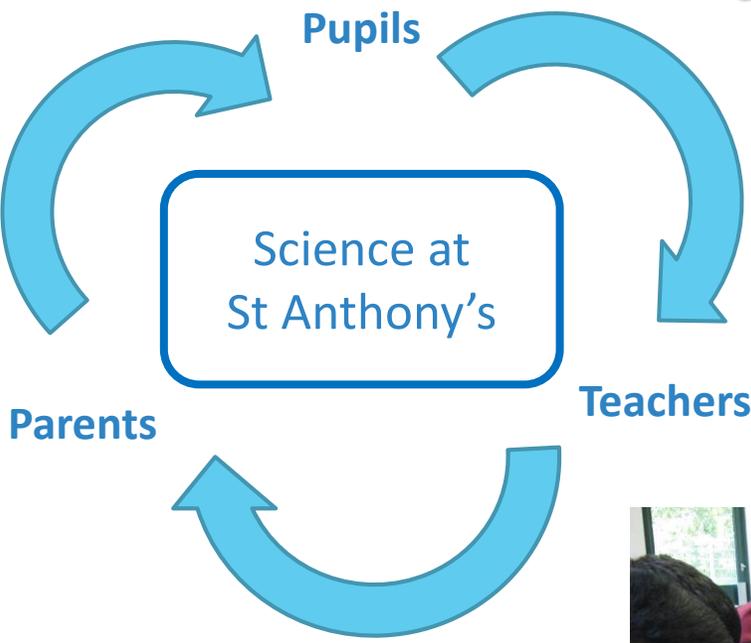


Amazing whole school Science Fair today... over 600 children taking part
🔍🔥👨‍🎓 huge success and such a buzz @ScienceWeekUK



Empowered teachers

Hands on



Fun

Teachers

Independence

- Events and trips that are planned and enjoyed with the whole school and local community;
- showing a shared love and passion for Science.

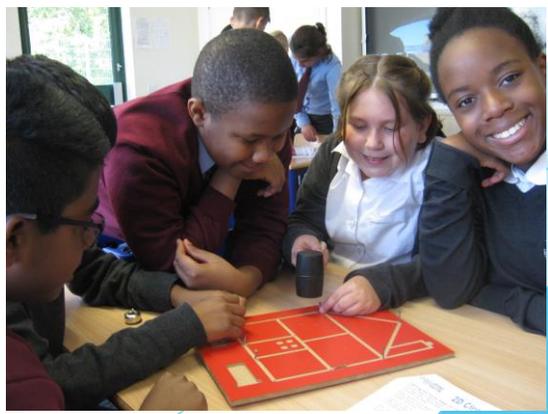
Science Trip to Forum Library

As you may know, St Anthony's Primary School are currently working towards the prestigious Primary Science Quality Award and as part of this we have the opportunity to participate in some hands-on, interactive Science sessions, alongside the staff at the Forum Library.

Year 2 will be visiting the library on **Friday 9th February 2018, 9.30 – 10.30 am.**

Parents and guardians are warmly invited to attend and participate in the sessions with their children, it will be a great experience to share, especially as it is such a busy but exciting year for Science at St Anthony's. We ask that you meet us at the library between 9.15 – 9.30am and are ready to get stuck in

Engaging



Making mistakes



A3: The current School Development Plan has appropriate and active targets for Science.

Middle leaders and senior leadership team work together to identify clear targets for Science and the actions needed to best support the teaching and learning across the school.
Shared with all staff. Science high priority subject.

Targets and actions reviewed regularly (at least termly) – during performance management interviews, Governors reports and meetings, subject leader meetings and through the multi-academy trust cluster meetings.

Extract from Subject Leader Development Plan 2017/18.

- Senior/Middle leaders have continued to engage in CPD opportunities to strengthen their leadership and management skills.
 - We have addressed the quality and focus on PE where we have gained local accreditation and national accreditation.
 - We have continued to develop RWI, JP providing parental workshops and training sessions.
 - The Maths Lead has linked to cluster schools and is working with Ray Maher to develop best practice, including the Bar Method.
 - An additional lead has been appointed for both Literacy and Numeracy to further improve the achievement of pupils.
 - The HT is undertaking training in Child Mental Health, leading to the work on the associated quality mark for the school.
- Science has become a stronger focus with developments in delivery of the curriculum and assessment. A science cluster group has been established.
 - The next middle leaders are now in the process of undertaking the training in their areas, Art, Outdoor learning, RE, MFL.
- A TLR3 has been appointed on a one-year contract for subject leadership of IT. This is to develop a new programme of study to complement the new creative curriculum, which is being rolled out over the next 12 months.
- We are working towards Arts Mark Gold and Science Mark.

Next Steps

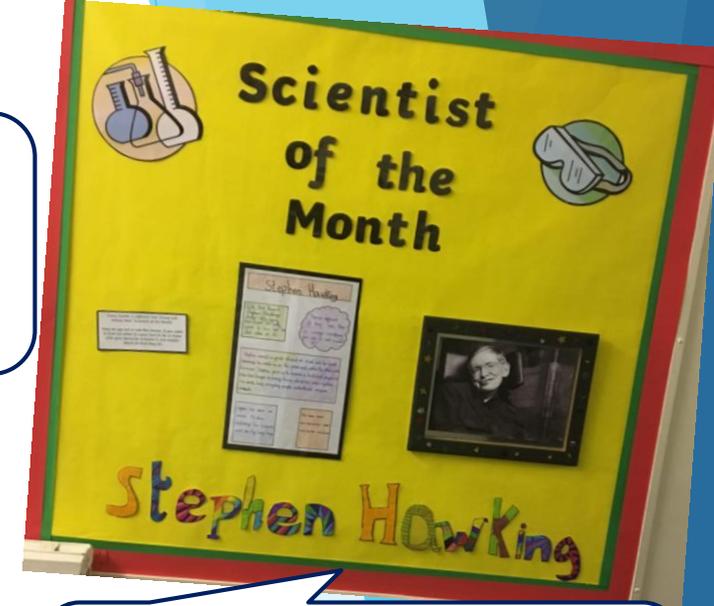
- Subject leader to improve existing resources and create a bank of resources to promote 'Working Scientifically' – more specifically the planning and evaluation of investigations.
- 3 day Science Fair – Summer Term 1 2018
- Science club to be up and running – Summer 1
- Develop links further with local community and cluster schools.
- Developing International Primary Curriculum in line with NC Science Objectives.

Development Point 1	Stage 1	Evidence of this development point is:	The impact to the school is:
To achieve the Primary Science Quality Mark – Silver Award. Portfolio submission Date – May 2018	Develop role as subject leader – work scrutinites, lesson observations, CPD opportunities, working with SLT, planning etc.	<ul style="list-style-type: none"> Completed portfolio ready for submission. Completion of all PSQM tasks. Completion of 7 core documents (including evidence) associated with PSQM award (Subject Leader Log, Calendar of Events, Action Plan, Portfolio, SDP, Principles and CPD) 	To evaluate, strengthen and celebrate science provision at St Anthony's Primary School. Create a shared understanding from EYFS to Y6 of the importance of Science. Children, in all year groups, are receiving a consistent and engaging science curriculum. Develop a more uniformed approach towards 'Working Scientifically'.
	Stage 2		
	Continue to develop cross-curricular learning links across year groups. Liase with subject leaders to make the 2016/17 links more concrete. Link to new topics 2017/18 new curriculum topics.		
	Stage 3		
	Organise staff inset sessions: <ul style="list-style-type: none"> Identify principles of teaching and learning All staff up to date with PSQM process and best practice in Science Rotation Science lessons (year groups) Delivered both by LV and outside agencies 		

A4: There is a shared and demonstrated understanding of the importance and value of Science to children's learning.

Over the past year, we have been raising the profile of St Anthony's – to show our parents, our governors, visitors and each other exactly how important Science is to our school. Look at our fantastic displays and work areas....

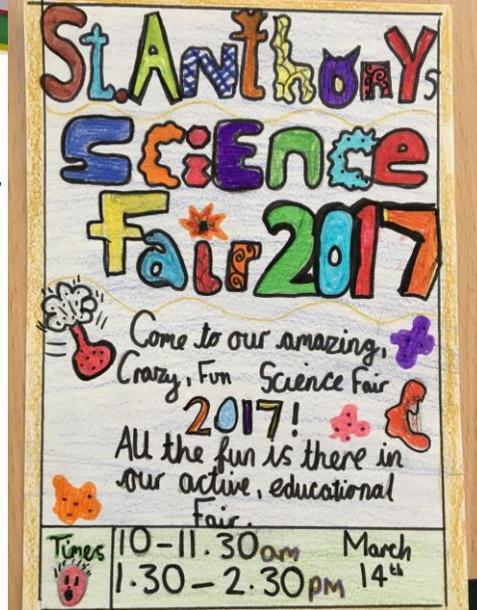
Each year group gave an update on what they had been learning during the Summer Term. They showed us pictures, presented us with pieces of outstanding work and even asked us questions!



Our Scientist of the Month display – Steven Hawking's achievements, his life and why he deserved to feature as St Anthony's Scientist for June!

On Tuesday 14th March we would like to invite

Our school invited parents, Governors, friends and families in the local community and neighbouring schools to our Science Fair during British Science Week. Children were able to put their outstanding work on display and visit the stalls of other Year groups. It encouraged children to use scientific vocabulary and really showcase their scientific learning.



There will be two sessions during the day that you will be able to attend:

Session 1 – 10 -11.30am

Session 2 – 1.30-2.30pm

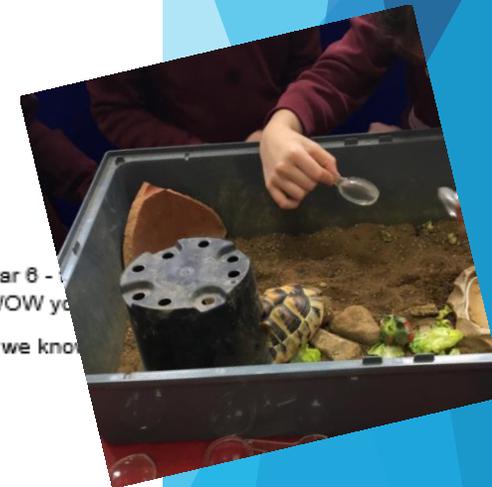
Both sessions will be an opportunity for some children - from Reception to Year 6 - showcase their hard work. Representatives from each class will be there to WOW you!

The Science Fair will be an exciting and educational learning experience and we know with your support, we will be able to have a fantastic event.

Let's really get our children excited about Science!

Yours Faithfully,

Mrs Verma



A5: The Science Coordinator knows about Science teaching and learning across the school.

St Anthony's is currently in the process of transitioning to use the International Primary Curriculum. Subject leader is aware of current overview but also future plans to ensure that NC Science objectives are covered throughout the year with no repetition or overlap between Year Groups.

Science Planning: Date: 23/11/2017 Unit Focus: Pirates/Materials		National Curriculum objectives for this week <ul style="list-style-type: none"> To perform simple task. To observe closely using simple equipment To use their observations and ideas to suggest answers to questions 			
IEP Targets: NA		Class Targets: Children to present their work neatly, whilst working scientifically. Children to show good sharing skills when working together.			
Learning Objective	Shared Session:	LA	MA	HA	Plenary
LO: To test the absorbency of different materials.	Recap with the children what they have been working on in Science this half term. What did we do last week? Why do we need to look at the suitability of materials? What is an absorbent material? Why do some products need to be absorbent? Work through the PPT, stopping at various points to ask questions. Share the problem with the children. Why would this be important to know? Explain to the children that they are going to be conducting an experiment to test the absorbency of different materials. Emphasise that the test must be a fair one. Why is it important to make it a fair test? Listen to ideas of how we can make it a fair test. Steer the children towards the size of the strips of material and the time spent in the water.	Working with Mrs H. Children to make a verbal prediction as a group. Which do you think will be the most absorbent? Children will pour the water into a tray and lay down the materials for 30 seconds. Timer to be put on the board. They will record their initial observations as a group on the sheet provided.	Working independently, children predict what materials are the least and most absorbent. Children record their findings. Children will pour the water into a tray and lay down the materials for 30 seconds. Timer to be put on the board. Encourage children to think carefully about why that material has absorbed most.	Working with Mr Thirsk, children predict how absorbent they think each material will be. Children will have coloured water as part of their experiment. They will be using measuring cylinders and trying to measure the amount of water each material has absorbed. Children record their findings as a group on the sheet. How could we show this data? Children to present their data as a bar graph.	Children to come together to share their results. What have you noticed? Was it a fair test? Could we change anything to make it fairer? Mrs Cassin to write down children's responses to these questions on the flipchart.

A fair test is not one where you need to share. Reinforce

What do we measure liquid

In St Anthony's Science is good because....

lots of practical activities are carried out & it is fun

My favourite thing about teaching Science is....

the unexpected questions & squeals of delight!

R Hince

Science is going well when....

When people are asking questions. Being curious about the world around us is so important.

The best science lesson includes....

- Big ideas*
- Hands on activities*
- Lots of fun!*

Mr Murray

Science is going well when....

children are busy asking questions and working in a practical way!!!

The best science lesson includes....

- Hands on activities*
- the 'lightbulb' moment.*
- children showing enthusiasm*

Mr Thirsk

Planning is annotated and provided for subject leader to evaluate and check progression throughout the school.

Activities and teaching ensures that opportunities are provided for EAL, SEN and Gifted and Talented children.

Objectives clearly linked to NC guidelines.

Staff Member	Observer	Date	1.15	OBS No
Mr Thirsk	R Hince	24/11/17		
Observation type				
Lesson observation	yes	Work analysis	yes	Discussions
Focus Performance Management science observation		Context ?? lesson on Materials		Other
LO To test the absorbency of materials				
Information gathered for lesson observations only				
Year group (s)	2	Grouping	Mxd	No in class
		Gender	Sc	29
		B G MI		
Evidence				
Good relationships are evident in the class, pupils are confident to try and answer questions. When you asked what materials might be absorbent one pupil said glass, you asked what does absorbent mean and after they had explained this, they tried again and said that glass was waterproof. You asked appropriate questions to develop their understanding. All children were engaged and keen to share their ideas, talking partners were used effectively throughout the lesson.				
Most resources and equipment were prepared. HA children had funnels and measuring cylinders, however only 4 and 5 respectively for 6 different materials and 6 children.				
Powerpoint used effectively to engage the pupils, and to illustrate different teaching points, and ask further questions – why does a bath mat need to be absorbent, you insisted on answers in full sentences using correct scientific vocabulary to consolidate learning, (because you are wet and you want the water to soak up, what do you mean by 'soak up' - the water to be absorbed).				
Clear differentiation was evident on recording sheets and for measuring the amount of water absorbed. HA children had measuring cylinders marked in ml, this was well matched to their ability, remaining children ordered the beakers by sight from least to most. This provided clear links to maths, as did the tick chart at the end of the lesson to record the results from each group. The problem of wiping up the pirate's spill rum linked well with your literacy theme.				

Performance management observations were completed in Science, by the Senior Leadership Team. Feedback then given to subject leader (LV) to help identify areas of weakness and celebrate strengths and good practice happening across the school. Really positive experience.

Staff all completed questionnaires and LV conducted staff voice task to underpin the teaching and learning principles. This allowed staff to reflect on how they teach Science, what the most important elements are to their lessons and how this will impact on future planning.

B1: Staff continue to have opportunities for CPD within Science that increases their skills, knowledge and understanding.

• **Science Cluster Meetings (working with Debbie Eccles)**

- Tuesday 12th September 2017 – St Paul's
- Thursday 21st September 2017- St. Elizabeth's
- Thursday 16th November 2017 – St Aidan's
- Tuesday 23rd January 2018 – Sacred Heart
- Thursday 8th March 2018 – St Peter's
- Tuesday 24th April 2018 – St Anthony's
- Thursday 21st June 2018 – St John's

Teachers and children are provided with the opportunity to acquire skills and knowledge from practical activities. All children and staff thoroughly enjoy the sessions and return to class filled with new knowledge and a love for outdoor learning. If it is pouring with rain the outdoors is brought inside!

Staff disseminate information and ideas to each other, providing CPD.. The session can then be delivered by the other 2 classes in the year group during the week.'

Rosie Hince, Deputy Head Teacher – 05.02.2018



Lower Primary

- Planet Earth and Space
- Plants
- Light and Sound
- Humans and Other Animals
- Energy
- Living Things and Habitats
- Everyday Materials
- Seasonal Changes



Upper Primary

- Food and Feeding
- Body Systems
- Rocks and Soils
- States of Matter
- Forces and Magnets
- Life Cycles
- Future of Energy
- Environments and Habitats



Skills-based

- Working Scientifically
- Outdoor Science
- Science Classroom Management
- Science Across the Curriculum
- Assessment and Progression
- Future Scientists



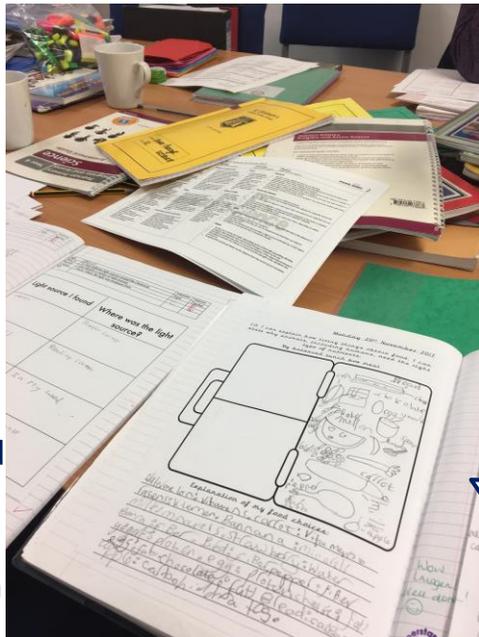
Growing Outside

Working Scientifically 2017

Debbie Eccles

primarilyscience@googlemail.com
07738707415

Over the academic year of 2017/18, subject leader has been attending moderation meetings with local catholic cluster schools. Developing a 'bank' of resources from each year group that show 'expected standard' for each age range, against NC objectives. To be shared with staff Summer Term 2018 when complete.



Each year group has had the opportunity within 2017/18 year to work alongside Mandy Morrison and the growing outdoor team.



Copies of certificates kept in personal CPD folders and centrally within SL folder.

Subject leader book scrutiny @ St Peter's, Wythenshawe. 23/01/2018 – Catholic Cluster

Provided staff with the opportunity to participate in free CPD (ReachOut) for their current Science topics. Teachers given certificates to track progress, throughout online courses participants are encouraged to make notes and reflections on their progression throughout their online programme.

Your current unit



Upper Primary
Evolution and Inheritance

Unit: 1. The Big Idea
What is evolution and why is it important?

Go to this unit



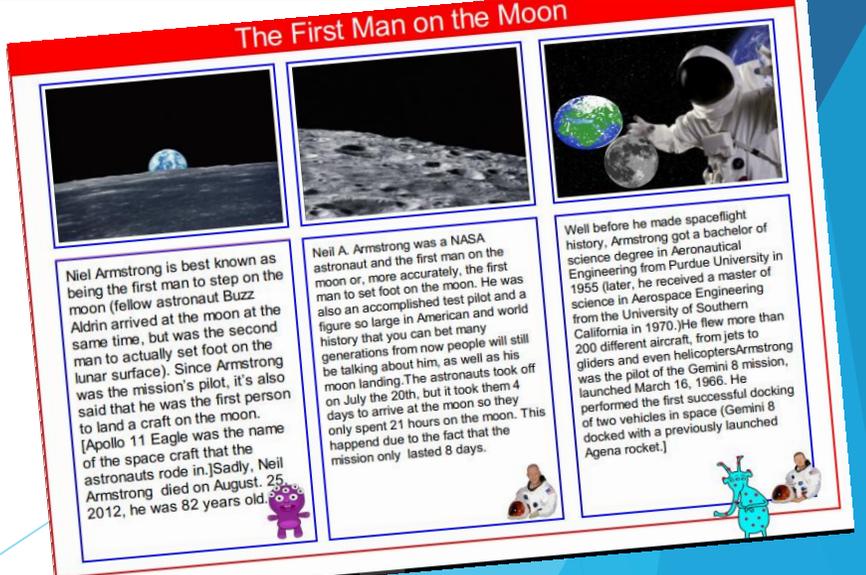
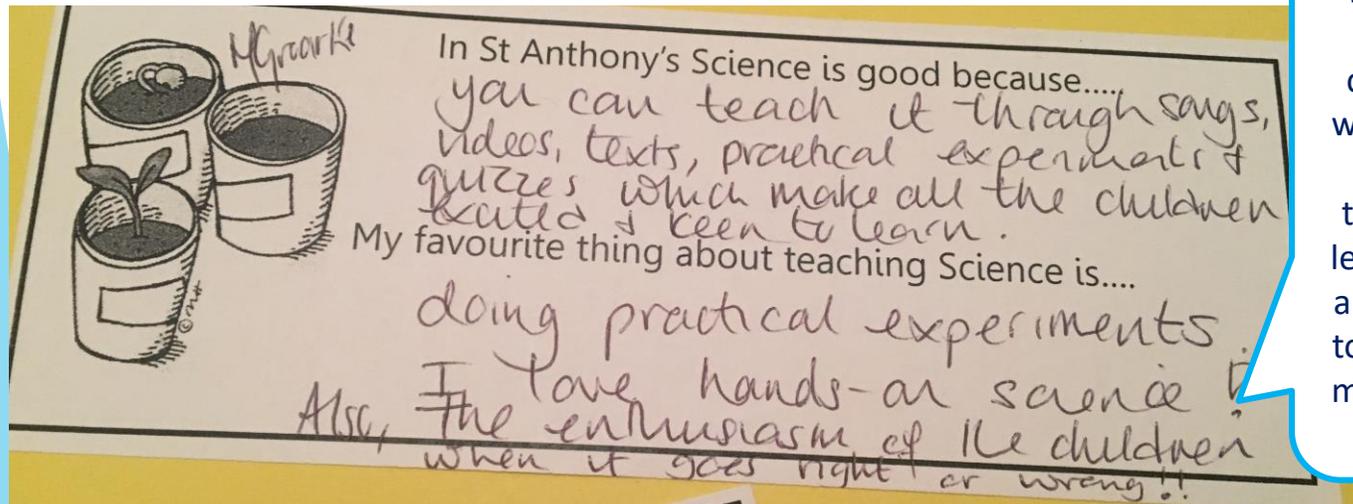
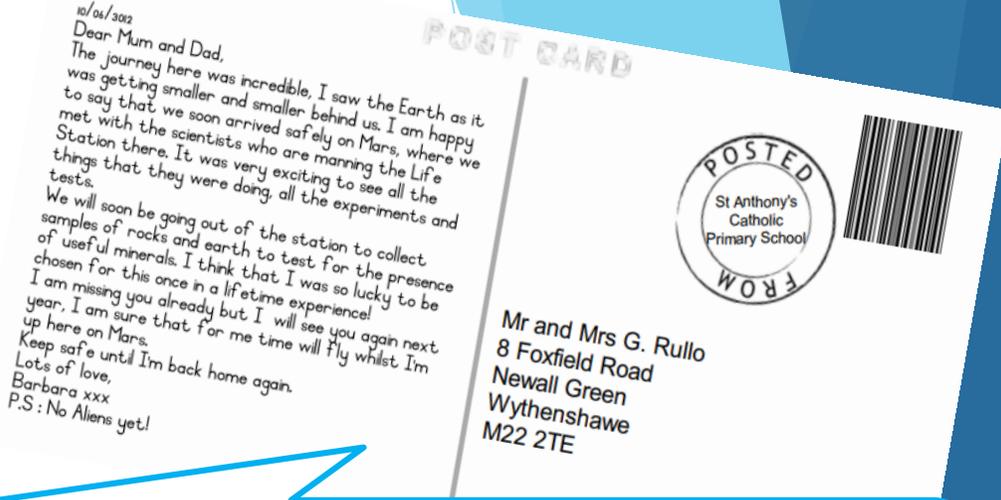
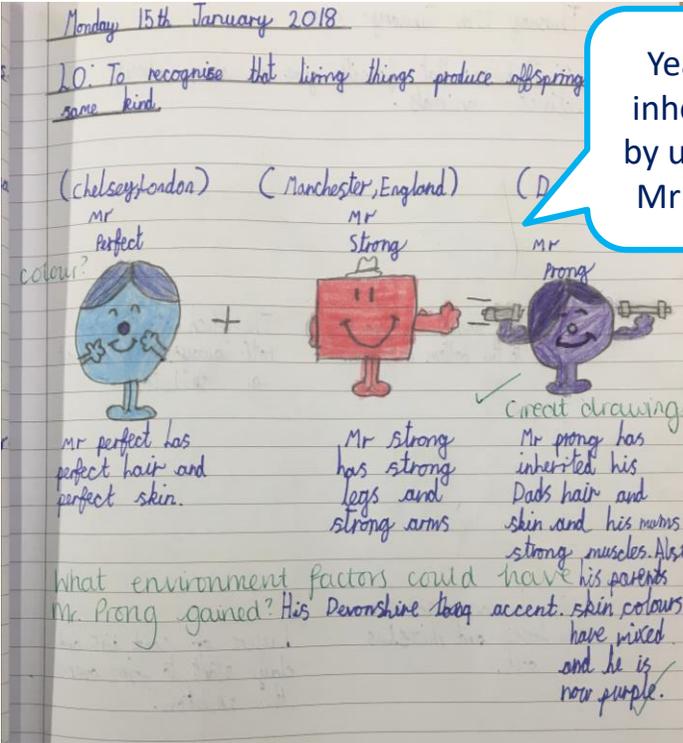
B2: There is a range of teaching and learning approaches for Science.

Year 6 have investigated inheritance and variations by using the Little Miss and Mr Men children's books.

Creating and excavating fossils. How are they created? How are they discovered?

Year 5 have been combing their English skills with Science and ICT during their Space Topic, they used the computing programme Purple Mash to write postcards home from Mars to their families and create biographies about different Space Explorers.

Teachers are passionate, creative and willing to try a range of teaching and learning styles and resources to engage and motivate their pupils.

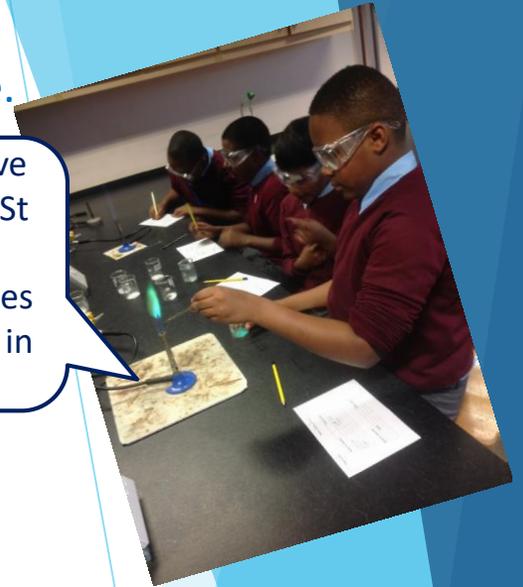


B3: There is a range of up-to-date, quality resources specifically for teaching and learning Science. ICT is used both as a tool and as a resource for teaching.

Here are just some of the high-quality texts we have used to support the teaching and learning of new Science concepts.



If there is equipment we don't have at St Anthony's, our high school – St Paul's will support us and let us borrow their equipment. Sometimes this means going to visit and work in their laboratories.



Dear Greenpeace



- BBC Terrific Scientific Resources
- Chester Zoo
- 'The Crunch' free Science Resources
- Grow Your Own Potatoes
- BP Education Online Resources
- WWF Green Ambassadors Programme
- NSTA Lesson Resources



Reorganisation of the stock cupboards and resources organised into group sections – E.g. sandwich bags for electricity that contain batteries, light bulbs, wires, crocodile clips etc.

Working with class teachers to organise and order specialist resources. E.g. Year 5 Owl Pellet Investigations – Summer 2017



M Seymour <m.seymour@st-anthonys.manchester.sch.uk> to me

Hi Leah,

I have attached the costs for the owl pellet investigation. I have based it on groups of three but this could be increased to four. Any more than that I don't think the children would gain from it as much. The practical itself would be for one lesson with 2 - 3 lessons of study around it.

Thanks

Michelle

12/03/2017

C1: All pupils are actively engaged in a science enquiry; using a variety of enquiry strategies, independently making decisions, using evidence to answer their own questions, solving real problems, evaluating their work.

Feedback from Head teacher following performance management Science observations.

C Fox <c.fox@st-anthonys.manchester.sch.uk>
to A, E, e, Claire, C, me, joanna, Alexandra, A, M

Dear All,

I may have recently popped into your class and, either watched part of a lesson, spoken to children or carried out a learning walk. Feedback is not always appropriate and often you are busy with children.

I was talking to a small group of staff, following tonight's meeting, and I explained that when I am observing, part of the monitoring process is to collect evidence to support (our judgements as a good school) our self assessment. Where possible, I want to encourage you to aim for outstanding and I will try to support you or give advice on how you might achieve this.

I am delighted to say; the lessons and classrooms I have visited have demonstrated good and outstanding practice. This is something that we should be proud of and we need to celebrate and share this good practice. I have been impressed with what I have seen in science and I can honestly say it has been a pleasure to see and hear, excited children filled with awe and wonder 'Wooping' at the resources or the things they have investigated, discovered and learnt.

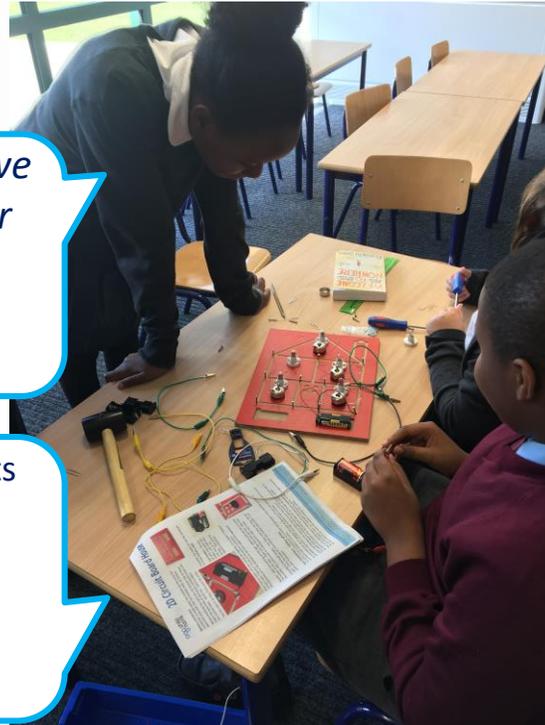
Well done to everyone and keep up the good work.

Mrs.C.P Fox

Headteacher
St. Anthony's Catholic Primary School
0161 437 3029

"It's always much more fun when we know that we might get to use our Science in real life, when we get older and get a job and own a house." – Jayden, Year 6.

Gifted and Talented Year 6 scientists designing and testing their own circuit boards for a house. Investigating series and parallel circuits and investigating their predictions.



21/11/2017

C1: All pupils are actively engaged in a science enquiry; using a variety of enquiry strategies, independently making decisions, using evidence to answer their own questions, solving real problems, evaluating their work.



Year 6 investigating and testing a range of series and parallel circuits; problem solving and demonstrating their knowledge of electrical components.

Year 1 were out on the playground investigating air resistance. They were designing and making parachutes to help their aliens land safely on Planet Earth!



Working Scientifically
 What factors affect the separation of salt from water during evaporation?
 We are investigating evaporation. I predict that the solution that is kept in the fridge will form crystals and evaporate at a much slower rate than those in other locations as when I have wet clothes that will not evaporate if kept in a cold environment but if in a hot environment therefore will create fewer crystals. I predict the solution kept in on the radiator will create and form larger salt crystals faster as when I want to dry my clothes applying heat will help the water to evaporate.

Controlled variables (What I keep the same)

- the volume of salt solution in each cup.
- the temperature of water in which to dissolve the salt.
- the length and the thickness of each string and the type of string.
- the capacity and shape of each cup.
- the same type and brand of salt.

Check and observe all the solutions are at the same time.
 Create the solutions at the same time.

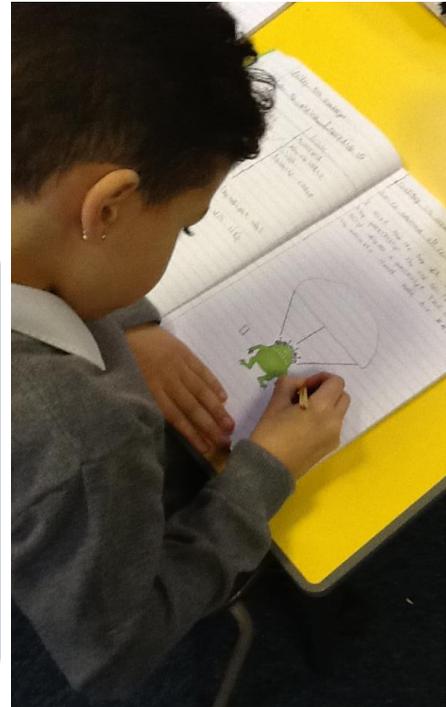
• the temperature in which the solutions are left to evaporate and their locations.
 Dependent variable (what I measure)
 • the volume of solution remaining in the container (cups).
 • Observe the size and quantity of salt crystals formed.

Equipment

- measuring cylinder
- piece of rope (20cm)
- table salt
- x8 cups
- 5 drops of food colouring
- pipette
- 50ml of water in each cup
- 200g of salt
- pencils x8
- scale

Diagram

Year 5 planning their evaporation and separating materials investigation; looking at independent and dependent variables. With a whole class focus on developing scientific vocabulary.



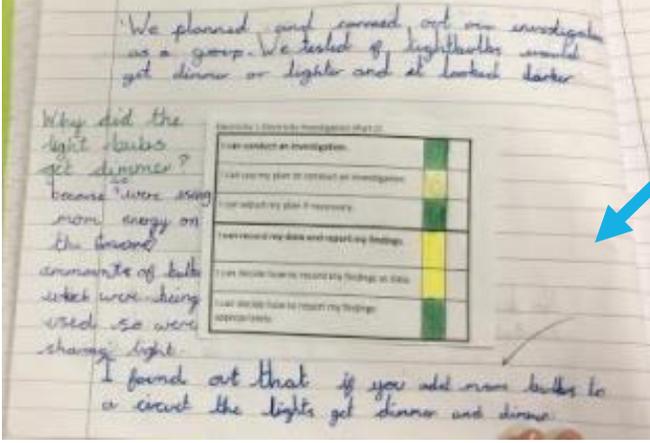
C2: The purpose of science assessments is well understood and shared by the members of the school community. Assessment approaches are designed to fit those purposes.

5b	5b+	5w	5w+	5s	5s+	6b	6b+
	Alana H	Alissia B Amelia K	Holly B		Antonina A Hollie A Jack B Bradley L Irene M Grace M Faye Jane W	Sephora B Catherine C Izabela K Oscar L Ebu N Olivia O Patrycja O Jake R Casper S	Ryan D Kelechi E Jayden Lee M Prava R

For example: (Year 6) **Light pink, yellow and green** sections highlight pupils that are on track for meeting end of year expectations.

Teachers are able to see NC objectives clearly and comprehensively and update the pupil profiles formatively, thus saving time when they are completing their summative assessment. GAPs analysis are available to show teachers focus groups, inform planning and identify any areas of revision that is needed.

Statement	Band	Mastered	Achieved	Working Towards	Not Begun	Antonina A	Hollie A	Holly B	Alissia B	Jack B	Sephora B	Catherine C	Ryan D	Kelechi E	Alana H	Amelia K	Izabela K	Bradley L	Oscar L	Irene M	Grace M	Jayden Lee M	Ebu N	Olivia O	Patrycja O	Prava R	Jake R	Casper S	Faye Jane W
Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. (Animals, including humans)	6	0 (0%)	0 (0%)	0 (0%)	24 (100%)																								
Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. (Animals, including humans)	6	0 (0%)	0 (0%)	0 (0%)	24 (100%)																								
Describe the ways in which nutrients and water are transported within animals, including humans. (Animals, including humans)	6	0 (0%)	0 (0%)	0 (0%)	24 (100%)																								
Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. (Electricity)	6	0 (0%)	17 (70.8%)	7 (29.2%)	0 (0%)																								
Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. (Electricity)	6	0 (0%)	17 (70.8%)	7 (29.2%)	0 (0%)																								
Use recognised symbols when representing a simple circuit in a diagram. (Electricity)	6	0 (0%)	24 (100%)	0 (0%)	0 (0%)																								
Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. (Evolution and inheritance)	6	0 (0%)	0 (0%)	0 (0%)	24 (100%)																								



End of lesson assessment consistent throughout the school, combined with whole school marking policy. Any misconceptions addressed after the lesson through questioning. Teachers annotate planning and children's work.



Steps Attainment Summary
Y6 '6LV' - All Pupils (24 pupils)

My Assessment	Success Criteria	Mr. Fairbrother's Assessment
	I can use the correct terminology with fluency i.e. conductor, insulator, magnetic etc.	★ All
	I can recognize which materials conduct heat and which insulate.	★
	I can recognize the need for both of these qualities.	★
	I can recognize which materials conduct electricity and which insulate.	★

All staff have recently (January 2018) taken part in new assessment training for Target Tracker, this enabled staff to understand the multiple ways to view Science data they have imputed thus giving comprehensive tailored reports that highlight whether pupils are above, below or meeting expectation.

Year 6 (24 pupils)	Number of Pupils (%) assessed in each Step as at Year 6 Autumn 2															
	Reading	No. (%)	4w+	4s	4s+	5b	5b+	5w	5w+	5s	5s+	6b	6b+	6w	6w+	6s
Pupils	24 (100%)			1 (4.2%)	2 (8.3%)			1 (4.2%)	1 (4.2%)	7 (29.2%)	8 (33.3%)	4 (16.7%)				
Males	9 (37.5%)								4 (44.4%)	4 (44.4%)	1 (11.1%)					
Females	15 (62.5%)			1 (6.7%)	2 (13.3%)			1 (6.7%)	1 (6.7%)	3 (20.0%)	4 (26.7%)	3 (20.0%)				
In Care	1 (4.2%)				1 (100%)											
FSM	5 (20.8%)				2 (40.0%)			1 (20.0%)				2 (40.0%)				
Not FSM	19 (79.2%)			1 (5.3%)					1 (5.3%)	7 (36.8%)	8 (42.1%)	2 (10.5%)				
Pupil Premium	10 (41.7%)				1 (10.0%)			1 (10.0%)	1 (10.0%)	4 (40.0%)	1 (10.0%)	2 (20.0%)				
Not Pupil Premium	14 (58.3%)			1 (7.1%)	1 (7.1%)					3 (21.4%)	7 (50.0%)	2 (14.3%)				
SEN Support	4 (16.7%)			1 (25.0%)	2 (50.0%)						1 (25.0%)					

C3: Children enjoy their science experiences in school

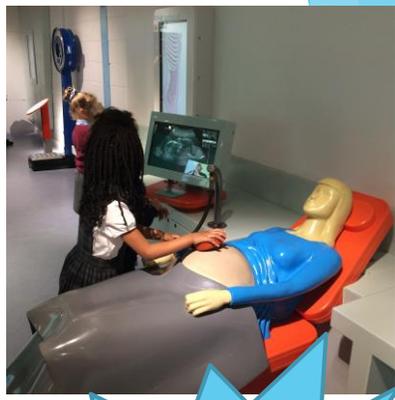
The highlight of our Sir David Attenborough challenges was a very smelly task. Each class was sent some animal poo samples! Unfortunately, the zoologist had forgotten to label which animal each poo belonged to! To find out, we had to look very carefully at what was inside. We looked for fruit, nuts, seeds and leaves to see if the poo belonged to a herbivore, bones for a carnivore and both leaves and bones for an omnivore. Once we had figured what was in each sample we were able to match up the sample to the correct animal. It was a smelly task but lots of fun!



Year 6 Fossil Task



Year 6 enjoyed making (and eating) their own Ice Cream when looking at melting and freezing points.



Year 1 Eureka Visit



Designing, making and excavating fossils.



This is where it got messy, we had to mix it altogether using our hands.

A lot of the children thought the mix felt slimy and really enjoyed squishing it and wanted to make more! Some children rolled their bird food into balls, others put it into small plant pots which we put holes in and threaded yarn through so they could be hung from trees.



EYFS Growing Outdoor Visit

In Year 3, we have been looking at 'The Human Body' We worked together to assemble all the bones in the correct places. It was tricky but we had fun!



Year 4 MOSI Visit

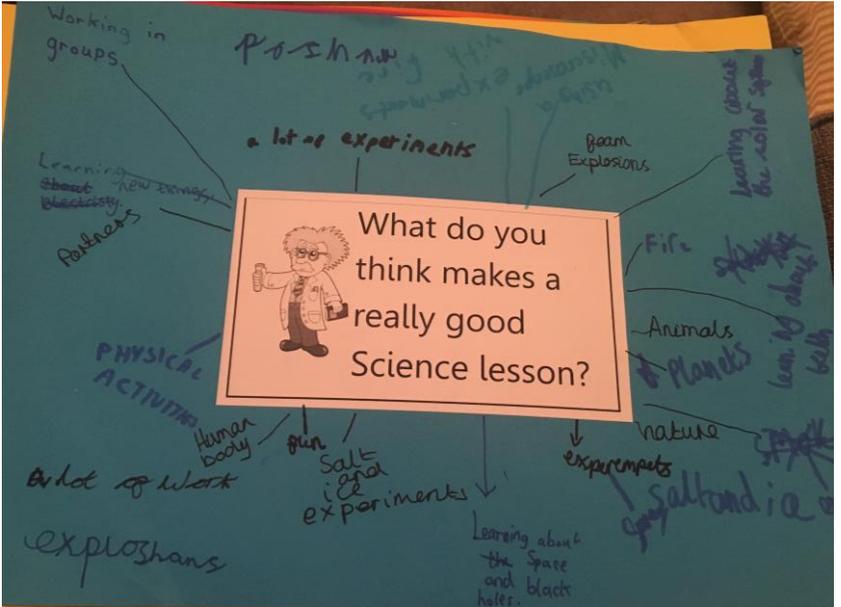


Year 5 Activities

In Science lessons, Year 5 learned about living things. One particularly enjoyable lesson was when we dissected owl pellets to learn about the feeding habits of owls, their hunting techniques and how to classify animals based on their remains. We found lots of bones in the pellets and some of us were lucky enough to find the skulls of various prey.

C3: Children enjoy their science experiences in school.

Mrs Verma also held a pupil voice session at lunch time to get children's opinions of Science at St Anthony's.



I enjoy Science because it's fun,
I enjoy science because you get to do experiments

I enjoy science because we make a new thing a new Day and a new project a new Day as well. I also enjoy it because you learn species all over the planet.
Lucas Graham 2CT

Science is important because you can learn new experiments and fun activities. It is also important because you can find out who created time and it gets messy when you do an experiment.

Science fair

What has been your favourite thing about Science?

Science fair families

Science fair

electricity

electric

Space

Planting with Mandy.

Planting seeds

magnets

In Year 5 we disappet a owl pallet (that was fun) Antonina 6/4

Materials I like planting seeds in class.

D1: Science supports and links with other curriculum areas and contributes to maximising whole school initiatives while retaining its unique status.

The school councillors visited the Geodome at Manchester College and looked at sustainable growing in our community.

All around school we have reading areas to promote Science. On display in our library at the moment are all Year 5's Science Space Homework Projects and Year 4's Rainforest displays.

Reading Areas



School Council

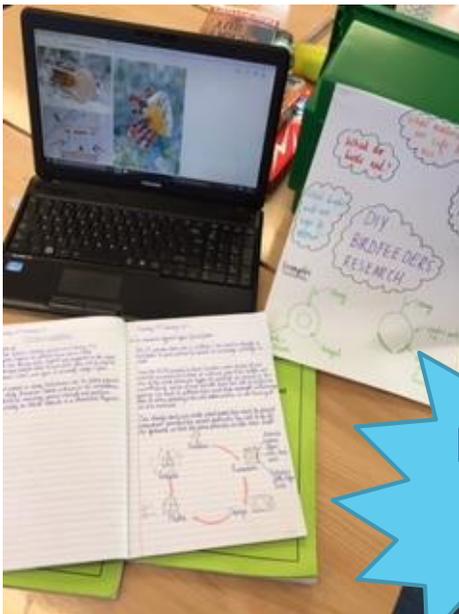
Maths



Miss Paton even created a reading stall at our Science Fair to help everyone choose books that linked to their topics and promote a love of reading. Have a look at our new outdoor reading garden. We are designing it and making it ourselves. It will be full of fruits and vegetables that we've helped to grow and space for animals to live and feed.



D1: Science supports and links with other curriculum areas and contributes to maximising whole school initiatives while retaining its unique status.



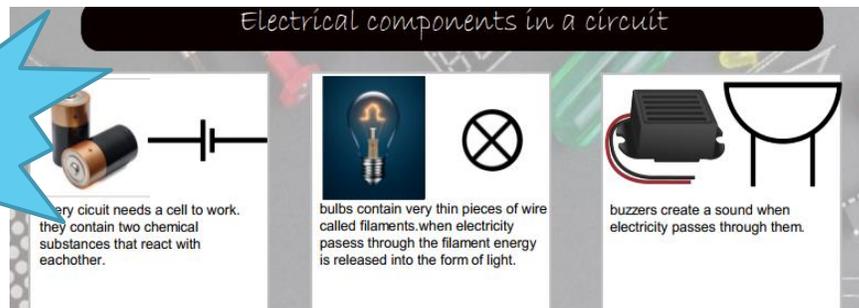
Design Tech



Year 6 designed and made their own bird feeders for our school environment. They then wrote detailed instructions to inform everyone of the process they went through.

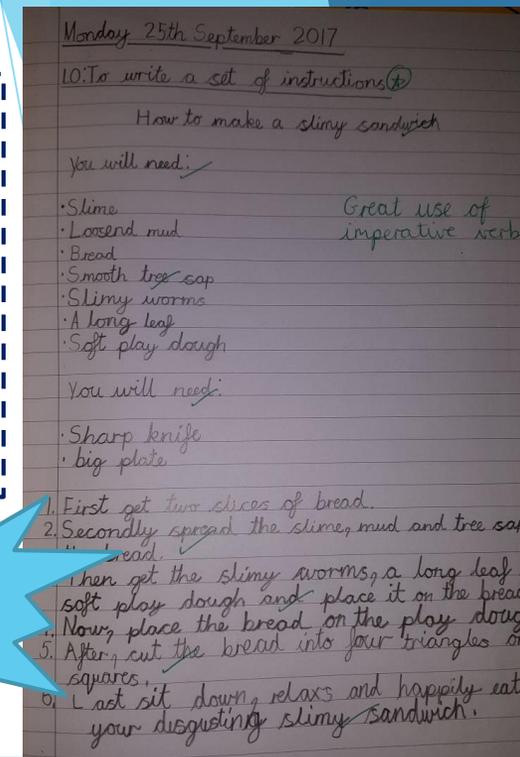
Children right across the school have been using Purple Mash programmes to develop their scientific skills. We've planned investigations, written reports and played games that link to our science objectives.

ICT



During Year 2's healthy eating topic, they looked at the book 'The Disgusting Sandwich by... and wrote their own instructions for a revolting lunch. They even were allowed to have a go at making it!

English



“Since introducing Purple Mash to our computing curriculum, it has been easy to see the impact on cross-curricular learning. I have recently read some great information sheets designed by Year 6 on electrical components – these are on display in our computing suite.”

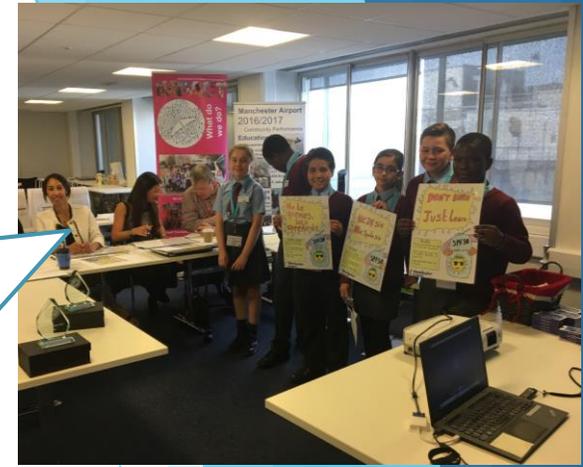
Mr Thirsk, Computing Coordinator

D2: There are clear links to other schools and outside agencies/organisations/communities to enrich science teaching and learning.

The RSPB came in and completed workshops with Years 2, 4 and 6. We completed a 'Bioblitz' becoming more familiar with our outdoor environment, classifying species and taking part in a mini-beast hunt.



Year 6 worked alongside a panel of experts at Manchester Airport to create an informative and scientific poster and radio advert for their 'Safety in the Sun' campaign



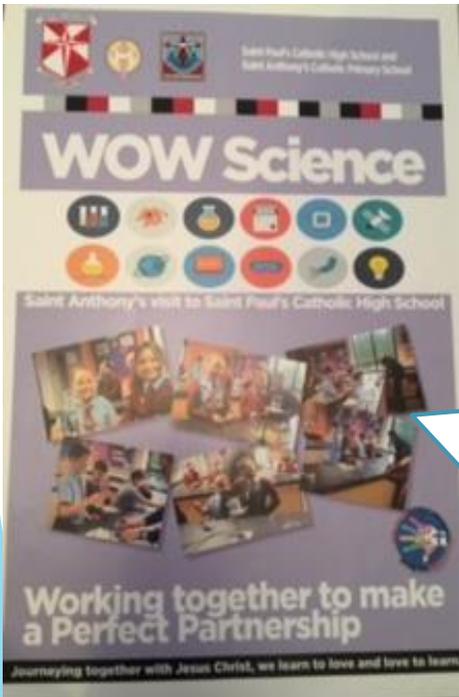
St Paul's High School invited Year 5 to visit and take part in their WOW Science Days. Year 11 pupils also came and did amazing science demos at our Science Fair.



Mrs Hutchinson from Whalley Range High School came and spent the day teaching us about the Duke of Edinburgh Award and how we are able to look after our local environment and wildlife habitats.

Mr Thirsk and Mrs Verma's class were able to visit The Forum Library in Wythenshawe to take part in some practical, hands-on Science activities.

Year 6 looked at the digestive system and took part in 3 investigations that showed various points of food consumption.



D2: There are clear links to other schools and outside agencies/organisations/communities to enrich science teaching and learning.

Throughout the year, all children have the opportunity to work with the **'Growing Outdoors'** team. Outdoor learning with a science focus. A newsletter is produced after each session.



In Year 2, Miss Fould's, Mr Thirsk's and Mrs Burn's classes - went outside to learn about growing healthy foods, learnt about how plants grow and they even planted their own vegetables.

School councillors from our school visited the spectacular GeoDome at Manchester College to learn about where our food comes from, sustainability and trying to inspire everyone to be Real Food Ambassadors.



We played games, pretended to be squirrels to hide our nuts and seeds and learnt how to classify materials and objects found in our school environment.



Year 6 WWF Green Ambassadors

What is a Green Ambassador?



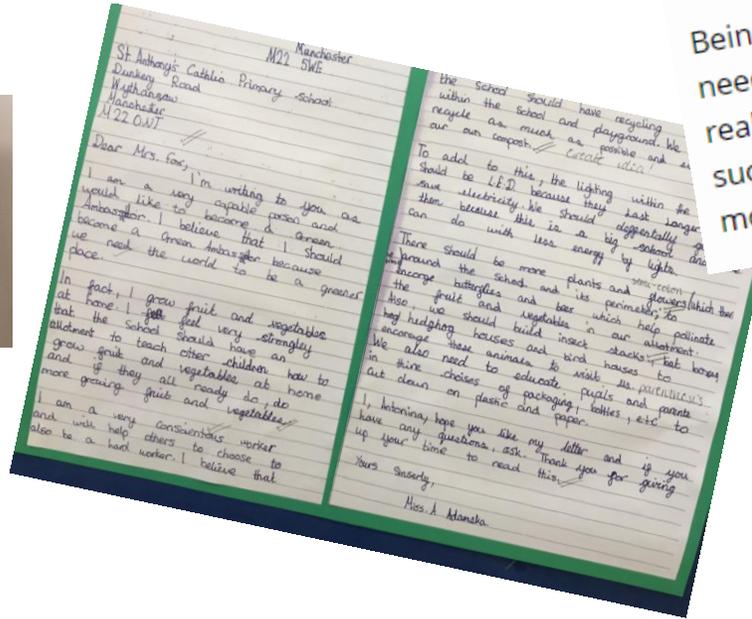
Our Year 6 pupils all had the opportunity to apply to become a 'Green Ambassador' for St Anthony's Primary School.

We researched what other schools were doing to be more eco-friendly, we spoke to our family and friends and we did our own research so support their applications.

Green teams (or eco-teams) are great for motivating and engaging pupils. They help build communication, team skills, and confidence - important qualities if you're keen to get some great environmental projects going in your school!

Being part of WWF's Green Ambassador scheme provides everything you'll need to set up or re-invigorate your school's green team so your pupils can really take ownership of sustainability in your school. And that's not all: successful green teams can help reduce schools' carbon footprint and save money!

I am really excited to be a G.A., there are lots of ways we can become 'greener' and we are allowed to make new decisions to help our school. These changes will hopefully last after we leave.



Letters were written to Mrs Fox (our head teacher) – highlighting the skills they have, proposing their ideas and how they would support their school in their new role! Very exciting!



Science Newsletters

We love to keep parents, guardians, governors and our local community informed about our Science successes.

EYFS News

Our outside area is looking much brighter thanks to Mr Fletcher and parent helpers who painted the planters. Last week Dawn from 'Growing Outside', came to work with another group of parents to help the children plant bulbs.



Year 5 Activities

In Science lessons, Year 5 learned about living things. One particularly enjoyable lesson was when we dissected owl pellets to learn about the feeding habits of owls, their hunting techniques and how to classify animals based on their remains. We found lots of bones in the pellets and some of us were lucky enough to find the skulls of various prey.

We also took part in the noble sports of worm charming and snail racing. Our worm charming competition was a success, everyone managing to charm a worm out of the soil. Snail racing was truly a 'blink and you'll miss it' affair. Before the race, we had to ensure our snails were given a good diet and plenty of training. We found our own snails and enjoyed learning about how they moved so easily along rough terrain.

Year 1 News

Trip to Eureka

Year 1 had a fantastic time visiting Eureka Children's Museum. In the 'All About Me' gallery, we looked up a giant nose, scanned a pregnant mummy's tummy and saw what we will look like in a few years from now! In the 'Living and Working Together' gallery, we explored the child-sized town and tried out lots of different jobs. We worked in a bank, a post office and a supermarket. We had so much fun exploring and learning together, that many of us fell asleep on the journey home!



Amazing Animals. In Science Year 1 have been learning about animals. We couldn't believe it when Sir David Attenborough wrote to us asking for our help. He sent us some films of wildlife which we needed to narrate using lots of descriptive vocabulary. We also invented our own new species, producing fact files about our new wacky animals. Later in the week, we helped Sir David with one of his recent studies about British birds. First of all, we needed to recognise and name different types of birds. Once we were experts, we went outside and sat very quietly looking and listening for signs of birds. We were surprised how many different birds flew over our school field. Later, we made birdfeeders to encourage more wildlife to nest in our school grounds.

Year 4 News

Museum of Science and Industry Trip

Year 4 have had a fantastic autumn term, with lots of exciting things to report. Our trip to the Museum of Science and Industry was fascinating, with lots of learning activities going on all day long. We came away knowing lots more about electricity and how we can be safe around it. We also managed to explore other aspects of science in the 'Experiment Gallery', which is well worth a visit.



Year 2 News

Our topic for the first half term is called 'The Wonder of Me'. We will be looking at the different ways that we can keep healthy and safe, as well as celebrating the qualities that make us all different. Our end presentation for this topic will be a 'Wellbeing Day'. Children will be invited to take part in a range of activities that will bring together everything they have learnt throughout the topic - more information will follow in due course.

Over the next three weeks, each class will be taking part in fun, practical Science sessions with Mandy Morrison. These will build on the knowledge that the children have gained in lessons. You may even get to see some of the children's work that they will bring home!