

1

MERCURY

Mercury was discovered by Assyrian astronomer.
 Discovery date 1400 BC
 named after Roman god of messengers
 temperature -173°C Cold of early days in a year 88

VENUS

Discovered by Babylonian astronomer
 discovery date 1700 BC
 named after Roman goddess of love
 colour is bright yellow
 made of rock
 moons 0
 days in a year 243

EARTH

temperature -88°C to 53°C
 cooler blue, green, white
 made of rock metal
 moons 1
 days in a year 365.25

1

Scientist Fact File

Name: Louis Pasteur


Born: 1822

Place of birth: France

What did Louis discover?
he helped show that germs can only come from other germs

Why did Louis carry out this research?
so we could stay safe from germs

Write 2 interesting facts about Louis
he was the first to use pasteurisation
also he helped prove that germs are everywhere



Working Scientifically (1 of 3)

1

What we will do ...

We will be making our letters
then we will put them in a bag
and we will see how many we can get
we will see if we can get more than we predicted

We predict...
about 100

We will change...
the material

We will make it fair by...
using the same bag

Wall of Wonder

How do batteries work?

Why do circuits get hot when we are working with them?

Who invented batteries?

What year?

How many letters?

What are the letters?

How small?

Why do we use them?

How many letters?

What year?

1

Classifying Countries

Monday: Mammals: lion, giraffe, chimpanzee, bear-backed bear, moose, bear. Not mammals: Charleevon, porcupine, dragon, Komodo dragon.

Tuesday: More than 1 leg: kangaroo, octopus, hissing cochrane, lobster. Less than 1 leg: Mammal, bird, etc.

Wednesday: Not a bird: giraffe, monkey. African: elephant, lion. Not a mammal: Charleevon, Komodo dragon. Not a bird: giraffe, monkey. Not a mammal: Charleevon, Komodo dragon. Not a bird: giraffe, monkey. Not a mammal: Charleevon, Komodo dragon.

1

Observe and record the weather over the week

Monday	Tuesday	Wednesday	Thursday	Friday

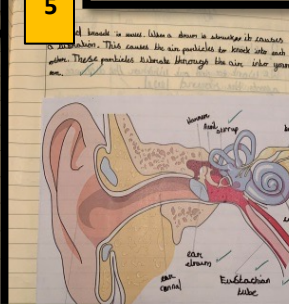
2

Year 4 Mission

Hello Agent, Jamie Bond needs your help! When chasing the baddies on his last mission, he slipped! Jamie Bond's shoes did not generate enough friction when running and... The bad guys got away!

Your Mission

You need to find out how much force is needed to move a shoe across different surfaces.



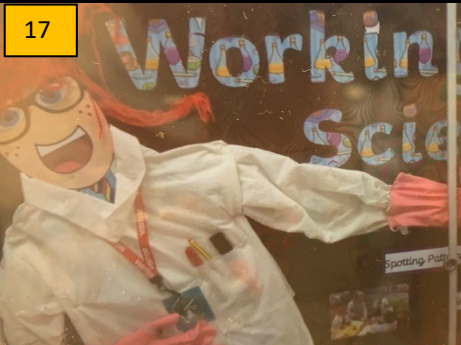
5

clapping	1m	100/100	The sun gets so hot that it was... The sun has a longer way to travel so it gets weaker as it travels.
clapping	4m	70/100	The sun has a longer way to travel so it gets weaker as it travels.
clapping	8m	50/100	The sun has a longer way to travel so it gets weaker as it travels.
clapping	10m	30/100	It was almost impossible to hear.
clapping	11m	0/100	It was now impossible to hear.

Conclusion

We found out that every time you get further away you are the quieter the noise. This is because the sound waves spread out over a larger area so there are fewer waves hitting your ear.

	EYFS	KS1	Lower KS2				
Plan	<ul style="list-style-type: none"> explore during their play and repeat an action / test making it obvious they are trying to find something out and see if the result is always the same recognises when a simple comparison is unfair 	<ul style="list-style-type: none"> with help begin to choose ways to try and answer a question take a few guided planning decisions recognise when simple test is unfair make own suggestions on how to collect data once the data needed has been outlined make simple prediction if appropriate (based on something they have observed before but without an explanation) 	<ul style="list-style-type: none"> begin to choose ways to try and answer a question put forward own ideas and make some planning decisions suggest ways of making the test fair or if it can't be fair how they will answer it by looking for a pattern from a selection say what equipment is needed suggest the type of data needed to be collected make simple predictions based on everyday experience and knowledge 	<ul style="list-style-type: none"> ask a question choose methods gather information list data decide what data to collect make predictions based on scientific knowledge 	<p>The sequencing of lessons helps the children apply their subject knowledge through practical work. Their learning is consolidated.</p> <p>Year 4 Teacher</p>	<p>When a guitar is played and played the pitch of the notes changes through the year. The vibrations through your ear and waves of your ear drum so you can hear.</p>	<p>clapping 1m 100/100 The sun gets so hot that it was... The sun has a longer way to travel so it gets weaker as it travels.</p>
Do	<ul style="list-style-type: none"> observe closely using all of their senses as appropriate during their play repeat an action/test making it obvious they are trying to find something out and see if the result is always the same compare 2 (3) things by direct observation 	<ul style="list-style-type: none"> make observations related to the task or test use simple equipment provided measure using uniform non-standard units (e.g. straws) or simple standard units and measuring equipment - meter stick, cm, kg masses, 1 jug & second timer compare 3 or more things read scales to nearest labelled division. 	<ul style="list-style-type: none"> carry out a fair test or pattern seeking enquiry with help compare 3 or more things use simple standard measures: m, cm, mm, kg, g, cm3, minutes, seconds, Newton - measure to the nearest whole or half unit or mixed units. read scales to the nearest division labelled and unlabelled. 	<ul style="list-style-type: none"> make a series of measurements adequate to the task select appropriate measuring equipment use standard measures as in including using fractions and mixed units and decimals to place. read scales with increased accuracy compare 5 or more things select apparatus and use with care read scales with precision and accuracy appropriate to the task repeat readings & find averages 			
Record	<ul style="list-style-type: none"> draw pictures of results/take photos help teacher make a class table or chart complete a simple chart or two column table make practical block graphs/pictograms make/draw a block graph with a 1:1 scale 	<ul style="list-style-type: none"> draw pictures of results/take photos help teacher make a class table or chart complete a simple chart or two column table make practical block graphs/pictograms make/draw a block graph with a 1:1 scale 	<ul style="list-style-type: none"> construct a simple 2 column table draw bar charts 1:1, 1:2, 1:5 and 1:10 scale & begin to plot line graphs 	<ul style="list-style-type: none"> present information clearly in tables including repeat readings record observations and measurements systematically draw bar graphs more complex scales possibly involving fractions or decimals e.g. 1:2.5 draw line graphs, possibly involving fractions and decimals 			
Review	<ul style="list-style-type: none"> Make comparisons Say what happened order results (first, second, third) Spot similarities and differences 	<ul style="list-style-type: none"> describe observations Say what they have found out Say whether what happened was what they expected 	<ul style="list-style-type: none"> Say what they have found out and give an explanation for observations and simple patterns based on everyday experience 	<ul style="list-style-type: none"> use graphs to spot and interpret patterns/trends in results draw conclusions using these patterns and begin to relate conclusions to scientific knowledge and understanding consistent with the evidence offer simple explanations for differences in 			



Working Scientifically (2 of 3)

Roles

We work in science groups and its fun because we all have a job and of we don't do it, the main scientist (Lead scientist) make sure we do.

Year 4 pupil

7

Franklin
Miley
Summer
Heidi
Olivia

Ohms
George
Adam
Libbie
Lydia

Volta
Jess
Mmnesuma
Josh

Tesla
Uche
Lucia D
William B
Issy G

Darwin
William S
Harry M
Christopher
Katie

Edison
Harry S
Mark
Sonny
Luke

It was fantastic to observe such an enthusiastic teacher. I became excited myself in that lesson!

Year 3 teacher

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St Matthew's Catholic Primary School

Chn working well in groups. Learning is maximised through discussion and cooperation (Group roles).

Teacher is keen to intervene when children are using the equipment. Children not given opportunity to problem solve and higher order thinking skills. Pupils select the equipment they will produce with.

After reflection, I really understand the relevance and impact of drawing upon these principles within lessons.

Year 3 teacher

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Lesson 1
R=Lab Technician
P=Lead Scientist

Lesson 2
R=Experimenter
P=Co Experimenter
G=Lab Technician
O=Lead Scientist

Lesson 3
R=Co Experimenter
P=Experimenter
G=Lead Scientist
O=Lab Technician

Lesson 4
R=Lead Scientist
P=Lab Technician
G=Co Experimenter
O=Experimenter

Next steps?
To improve further, use a 'hook' at the beginning so that children can relate to the learning. How could you do this?

20



Science is great when we are...

Learning about Real Scientists

Questioning and Being Curious

7 Lab Technician

- Gathers and tidies away equipment
- Records all findings and data

Lead Scientist

- Checks that everyone is keeping to their role
- Checks that the equipment is being used safely

It's good when sir tells us how to work like real scientists. I know that I need ask questions and tell the class what we found out.

Year 2 pupil

17



Experimenter

- Works with the Co-Experimenter
- Uses equipment to find data
- Gives data to Lab Technician

Co-Experimenter

- Works with the Experimenter
- Uses equipment to find data
- Shares data with Lab Technician

The pupils in my class are really starting to talk about the principles that we have developed. They like that there are pictures to demonstrate these. The Lead Scientists loves to keep them on task by saying things like "You need to say scientists words".

Year 1 Teacher

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19 Appendix

Amendments to Policy due to COVID-19 pandemic 2020

***Aims of Policy**

Please note that with regards to the implications of science and the future, children will continue to learn about how the spread of infectious diseases can be minimised and how society may change in light of the Coronavirus epidemic

***Objectives of policy**

7

OBSERVER: L. Evans
FOCUS: Human & other animals
What is the impact on the children's Learning?

Children aware of their roles and responsibilities
Health and safety

7

... progress in knowledge or through practical discussion and observations

Well resourced lesson used to engage and motivate children

Good use of role types to maximise collaboration and progress in Working Scientifically.

7

Children engaged and love learning/heard/learned Singapore style of learning / children beginning to lead learning

Roles given to each group to allow collaborative MA of learning.

St Matthew's Catholic Primary School

Curriculum

Science

Statement

St Matthew's Catholic Primary School understands Science as an essential component of all subjects and as a subject in its own right. A good understanding of scientific knowledge and conceptual understanding helps to support pupils work across the curriculum.

On this page, you will find relevant information about the Science Curriculum at St Matthew's.

- Science Policy 2020 including Covid-19
- Science Curriculum Vision 2020
- Science Curriculum Map 2019 - 2020
- Science End of Year Milestones 2019 - 2020

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I predict that the foil will be the best thermal insulator because if you put the shell side of the foil over the outside it will absorb the heat and the shiny side keeps the heat in.

Results

We will be measuring and recording the temp (°C) over time.

material	Start	2min	4min	6min	8min	10min	15min	Difference
woolly paper	57	54	52	50	48	47	44	13°C
paper	57	53	50	49	46	45	41	16°C
scourer	57	55	53	50	49	47	43	14°C
wool	57	55	52	50	49	48	43	14°C
dish cloth	56	54	52	50	48	47	44	12°C
control	50	53	45	44	42	41	38	15°C

Conclusion

In our investigation we found out that the dish cloth was the best thermal insulator because it was still at 12°C. The paper was the worst insulator. This is shown by our results where the dish cloth started at (57°C) and it went down by 12°C so it ended at (44°C). The paper started at (57°C) but it fell by (16°C) and it ended at (41°C). My prediction was wrong because I thought the foil would be the best thermal insulator. This was a fair test because everyone else got the exact same results but the control started at (50°C) when the others were (56-57°C). So it started at (57 or 56°C) it would still be the best one. (Can you think of a material that would be a better thermal insulator?) Well done! That may be a better thermal insulator.

8

• Size of the cup
• The place the cups are left
• Type of thermometer used

Prediction

I Prediction Predict that the cup will be the best insulator because it is hard. They all had cups James - we are looking at the materials wrapped around them!

Results

We will be measuring and recording temperature (°C) over time

material	Start	2min	4min	6min	8min	10min	15min	Difference
woolly paper	57	54	50	49	46	45	41	16
paper	57	53	50	49	47	43	43	14
scourer	57	55	53	50	49	48	43	14
wool	57	55	52	50	49	48	43	14
dish cloth	56	54	52	50	48	47	44	12
control	50	53	45	44	42	41	38	15

Conclusion

In our investigation we found out that the dish cloth was the best (The best) Thermal insulator. The worst one was the Paper. The dish cloth

Working Scientifically (3 of 3)

Science	22-36 months	Children know about similarities and differences in relation to objects and materials	17. Can talk about some of the things they have observed such as plants	They make observations of plants and explain why some things occur and talk about these changes
13	15. Notices detailed features of objects in their environment	Exceeding	18. Talks about why things happen	Exceeding
	30-50 months	They know the properties of some materials and can suggest some of their purposes they are used for	19. Developing an understanding of growth, changes over time	Children know living things are influenced by human activity
14	40-60 months	They are familiar with basic scientific concepts such as floating and sinking	20. Shows care and concern for living things	They talk about the features of their environment and show how environments might vary
	21. Looks closely at similarities and differences, pattern and change			

It is really useful to see how the Yr1 teachers explain and model fair testing. I have always thought it would be too difficult to teach in Reception. I feel confident that we can now do this in EYFS.

EYFS lead

The hardest bit of science is when we write up what we have found up. It takes a long time to do and I write slowly

Year 4 pupil

11

11

95am 5.90

Conclusion

11

Sprinting 74 142 73 140

Conclusion:

I found out that when I did the exercises the exercise that raised my heart beat rate the most is the sprinting and the least is walking, as for this my results seem reliable as the furthest amount of heart beats are b. My resting heart rate is always between 70 and 75 and the both results are fair but the reliability of all our results aren't fair as on each of the sports / exercises are fair but what wasn't is that people had trousers then some had slip on shoes and also different clothes to make this fair we should all wear our P.E. kits (as they are all the same). The reliability of my results is good because I have no anomalous results. I would improve the experiment by doing it some where less unspacious (class room) like a yard.

15

Marking Codes (EVIDENCED)

SK
TABL
SD

N.B Verbally recap on PRED and FAIR


10

Prope their p
Partic partic

15

The results show that the trees are highly full of carbon dioxide. This is because Queens drive is a busy road so many cars go past which means that carbon is coming out of cars.

I know this because yesterday we went outside and we counted how many cars passed St Matthews. It turned out every 2 minutes about 120 cars go past. If we carry this, we could be in danger and all the ice caps & rivers would melt. These changes could change the way we live because we would have a happier healthier life with very fresh lungs. This is why



12

Well done! Your next step is:

What do scientists mean when they talk about the 'degree of trust'? How can we ensure there is a high degree of trust in our results?

Scientists mean a 'degree of trust' as if they were to do a test only by guessing about how much acid is in a

Scientific reporting is one of the most difficult aspects to teach. It takes time to have detailed discussions about their findings, what the data should have shown. It is much easier to use the marking codes to focus in depth at one particular aspect. The use of the visualisers to analyse good examples really helps.

Year 6 Teacher

Recommendations: Mock Deep Dive

1. Science curriculum leader would benefit from working more closely with the EYFS staff to develop a deeper understanding of learning here.
2. Teachers need to use more repetition of key facts to enable children to retain information

Intent: To continue to develop T & L at St Matthew's, to provide a supportive mechanism for other schools/HE settings, work with Parents/Carers and the local community.

Primary Quality Science Award (PQSM)

Application for 'Outreach Award' underway- completion July 2020

Criteria- Subject leadership, T &L, CPD, wider opportunities, local and wider activity. Focus on wider opportunities for this award. Including:

- Support for other schools (Primary and Secondary)
- Working with colleagues in Higher Education
- Development of resources within the local community
- Publishing journals/resources to reach wider audiences

How?

- Work with SJB/SFX to provide booster sessions for Year 5 girls and Year 5/6 boys

Outdoor Learning is one of the key priorities in this year's SDP. As you are aware, we have very limited green space on site and we needed to develop this further in order to give our children the best possible education. The health and wellbeing benefits of learning outdoors are well documented and explained in St Matthew's Outdoor Learning policy 2020.

Children will be regularly attending learning off site both at Windsor Gardens and our new allotment with the aim to include weekly or fortnightly sessions where all curriculum areas can be covered, not just science.

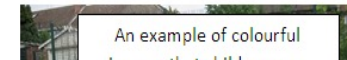
'Bucket' School

Outdoor learning will be part of our 'Bucket School'. Each child has a bucket, personalised high visibility jacket and backpack with a range of equipment in.



On Site Development

Large planters, spring bulbs and compost will help create a flower 'Maze' on site. They will be positioned so that children can play amongst them as part of playtime and have the opportunity to observe closely the changes throughout the year. Children will plant and maintain these as part of their learning on site. Additionally, this area will be transformed by a brightly-coloured mural designed by the children (like the one below). This project should make the learning at the gardens and allotment more relevant day to day. We will continue to develop the site using other areas in 2021 and beyond.



An example of colourful images that children may

Data Analysis of Teacher assessment in Autumn 1 and 2 2018

Areas for development-KS1
 Reading scales to the nearest division
 Producing graphs
 Conclusion/analysis of results

Strengths-KS1

Predicting
 Comparing
 Describing observations

Areas for development-KS2
 Use simple standard measures; cm, mm, kg, g, cm³, minutes, seconds, Newton. -measure to the nearest whole or half unit or mill units.

Strengths-KS2

Planning experiments
 Fair testing
 Identifying variables

Producing graphs
 Conclusion/analysis of

We really like the idea of introducing 'Bucket School' next year. We feel it is very innovative.

F. Vaudrey- Chair of Governors

The governors are extremely pleased that Mrs Evans has received the lottery bid and funding from Mr Jeeves to create the outdoor learning at Windsor Gardens. This is a superb addition to the curriculum at St Matthew's. **C. Seargeant- Deputy Chair of Governors**

'Show and Tell' is a great way to see the learning at school. it is extremely useful to see what the school as a whole are doing in science.

A. Fair-Science Link Governor

School Improvement Priorities

We are concentrating on resilience and mental health and wellbeing for all staff and children for the moment. We are still aware that we want to maintain high standards work towards this will start shortly.

We are also looking at the outside environment with the Windsor Gardens Project and the bucket school. We are also looking at our own outdoor environment with a local gardener who will work with the children to plant planters around the school. In the future

Cross Curricular Links (1 of 2)

It's really useful having the previous year's vocab in the plans. In the past, I made assumptions about their understanding of words and definitions.

Year 3 teacher

5

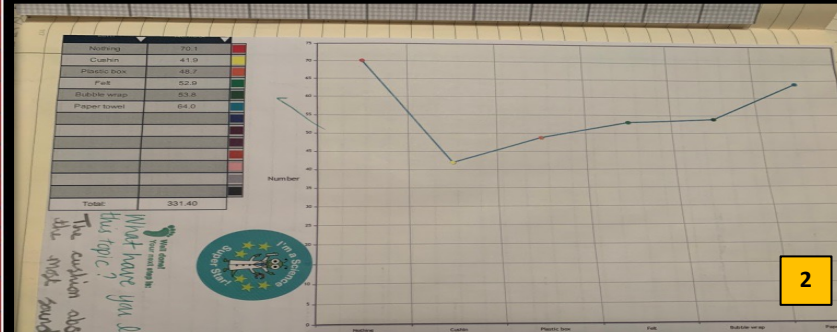
Audit-Science Books EYFS-Year 6 2019-20

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Stars and Planets (EYFS)	People who help on collection (x1)(Yr1)	Big cats- DK x2 (yr2)	DK mini- dogs, mammals, animals and insects (x4) (Yr 3)	DK mini-human body (x2) (Yr4)	DK Engineering (x2) (Yr5)	Your heart and lungs (Yr6)
African animals (EYFS)	World and weather- top facts (Yr1)	Why do I wash my hands (yr2)	Top Facts- Dinosaurs and natural wonders (yr3)	You wouldn't want to live without electricity (yr4)	DK Space travel (x2) (Yr5)	DK Science (x2)(Yr6)
Animals with wings (EYFS)	Birds and bugs- top facts (Yr1)	Invertebrates (yr2)	You wouldn't want to live without bees (yr3)	You wouldn't want to live without dentists (Yr4)	You wouldn't want to live without geography (Yr5)	DK mini Science (x2) (Yr6)
Big animals (EYFS)	Animals and ocean creatures- top facts (Yr1)	In the Garden (yr2)	Curious about dinosaurs (yr3)	You wouldn't want to live without poo (Yr4)	You wouldn't want to live without satellites (Yr5)	Ecology
Fish (EYFS)	Body and senses- top facts (Yr1)	Keeping Fit (yr2)	Curious about my body (yr3)	Electricity (Yr4)	Curious about the solar system (Yr5)	Circuits and conductors(Yr6)
Rainforest birds (EYFS)	You wouldn't want to live without antibiotics (Yr1)	A world of Microorganisms (yr2)	Peeking under your skin (yr3)	Your digestive system (Yr4)	Planets and stars (Yr5)	Mixtures and Compounds(Yr6)
1	Curious about animals (Yr1)	Natural Habitats (yr2)	Light and dark (yr3)	Why do I brush my teeth? (Yr4)	DK mini Earth (x2) (Yr 5)	Isaac Newton(Yr6)
	Taste (Yr1)	The Rock Factory(yr2)	Your bones (yr3)	Curious about saving the earth (Yr4)	DK mini Space (X2) (Yr5)	You wouldn't want to live without sleep (Yr6)
	Weather and seasons (yr1)	The Rock Cycle (yr2)	DK mini rocks and minerals (x2) DK inventions (x2) (Yr3)	DK mini-dinosaurs (x2) (Yr4)	DK mini Cars (x2)(Yr5)	
	Touch(Yr1)	Dinosaurs (yr2)	Rocks (yr3)	About Reptiles (Yr4)	Frogs(Yr5)	
	Hearing(Yr1)	Light and Colour (yr2)	Springs and Magnets (yr3)	Whales and Dolphins (Yr4)	Earth Materials (Yr5)	
	Why do I run? (yr1)	DK animals x2 (yr2)	Colour and Light (yr3)	Bears (Yr4)	Beat Off- Let's Explore the Sun(Yr5)	
	Sight (yr1)	DK reptiles and amphibians x2 (yr2)	Boeing Light and ~Shadow (yr3)	Transport Firsts (Yr4)	100 Facts about Space(Yr5)	
	DK mini Animals, insect, mammals and dogs (yr1)	You wouldn't want to live without snot (yr2)	Rocks (yr3)	Hamsters (Yr4)	Energy(Yr5)	
		Seeds to sunflower (Yr2)	Tricceptors and Horns(Yr3)	Animal Communication (Yr4)	Space Exploration(Yr5)	
		Pushes od pulls (yr2)	What we Eat(Yr3)	Save the Tiger (Yr4)	Space x 2(Yr5)	
		Materials (yr2)	Crystals and Gems(Yr3)	What's inside everyday things (Yr4)	Quiz Facts- Earth and Space(Yr5)	

Item	Number
None	70.1
Per lower	63.9
Felt	53.3
Table wrap	54.3
Plastic box	48.7
Cushion	41.9
Total:	332.20



2



2

Save the penguins!

3

Data logging/G raphing

Can use a suitable on-screen program to represent information with pictures

Can use a graph presented on screen to

distinguish between an object and the material from which it is made

identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock d

Describe the simple physical properties of a variety of everyday materials

compare and group together a variety of everyday materials on the basis of their simple physical properties.

Working Scientifically Plan

With help begin to choose ways to:
 Try and answer a question
 Take a few guided planning decisions
 Recognise when simple test's unfair
 Make own suggestions on how to collect data once the data needed has been outlined
 Make a simple prediction if appropriate (based on something they have observed before but

whispering to them about the blocks of ice on the tables. Focus their attention on the play figures frozen into the ice blocks and ask:

Challenge chn to stop the penguins from melting and to devise an investigation to explore ways of keeping their ice block from melting.

Chn fill in discovery dog sheet. Encourage independence and promote discussion of each section. (as per last session- the aim is to allow them to understanding the importance of the planning process).

Consider how you will gather the data. Will it be based on observation? Discuss the limitations of this as scientific data. Discuss why scientists use equipment like data loggers.

Chn carry out the investigation using group

Vocab

Vocab from year 1

Names of common animals – fish, birds etc., Meat-eaters, Plant feeders, Habitat, Wild animals, pets, Senses, Hear/hearing, see/seeing, Touch / touching, Taste/tasting, Wing, Claw, Tail, Beak, Fur, Feather, Fin, Scales, Amphibians, Reptiles, Mammals, Carnivores, Herbivores, Omnivores

Yr 2 Vocab

Living, Alive, Non-living, Dead, Move, Grow, Feed, Breathe, Have young, Needs, Shelter, Heat, Habitats, Conditions, Characteristics, Adaptation, food chain, Name micro-habitats – log, bush, Describes conditions – damp, dark etc., Food chain Carnivore, Herbivore, Omnivore, Name local habitats – pond, woodland, Life processes, Reproduce, Respire, Excrete, Producer Consumer, Sources of food, Seashore, Ocean, Rainforest, Microhabitat, Conditions, Depends on/suited to

All Y4 vocab

Electricity, Electrical device / appliances, Mains Plug, Components, Conductor, Insulator, Switch, Buzzer, Motor Connection, Electrical / simple circuit
 Complete circuit, Closed circuit, Open circuit, Positive, Negative, Crocodile clip, Series circuit, to
Plus Year 6 Vocab
 Series circuit, Terminal, Voltage volume, Current, Resistance, Circuit diagrams, Parallel circuits

5

4	co-experimenter, lab technician and lead scientist)	presentation
	O: place words 'push, bend, pull and stretch' on the board. Chn to create a sentence with one of these words in and add accompanying action. Recap meaning of the words.	Floor surfaces packs x 7 Newton meters

4	knowledge compare how things move on different surfaces compare 3 or more things	O: Place sentence 'a force is a push or a pull in a particular direction' on the board. Allow <u>chn</u> to suggest suitable actions and agree as a whole class. Repeat this throughout lesson. Making Things Move: Recap forces using the Lesson Presentation. Ask the children to discuss how the cyclist can change the motion of the bicycle.
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Cross Curricular Links (2 of 2)

Measurement

Statutory requirements

Pupils should be taught to:

- convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
- understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints

6

Statistics

Statutory requirements

Pupils should be taught to:

- solve comparison, sum and difference problems using information presented in a line graph
- complete, read and interpret information in tables, including timetables.

9

In 2017 and 18, statistics and measurement were the biggest area for development in maths. Myself and Mrs Evans made changes to planning in both maths and science. This is no longer a concern.

Maths Coordinator

11

Pupil voice overview Autumn 2019-2020

Areas of Strength	Areas of Development
<p>Children enjoy science at St Matthew's- especially practical science. They agreed that we do a lot of this Maths is used in a lot in science and it helps them remember what they have learnt in maths</p> <p>Children understood hop science links with other subjects (P4C, Geography, PE, Maths)</p> <p>Children find Science hard- especially when working independently to solve problems</p> <p>They love working in groups and having a role to follow</p> <p>Chn loved that they work independently and have to problem solve (even though it is hard)</p> <p>Lots of Chn wanted to become a scientist when they are older</p> <p>Chn completing activities from science newsletter at home. Keen to win competition</p> <p>Chn responded well to Nobel Prize Winners/Wall of Fame and celebration assembly.</p> <p>Chn loved doing science with parents as part of Science Messy Morning- all year groups</p>	<p>Children want to wear lab coats more often (120 new lab coats ordered- waiting for arrival)</p> <p>Want more time to complete practical work</p> <p>Chn not always confident to explain definitions of more complex words (tertiary words). Part of action plan</p> <p>Teachers need to reinforce learning by orally recapping each lesson to build children's confidence of explaining more abstract theories.</p> <p>Children were unsure how the teachers use questioning to probe further/challenge</p> <p>Retention of knowledge?</p> <p>Teachers linking previous learning i.e. resistance in Year 6- link to air and water resistance in Year 5</p>

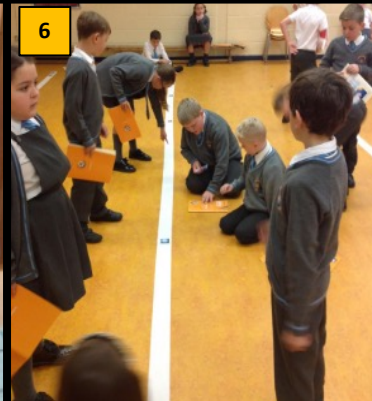
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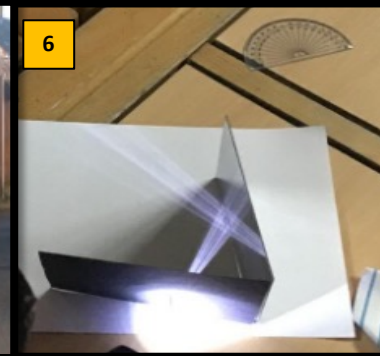
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6



ICT links for year 4

Data Logging/graphing

- Know sensing devices can be used to monitor changes in environmental conditions and are present in a variety of real-life situations
- Can collect data from internet research, digital surveys and digital devices
- Can read and interpret bar and line graphs created through data logging
- Know that computing can create graphs for different purposes
- Can enter data into a graphing package and use it to create a range of graphs & interpret results

11

Internet Research

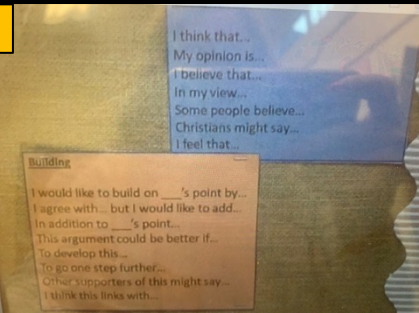
- Know that content on the internet can be located efficiently but is not always relevant
- Can use key words for effective Internet searches
- Can select relevant information (pictures, text, sound and video) to use in other software

1

The capacity packs have really helped develop the children's skills and understanding of accuracy. They use question stems to explain their choices of measuring equipment.

Maths Coordinator

8



	AUTUM N 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Reception	Baby Clinic Visitor	Chester Zoo	Space Pirate Visitor	Green Acres Farm Earthworks- Allotment and Windsor Gardens	Blue Planet Aquarium Earthworks- Allotment and Windsor Gardens	New Brighton Beach Earthworks- Allotment and Windsor Gardens
Year 1	Visitor-Nurse to talk about families	Chester Zoo	Veterinary visit	Croxteth Park Rangers Earthworks- Allotment and Windsor Gardens	Forest School Earthworks- Allotment and Windsor Gardens	Farmer Ted's Earthworks- Allotment and Windsor Gardens
Year 2	Church visit - baptism	Chester Zoo	Nurse Visit/ Over the top puppets	Kingswood Earthworks- Allotment and Windsor Gardens	Nature Ranger Sefton Park Earthworks- Allotment and Windsor Gardens	Ice Cream Farm Earthworks- Allotment and Windsor Gardens
Year 3	Synagogue	Chester Zoo	Zoo Lab	Chester Roman Day Earthworks- Allotment and Windsor Gardens	Catalyst Museum Earthworks- Allotment and Windsor Gardens	Wild Boar Park Earthworks- Allotment and Windsor Gardens
Year 4	Manchester Science Museum	Chester Zoo	Norton Priory	Liverpool Art Gallery Earthworks- Allotment and Windsor Gardens	Big Bang North West Earthworks- Allotment and Windsor Gardens	Forest School Earthworks- Allotment and Windsor Gardens
Year 5	Theatre Arts trip	Chester Zoo	Jodrell Bank	Pier Head Earthworks- Allotment and Windsor Gardens	Big Bang North West Earthworks- Allotment and Windsor Gardens	Wirral country park/beach Earthworks- Allotment and Windsor Gardens
Year 6	Martin Mere	Chester Zoo	Lowry Art Gallery	Cadbury World Earthworks- Allotment and Windsor Gardens	Big Bang North West Earthworks- Allotment and Windsor Gardens	London Residential Earthworks- Allotment and Windsor Gardens

SCIENCE

teacher, what rule would you make for the school?

We are delighted to announce that the Year 5 Girls have won at the St John Bosco Science Fair.

This means that St Matthew's have won this award for 3 years consecutively. It was a huge honour to win as the competition this year was outstanding and we competed against other schools from across North Liverpool.

The project was to investigate whether age and gender impacts upon the ability of a person to multi task? The children successfully completed a ten minute presentation, demonstration of their practical, explanation of their results as well as a 'grilling' about their experimental design from both adults and children.

Well done girls, you have really made us proud!



Space Pirate

Reception children were amazed by a space pirate who visited our classroom, he needed help to fix his ship so that he could go back to space. While the children were helping Captain Morgan fix his ship he taught them all about the life cycle of a star and how planets orbit the sun.



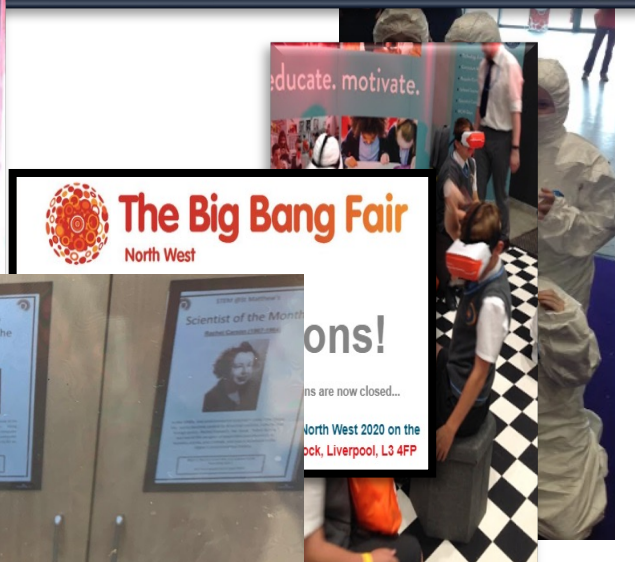
SCIENCE

4C have completed an experiment about how sound travels over distance. We used decibel readers, sound sources and trundle wheels. We found out that the further the sound travels, the quieter the volume.

6B have been very busy using and sorting with classification keys in our science weeks topic. We also studied a taxonomist called Carl Linnaeus



6P have been classifying animals in their Science topic 'Animals'



Extra Curricular and Science Capital (2 of 7)

5



During lockdown, when my husband and I read the daily newspaper, Adam would reads the science paper that you sent on Dojos (Reachout Reporter Online). It was really lovely to see! **Year 5 parent**

10

Thank you so much Mrs Evans (sarcastically) for the Geode Egg challenge. Lucia has been doing it each night after school. **Year 3 parent**

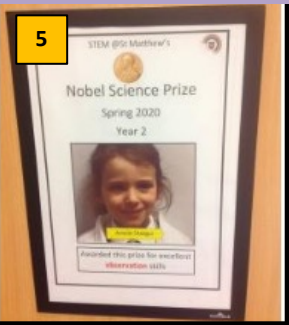
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I like doing lots of messy science in our kitchen. Its so fun to do because I show my granddad what to do. He likes to do it too. **Year 4 pupil**

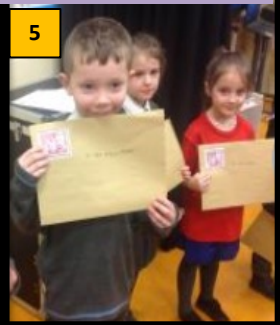
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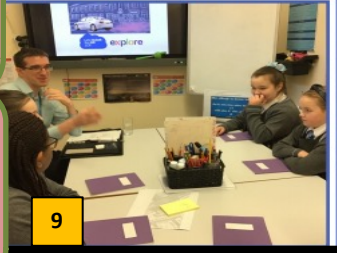


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St Matthew's have been selected to be part of a very important project working with Liverpool City Council to act as Air Quality Control Officers using specialist equipment called diffusers to monitor the levels of poisonous Nitrogen Dioxide (NO2) in the air surrounding our school. The diffusers are sent away to a laboratory for testing and the results will be published monthly. Over the next twelve months, we will look at ways to reduce these pollutants and their potential health hazards.

5



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8

Subject Leader Time
Spring 2 2020

DATE	SUBJECT	SUBJECT LEADER
24.2.20	MFL	H. Connor
26.2.20	Maths	J. Brooks
2.3.20	Reading	A. Parry
4.3.20	Writing	C. Rush
9.3.20	Speaking & Listening	J. Chalmers
11.3.20	Science	L. Evans

St Matthew's Catholic Primary School Science Recovery Curriculum Plan 2020-21

7

	Autumn Term		Spring Term		Summer Term	
Year 1	Animals Including Humans-Ourselfs Working scientifically	Everyday Materials-Let's Build Working scientifically	Plants-What's growing in our Gardens? Dates 1 st -12 th February Working scientifically	Animals Including Humans -Our Pets Working scientifically	Everyday Materials- Marvellous Materials Working scientifically	Seasonal Changes- Wonderful Weather Working scientifically
Year 2	Animals Including Humans -Our Pets (Catch up from Year 1) Working scientifically	Seasonal Changes- Wonderful Weather (Catch up from Year 1) Working scientifically	Plants-What's growing in our Gardens? (Catch up from Year 1) Working scientifically	Materials Working scientifically	Living Things and Their Habitats- Habitats Working scientifically	Plants-Read, Steady, grow! Dates 21 st June- 2 nd July Working scientifically
Year 3	Plants-Read, Steady, grow! (Catch up from Year 2) Dates 5 th - 16 th October Working scientifically	Living Things and Their Habitats- Habitats (Catch u from Year 2) Working scientifically	Light- Light and Shadows Working Scientifically	Rocks-Rocks and fossils Working scientifically	Plants Working Scientifically	Forces and magnet -Amazing magnets Working scientifically
Year 4	Forces and magnet -Amazing magnets (Catch u from Year 3) Working scientifically	Plants-Rocks and Shown (Catch u from Year 3) Dates 16 th -27 th November Working Scientifically	Electricity Working scientifically	Sound Working Scientifically	Living Things and Their Habitats-Name That Thing Working Scientifically	Animals including Humans-Excuse Me are These Your Teeth? Working Scientifically
Year 5	Living Things and Their Habitats-Name That Thing (Catch u from Year 4) Working Scientifically	Animals including Humans-Excuse Me are These Your Teeth? (Catch u from Year 4) Working Scientifically	Earth and Space and Forces Working Scientifically	Living Things and Their Habitats-Help Our Habitats (Catch u from Year 4) Dates 15 th -26 th March Working Scientifically	Materials Working Scientifically	Living Things and Their Habitats-The Art of Living Working Scientifically
Year 6	Changes of Materials- Changing Materials (Catch u from Year 5) Working Scientifically	Living Things and Their Habitats-The Art of Living (Catch u from Year 5) Working Scientifically	Light and Sound Working Scientifically	Living Things and Their Habitats-The Game of Composteurs Working Scientifically	Evolution and Inheritance-The Game of Survival of Working Scientifically	Animals Including Humans-The Art of Beng Human Working Scientifically

10

MAD SCIENCE AT HOME NEWSLETTER

St Matthew's Catholic Primary School Termly Newsletter November 2019

Why Should You Get Involved in Science Activities at Home?

The purpose of a newsletter is to give fun and easy experiments for the Parents and Carers and Pupils at St Matthew's to do at home.

Tips for Being A Great Scientist at Home

Scientists use their **observational skills** to look at the fascinating world around them. It is an important science skill and important life skill. Being aware of your surroundings, taking in information, and evaluating the situation are all examples of observation skills. An observation is a statement about the characteristics of something. We make observations with our senses - sight, hearing, taste, touch, smell.

Top Tip

'Before carrying out any investigation at home, remember to ask for the permission of an adult. Always follow instructions slowly and carefully and do so with the supervision of an adult'

Jen Evans- Science Coordinator at St Matthew's

10 Me and my sister do all the experiments that get sent home. My favourite was the rocket balloons. I raced them in the garden and I won!
Year 2 pupil



10

In This Issue

Competition Time
Are you a budding young scientist? Do you like to have fun with

ASE TeachMeet 7th Jan 2020

Using Whole School Events to Address Weaknesses in Working Scientifically (Jen Evans St Matthew's Catholic Primary)

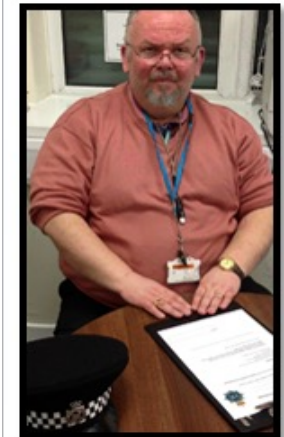


1. Children arrive at school with crime tape visible at reception.



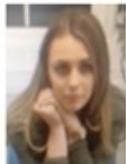
4. Children sent to 'lab' to build a profile of each subject

See video on: <https://www.youtube.com/watch?v=LY11vWpxr00&t=5s>




2. Video Interview of suspects at whole school assembly

SUSPECT: MISS FINNEGAN



IF YOU HAVE SEEN ANYTHING SUSPICIOUS, PLEASE INFORM A MEMBER OF STAFF!

SUSPECT: MR GREAVES



IF YOU HAVE SEEN ANYTHING SUSPICIOUS, PLEASE INFORM A MEMBER OF STAFF!

SUSPECT MR BROOKS




IF YOU HAVE SEEN ANYTHING SUSPICIOUS, PLEASE INFORM A MEMBER OF STAFF!

SUSPECT: MR McNALLY



IF YOU HAVE SEEN ANYTHING SUSPICIOUS, PLEASE INFORM A MEMBER OF STAFF!


SUSPECT: MISS LATHAM



IF YOU HAVE SEEN ANYTHING SUSPICIOUS, PLEASE INFORM A MEMBER OF STAFF!

3. Wanted posters around the school

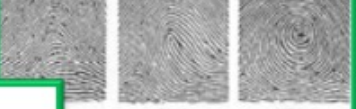
Pen Analysis



Ink smudge (Positive Sample)

FINGERPRINT ANALYSIS!

Each fingerprint is unique so we can use it to find our criminal. There are 3 basic types of fingerprints, see below:




Loop Whorl

Handwriting samples for suspects A-E:

- A) Greaves suspect
- B) Brooks suspect
- C) Edwards suspect
- D) Latham suspect
- E) McNally suspect

Fibre Analysis



Scenario: Look at all fibre samples A-F using the microscope. (Don't get them mixed up!)

Can you match each fibre to the correct clothing?


A) Miss Finnegan =
B) Mr Greaves =
C) Mr Brooks =
D) Mr Edwards =
E) Miss Latham =
F) Mr McNally =

Scenario: We have found a pen at the scene of the crime. We need to link it to the hand in their writing. Take 6 pieces of paper and write the name of the suspect on each.

- Draw a dot on the strip (Pen)
- Feed the loop for 2 minutes
- Read and re-read

A) Miss Finnegan =
B) Mr Greaves =
C) Mr Brooks =
D) Mr Edwards =
E) Miss Latham =
F) Mr McNally =

Footprint Analysis



Scenario: A footprint was left at the scene of the crime (not the one above!) We know the following information:

- It is at least 27cm long (it could be more)
- It had squares on the sole
- No brand name was seen on the print (i.e. Nike, Adidas, and Puma). You must check the paper print, not actual shoe)

Take an imprint for each of the shoes. Who has all 3

A) Miss Finnegan =
B) Mr Greaves =
C) Mr Brooks =

HANDWRITING STATION

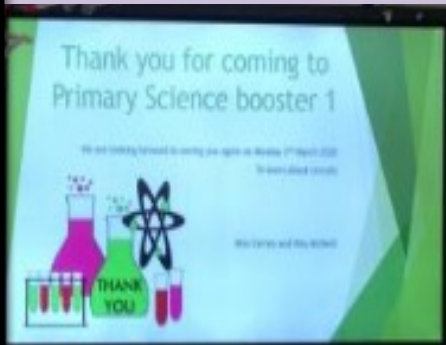
Your handwriting is as unique as your fingerprints! Can you match up the handwriting labelled A-F with the teacher's handwriting?

Year 4 Science Week



4P Cherry Lane fields to measure the Carbon content of trees as part of Science week. We also used paint in Maths to create symmetrical patterns.

Extra Curricular and Science Capital (4 of 7)



Friday 11th October 2019

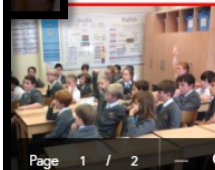
Vendredi 11 Octobre

Full day at Martin Mere which offered different birds in different habitats in the area. As well as doing lots of practical work, we found our way around the area to and from the area.



Chester Zoo

The children had an amazing time at the zoo. They saw lots of different animals including their focus animal the elephants! They saw a tiger eating its dinner, monkeys swinging and a bear drinking from a bamboo stick. We went in the bat cave and watched the giraffes playing. Thank you to all our helpers!

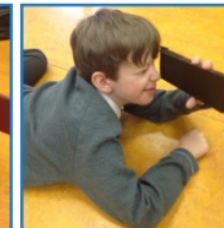


This week, Year 6 have had a special visitor to raise awareness about the dangers of gang culture. James worked with the probation service for over 18 years and provides workshops that aim to "educate, inspire and empower young people to take control of their future by rejecting the gang lifestyle". As part of his Gangs and the safe N get away programme, he

Page 1 / 2

Science week

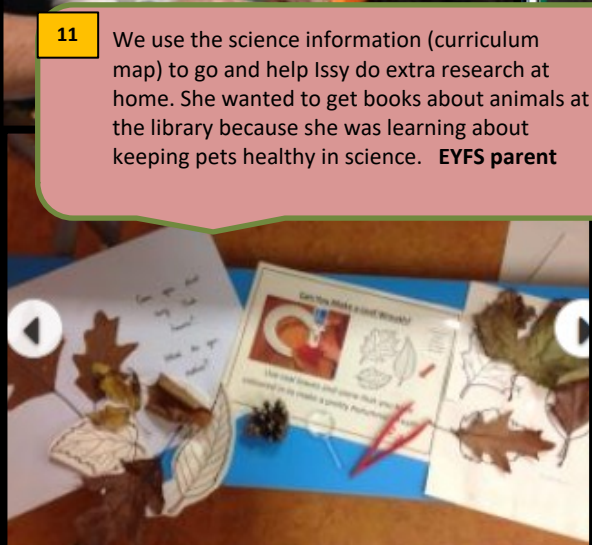
Year 6 have been learning all about light in their science lessons. They looked at the law of reflection and as an extension of this, created periscopes. They learned that the angle of incidence always equals the law of reflection and a periscope works when two mirrors are angled at 45 degrees. Next, they used their periscopes to spy around corners and did so by venturing around the school.



4D have been using cells, wires, bulbs and buzzers to try and build a working electrical circuit.



11 We use the science information (curriculum map) to go and help Issy do extra research at home. She wanted to get books about animals at the library because she was learning about keeping pets healthy in science. EYFS parent



Extra Curricular and Science (6 of 7)



6 Deprivation

Ward Range of LSOA Deprivation Rank by Category of Deprivation 2015

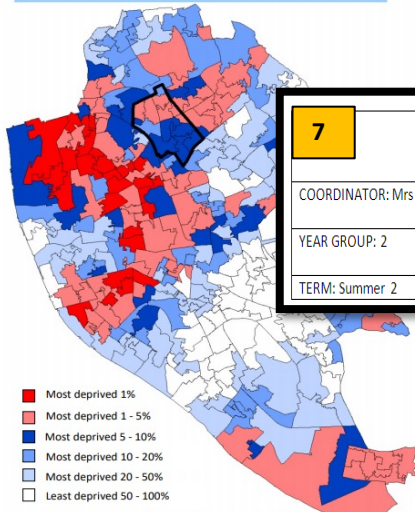
No of LSOAs	IMD			Income Deprivation Affecting Children Index			Income Deprivation Affecting Older Persons		
	Min. Rank	Max Rank	Range	Min. Rank	Max Rank	Range	Min. Rank	Max Rank	Range
14	595	4,740	4,145	133	6,482	6,349	1,291	7,119	5,828

All LSOAs in England are ranked between 1 and 32,844. 1 indicating the most deprived to 32,844 being the least deprived. Min. rank shows where the most deprived LSOA within this ward ranks nationally, and max. rank shows where the least deprived LSOA within the ward ranks nationally.

Most Deprived LSOAs by Category of Deprivation 2015

Index of Multiple Deprivation	No. of LSOAs	Most deprived 1%	1-5%	5-10%	10-20%	20-50%	50%+	Total
Income Deprivation Affecting Children Index	1	5	1	7	0	0	0	14
Income Deprivation Affecting Older People Index	0	2	7	4	1	0	0	14

Liverpool Index of Multiple Deprivation 2015



Source: Department of Communities and Local Government, IMD 2015

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Dear Parents/Carers,

It's that special time of year when we hold 'Industry Week'. Last year was a huge success and our children enjoyed meeting parents who came into school to talk about their jobs. The week was inspiring and demonstrated to our children the achievements that hard work can create.

This year, we will be holding 'Industry Week' on **Monday 4th of July – Friday 8th of July 2020**. The focus will be jobs within STEM (Science, Technology and Maths). Why have we chosen to focus on STEM careers? **"Research, engineering and technology jobs are expected to grow at double the rate of other occupations creating 142,000 jobs in the UK between now and 2023"** Social Market Foundation and EDF 2018. At St Matthew's we believe that by inspiring children at a young age, we can create the passion necessary to succeed in this rapidly expanding job market. The economy, our general well-being—it's all backed by science, technology, engineering, and math.

If you have a career that demonstrates any links with STEM or have a career that uses maths, science or technology in any way, we would like to invite you to speak to the children. The children will have some questions prepared for you however, you are welcome to bring any equipment or resources that may assist you.

If you wish to be involved in this exciting opportunity, please return the following slip to **Mrs Evans by Monday the 21st of June 2020**

Thank you for your continued support,

Mrs C Sime
Headteacher

Mrs J Evans
Science Coordinator

Mrs C Pritchard



7

SUBJECT: Science

COORDINATOR: Mrs Evans	TOPIC: Scientists and Their Inventions
YEAR GROUP: 2	TEACHER: Miss Rush and Miss Byatt
TERM: Summer 2	DATE: June-July 2020

7

SUBJECT: Science

COORDINATOR: Mrs Evans	TOPIC: Scientists and their inventors: Ernest Rutherford and Alan Turing
YEAR GROUP: Three	TEACHER: Miss Dillon and Little
TERM: Summer 2	DATE: June 2020

Extra Curricular and Science Capital (7 of 7)

St Matthew's Windsor Gardens Wildflower Meadow @StGard...
Remember to attend 'Meet the Scientists' at World Museum tomorrow at 11-3pm. Lots of cool free science activities!

1

I want to be a doctor or a vet when I get older. I want to help people. Doctors are scientists.

Year 2 pupil

4

I have a shallow understanding of science capital but wouldn't feel confident to say how we address it as a school and as subject coordinators.

EYFS teacher

James Noakes @jimnoakes · 3h

5

St Matthew's Windsor Gardens Wildflower Meadow
Remember you can catch up with the Royal Christmas Lectures online if you missed them. rigb.org/christmas-lect...
I loved the the Planet Earth lectures and I'm sure you will too! Happy New Year everyone!

3



2

Jenny Evans <j.evans@stmatthewsops.co.uk>
to Dave ▾

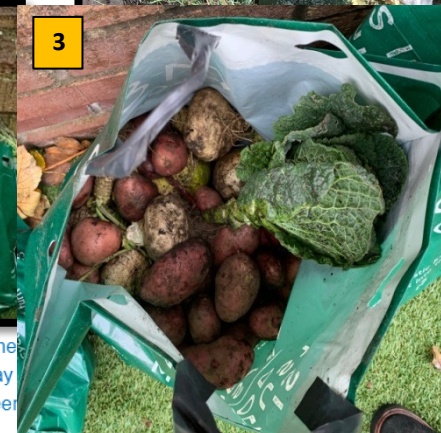
Hi Dave,
My name is Mrs Evans, Science Coordinator from St Matthew's Primary School. Last year, you were so kind to give the children an opportunity to exhibit their project on the exhibition stall. Afterwards, we were sent an email from Glynn Robinson, one of the judges from the Big Bang to thank the children for there enthusiasm. Myself, Glynn and I were in contact after the event and there was discussion of possibly introducing a Primary Award or allowing the children to compete? Do you know if this is an could our children possibly have an exhibition stand as they are super excited and have been working on this project for the last 9 weeks and I am sure it would make their year. We for 60 children in the morning session.

Thanks for your time and I am sure you are very busy. We look forward to hear from you.

Mrs J Evans
Science Coordinator
St Matthew's Primary School
Walton
Liverpool



3



Dave Armson <dave@allaboutstem.co.uk>
to me ▾

Hi Jenny

Unfortunately, despite Glynn's and our encouragement Engineering UK has not commissioned a Primary Competition this year. They have assured us that it is on the list but not in this years programme and we don't have the resources or funding to run it ourselves so have not included it into this years Big Bang North West. I will go away to the team to see if there is space to accommodate your project but I know floor plans have been signed off and orders for tables, display stands and power have also been ordered so there is much room to accommodate your request this year.

Please leave it with me and I will get it sorted.

Kind regards

5

Science is interesting and the experiments are really good. My favourite lesson in english and I think science is very hard to learn when you are older.

Year 5 pupil

5

Scientists help people get better because they know about diseases and germs. They get lots of money. I want to be one when I am older.

Year 4 pupil

5

I think scientists are very clever but you need to pay lots of money to be one.

Year 6 (SEN) pupil

	Science
Overall on track	84
Boys on track	
Girls on track	82
Pupil premium on track	79
	78
EAL	70
SEN	73
More Able	75
Summer Born	81

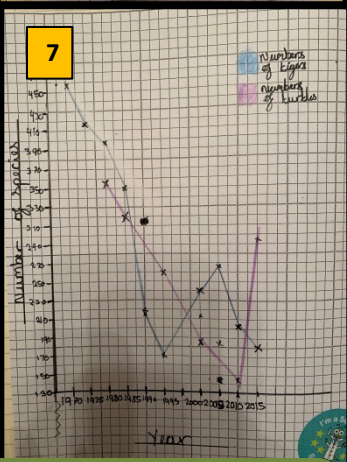
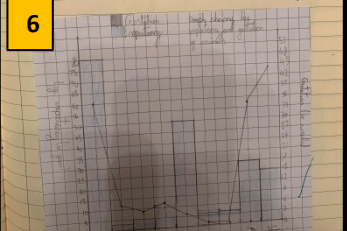
Class 4M

Check out this great teeth quiz on Kahoot. How many can you get right?
<https://create.kahoot.it/details/d316d6aa-1710-412f-a2de-cb07fd841f82>

Working scientifically groupings allow for assessment of their knowledge and skills because they are working independently from adults. We are free to listen to group discussions and discover their understanding by questioning.
Year 1 teacher

My group is called Einstein's. I like writing being the lab technician because if I make a mistake, I can rub the numbers off the (mini) whiteboards. I'm good at science
Year 6 (SEND) pupil

Animal	Average Life Expectancy	Average Gestational Period
Human	30	260
Lizard	2.5	10
Worm	5	5-5
Salmon	11	10
Snake	5.0	3-5
Foxglove	5.5	1
Frog	9	0-5
Grasshopper	30	35
Planetary	2.5	44



Strongest areas of

Weakest area
Reading skills

Working in roles helps me because I don't have to find the answer on my own.
Year 3 (SEND) pupil

Handwritten notes on a piece of paper:

- teacher picking up on my ideas encouraged to discuss
- raise used for each group
- Clear instructions of how to use microscope
- Chm engaged / very engaged.
- Predictions used -
- Paracy lesson using time and setting targets
- Chm used to working as a group
- Excellent use of question skills
- Chm explaining justifying reasons
- Chm keen to please answers
- Chm learning new and etc
- Chm using base + knowledge
- Collaborative learning
- Scaffolding discussion
- higher order thinking

Handwritten notes on a piece of paper:

- Strong Scientific knowledge
- Chm confident to give opinions/questions
- Mixed ability groups allows M.A. Chm to explain
- Links with PSHE and Philosophy for children embedded
- Question stems to help discuss
- Calm learning environment
- Showing mutual respect between CT and
- Difficult subjects addressed confidently
- Chm learning from each other
- Less able Chm supported through more able Chm's support.
- Cross-curricular opportunities for learning
- SEN Chm used these to support ideas
- Children's learning is

SEN and low attaining pupils make up a large percentage of my class this year. They enjoy working in their roles because they have clear roles in which they can focus on.
Year 1 teacher

Mrs Evans plans additional activities for our more able. The more able children thrive at the maths tasks because they require them to be challenged.
Year 6 teacher and maths coordinator

I'm confident to know when pupils are working towards and when they are clearly at age related expectations. I'm less so with greater depth pupils.
Year 4 teacher



Earth and Space Quiz

Questions (20)

1 - Quiz
Which of these is the biggest?

2 - Quiz
What shape are the Earth, Sun and Moon?

3 - Quiz
How long does it take the Moon to travel once around the Earth?

	with our gardens, begin to plant in Spring 2020. Select a range of abilities/backgrounds and ages chn to help sow the seeds.			Parental Feedback
Spring 2020	Work with CTs to improve accuracy between children with high prior attainment and greater depth within science	J.Evans CTs	Subject Leader time	Improved accuracy of teacher assessment of children with high prior attainment in KS1
January 2020	Improve Physics subject knowledge of Trainee Teachers at MAITT. Focus on weakest areas of the curriculum Nationally (Light and sound and forces).	J.Evans	Day release from school	MAITT Trainee feedback
Summer 2020	Work closely with less confidence staff, RQTs and NQTs. Have an open door policy.	J.Evans	After School Subject Leader Time	Monitoring cycle Staff feedback

Teacher Assessment per topic

Data and Groupings (2 of 2)

K	L	M	N	O	P	Q	R	S	T	U	V	W	X
recognise that they need light in order to see things and that dark is the absence of light	notice that light is reflected from surfaces	recognise that light from the sun can be dangerous and that there are ways to protect their eyes	recognise that shadows are formed when the light from a light source is blocked by an opaque object		Begin to choose ways to try and answer a question	Put forward own ideas and make some planning decisions	Suggest ways of making the test fair or if it can't be fair how they will answer it by looking for a pattern	From a selection say what equipment is needed	Suggest the type of data needed to be collected	make simple predictions based on everyday experience and knowledge		Carry out a fair test or pattern seeking enquiry (with help)	Compare 3 or more things

Reported to staff for areas of development. Planning altered to drive improvement

8	Track K	On Track WS	Boys OT K	Boys OT WS	Girls OT K	Girls OT WS	Pupil premium K	Pupil Premium WS	EAL K	EAL WS
	77	77	82	82	75	75	33	33	NA	NA
	77	77	75	75	38	38				
	75	80	71	71	81	87	73	73		
	56	60	57	50	76	76	64	71		
	84	75	92	80	78	69	89	85		
	49	68	55	75	48	50	61	70		
	77	75	70	72	67	65	75	70		
	76	66	65	57	73	67	73	72		
			71	70	67	66	72	74		

Whole school analysis by grouping each topic

Pupil Premium on Track

Whole school analysis by grouping for the year

Knowledge

Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2		Overall			
N ^e	%	N ^e	%	N ^e	%	N ^e	%	N ^e	%	N ^e	%	N ^e	%		
7	64	7	64	6	55	6	55	7	64	7	64	7	64		61

Working Scientifically

Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1		Summer 2		Overall			
N ^e	%	N ^e	%	N ^e	%	N ^e	%	N ^e	%	N ^e	%	N ^e	%		
7	64	7	64	9	82	9	82	7	64	7	64	7	64		70

1 Analysis of Whole School 2018-

	Science
Overall on track	84
Boys on track	82
Girls on track	79
Pupil premium on track	78
EAL	70
SEN	73
More Able	75
Summer Born	81

Strongest areas of

Weaker

9 As a school, I feel that we could take our learning outdoors more.
Parent Governor

Outdoor Learning

COMMUNITY FUND Funding News Insights Contact

8 Funding during COVID

Logged in as j.evans@stmatthewscps.co.uk Latest

Pick up where you left off, start a new application or [view all applications](#) 12 Feb, 07:54 (6 days ago)

Latest application

St Matthew's Community Support and Hub

Amount requested: £10,000

Project dates: 26 April, 2021–26 April, 2022
Location: Merseyside
Organisation: St Matthew's Catholic Primary School

Status: Submitted Last Monday at 13:54

Timetable for Kev from Earthworks

*See key points at the end of document

Autumn 2 Term Science Week Monday 16th - 27th November
Year 4- Plants (Roots and Shoots)

Wednesday 18th November

Where?	Time	Class	Group (1/2 of class each time)
School (Improving our school environment-planters and bulbs)	9.10-10.00 back yard by Geography maps	Mr Heron	Group 1
	10.00-5 mins before break back yard by Geography maps	Mr Heron	Group 2
	Break		
	Five mins after break for 40 mins back yard by Geography maps	Mr McNally	Group 1
	40 mins before lunch until lunch back yard by Geography maps	Mr McNally	Group 2

Tuesday 24th November

Where?	Time	Class	Group or Class 'Bubble'
Allotment	9.10-9.30 Walk to	Mr McNally	Class bubble

AFE@tnlcommunityfund.org.uk <afe@tnlcommunityfund.org.uk>
to me, c.sime@stmatthewscps.co.uk



Project ID: 20160796

Hello Jenny

We're going to fund your idea

We're really happy to tell you we will be funding your project following your application for National Lottery Awards for All. And we want to give St Matthew's Community Support and Hub £10000 to help your community thrive.

Can you [fill in this form](#) so we know more about how the funding is helping your community.

We'll send the funding to your bank account

You should see the funding in your organisation's account in the next couple of weeks. So you can start spending it on the activities you told us about in your application.

Lead: Mrs J Evans Review Date: Sep 2022

2

St Matthew's Catholic Primary School Outdoor Learning Policy

"Through respect we will work together in Christ to develop the whole person"

This policy provides guidance to parents, children and all adults working within the school setting.

1. Purpose

At St Matthew's, we recognise the important part that outdoor learning plays on a child's wellbeing and their ability to learn and achieve. We believe that as a school and in collaboration with parents and carers, we can work to educate our pupils with the knowledge and understanding of the world around us, taking ownership in caring for the community and their surroundings plus developing a life-long love for the outdoors. By careful planning, we aim to provide our children with at least one session fortnightly ideally

When Kev first started teaching us, I would ask him for help. Now I can do things on my own.
Year 2 pupil

School/Youth Group	St. Matthew's Catholic Primary School Mr McNally	Learning activity	Windsor Garden Wildflower Site
Group Leader		Other staff	Mr Mills, Mrs Clewes
Group size	30	Supervision ratio	R 1:5 Y1-3 1:6 Y4-5 1:10

IDENTIFYING AND ASSESSING THE RISKS	RISK LEVEL	CONTROLS FOR MANAGING THE RISKS
Site and environment	Low	<ul style="list-style-type: none"> Venue has been visited previously by the school and has proven its suitability. Leader has thorough knowledge of venue. First aid bag to be taken with staff. Check area for contaminants and hazards in the area. Children will only visit area with short grass so that all hazards can be observed. Bring gloves, litter pickers and plastic bags. Children and staff wear high visibility jackets during the trip Children wear suitable outdoor clothing such as a warm, waterproof coat, scarves, hats and

As a teacher, you are always wary of risks when taking the pupils outside. Kew models the pitfalls and risks beforehand and is constantly modelling using the equipment safely.
Year 1 teacher

Teachers would stop the class many times throughout the session to pick up on low level behaviour. Over time, they have begun to model more. At first- they just expected the children to know how to behave outdoors.
Kevin. Curran (Earthworks)

Kew has really developed my understanding of how children learn outdoors. I found it difficult at first to let the kids 'go' but I can really see the impact of stepping back whilst they are learning.
Year 6 teacher

Kew is really good at explaining the rationale behind his teaching methods as the pupils are engaged in tasks. It has helped me reflect upon my own teaching style and how I will be adapting it to help children become more independent when outdoors.
Year 3 teacher

Learning at the allotment in fun. We spent lots of time doing things in our groups. I like digging up the soil and looking for bugs.
Year 3 pupil

Planning

1

Misconceptions Year 4 Electricity

1. **Misconception:** Electric current flows from the negative to the positive terminal.

1

Earth and Space Year 5 Misconceptions

1. **Misconception:** Rotation is the same as revolution.
Fact: Rotation is the movement which involves turning about an axis, as in a spinning top. Revolution is the movement in an orbit, as in the Earth revolving round the Sun.

1

Plants-Misconceptions

1. **Misconception:** Trees are not plants.
Fact: Trees are plants.

2. **Misconception:** Many flowering plants have been mistaken for flowering plants due to inconspicuous flowers or infrequent flowering.

3

Question

We want to find out whether the length of the ruler makes an impact of pitch.

3

We are investigating whether the length of a ruler hanging over the edge of a table impacts the vibration of the pi

two hour lessons	LEARNING OBJECTIVE	DIFFERENTIATED ACTIVITIES	RESOURCES
2	P4C/Big Question	Stimulus <ul style="list-style-type: none"> Watch video about senses https://www.youtube.com/watch?v=q1xNuU7gaAQ Discuss which sense they might use the most. Record any issues on WB. Private Reflection	
2	P4C/Big Question	Stimulus <ul style="list-style-type: none"> Watch the BBC video about day and night. https://www.bbc.com/bitesize/clips/zrd9wmn Discuss any issues that might arise. Record any issues on WB. 	
2	P4C/Big Question	Stimulus <ul style="list-style-type: none"> Watch http://www.bbc.co.uk/education/clips/z4vfb Ask the children what other animals might have changed their environment. Look at 'What's Next?' sheet. Children annotate sheet in groups. 	

St Matthew's Catholic Primary School Essential Knowledge for Science

Everyday Materials (Materials Matter) and Everyday Materials (Materials Matter) Year 2 Autumn 2 and Spring 2

4

Prior learning in Year 1
 Key Definitions- object, material, hard, soft, stretchy, shiny, dull, rough, smooth, bendy, not bendy, waterproof, not waterproof, absorbent, not absorbent, transparent, opaque
 A range of materials which are natural and man-made such as plastic, wood, metal, glass etc.

Key Vocabulary

materials	Materials are what objects are made from.
suitability	Suitability means having the properties which are right for a specific purpose.
properties	This is what a material is like and how it behaves (soft, stretchy, waterproof).

Key Knowledge

Properties of Materials

 <p>wood: hard, stiff, strong, opaque, can be carved into any shape.</p>	 <p>glass: waterproof, transparent, hard, smooth.</p>
 <p>Squash an object by pushing both hands together.</p>	 <p>Bend an object by grabbing both ends of the object and bringing the ends inwards together.</p>
 <p>plastic: waterproof, strong, can be made to be flexible or stiff, smooth or rough.</p>	 <p>metal: strong, hard, easy to wash.</p>

4



St Matthew's Catholic Primary School Essential Knowledge for Science

Things and Their Habitats Year 2 Spring 2

Key Vocabulary

life processes	These are the things that all living things do. They move, breathe, sense, grow, make babies, get rid of waste and get their energy from food.
living	Things that are living have all the life processes .
dead	Things that are dead were once living . They did have all the life processes but don't now.
never living	Things made out of metal, plastic or rock were never living . They never had the life processes .
food chain	A food chain shows how each animal gets its food. Food chains are one of the ways that living things depend on each other to stay alive.
food sources	This is the place a living thing's food comes from.

Key Vocabulary

habitat	A habitat is the natural place something lives. A habitat provides living things with everything they need to survive such as food, shelter and water.
microhabitat	A microhabitat is a very small habitat in places like under a rock, under leaves or on a branch. Microbeasts live in microhabitats . The microhabitats have everything they need to survive .
depend	Many living things in a habitat depend on each other. This means they need each other for different things.
survive	This means to stay alive.

Key Knowledge

Examples of **habitats**:

	
woodland	urban
	
rainforest	arctic
	
ocean	river
	
coastal	mountain
	
desert	

Food chains. The arrows mean 'is eaten by'.



Key Knowledge

		
living	dead	never living

I will share these knowledge organisers with the staff. They will be great to help focus on what needs to be covered.

A. Rosser-Science Lead at Townfield Primary School

5

I much prefer using marking codes to focus learning. It keeps the main objectives at the front of my mind. The kids seem to be more focused too.

Year 1 teacher

6

The marking codes help me know what I have done right. Miss colours them green when I do it right.

Year 2 pupil

6

Continual Professional Development (1 of 1)

Science Subject Knowledge Book

2020 4pm-5pm

1	Topic	Date	Teacher
1	Digestion. Teeth. Nutrition. Skeletons.	Thursday 23 rd April	Mrs Dunbar
2	Rocks. States of matter (solid, liquid, gas). Changes of state.	Thursday 30 th April	Mr Chalmers
3	Light. Forces. Magnets.	Thursday 7 th May	Mr Greaves
4	Sound. Electricity.	Thursday 14 th May	Mrs Dunbar
5	Life cycles. Classification. Evolution.	Thursday 4 th June	Miss Parry
6	Circulatory system. Diet and exercise. Reproduction.	Thursday 11 th June	Mr Brooks
7	Materials (dissolving, separating mixtures, reversible and irreversible reactions).	Thursday 21 st June	Mr Edwards
8	Space. Forces.	Thursday 25 th June	Mr Greaves
9	Light. Electricity.	Thursday 2 nd July	Miss Parry

Hi-Impact Consultancy Ltd.
Innovation House

Science Staff Meeting-OFSTED

- https://www.youtube.com/watch?v=RRy_73ivcms
- Osted 'Outstanding' science
- 'They work constructively **with other pupils**, demonstrating common understandings in discrete well-focused roles, with all **playing a part** in successful investigation'
- 'Pupils work **independently** from the Teacher, using their peers to guide learning'
- 'Show exceptional **independence**, think for themselves and raise own questions'
- 'Have strong links with Maths, DT and English and can apply these **independently** with practise'
- 'Students work **collaboratively** and learn from working as groups, including those with a range of knowledge and abilities'

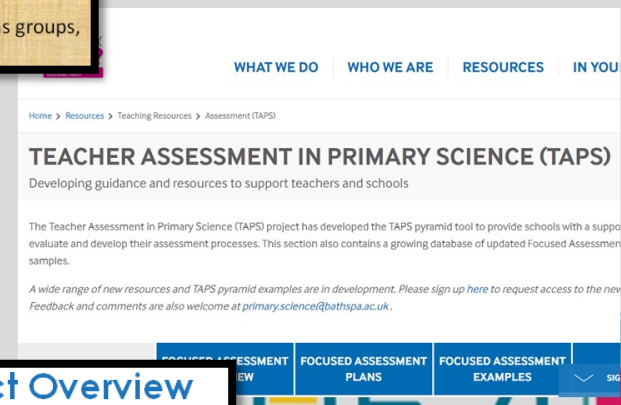
10

There are so many great online CPD available for science. I hope online CPD will be our main form of CPD as I like the flexibility of accessing it at home. **EYFS teacher**

Science Moderation-TAPS Assessment Tool

5

links to access TAPS assessment tool. On <http://www.bathspa.ac.uk/resources/curriculum-materials/assessment>



EVIDENCE BASED RESEARCH		
What are the messages from OFSTED?	Science Capital is extremely important- allowing opportunities for all New framework ensures that subject leaders are fully accountable and take more ownership for their decisions.	Pupils and particular groups have educational experiences in science that ensure they are well prepared for their next stage of education, training or employment.
What evidence based research have you used?	Sequencing and progression. What have the <u>chn</u> done before? What will they progress onto? How does science link with other subjects? Vocab and ability to explain complex science and apply their learning? How is the curriculum designed? Why and how?	Use of ICT is embedded into planning and used to
• EEF • Associations- Geography	Children have excellent educational experiences to create a 'buzz' Large focus on pupils working collaboratively.	

Part One: National Professional Qualification for Senior Leadership Project Overview and Tracker

3.

Please select your specialism for your project:

Secondary Primary Special Other If other, please specify:

Project title (see guidance notes below) To improve the attainment of Disadvantaged (Pupil Premium) of teaching and learning techniques.

Science is the most difficult subject to teach for me. The children ask lots of questions and its having the understanding to explain. **Year 4 (NQT).**

7

I feel confident to teach biology based topics. Physics ones scare me. **Year 3 (NQT).**

8

3 Science Update and Moderation

- Assessment problematic area in Science
- Abolished from KS2 SATS 2009
- **Core subject** to be 100% Teacher assessed
- Not supported by NFER/Summative tests
- **Recent study by ASE**
- Foundation subjects have a error margin of ~7 %
- Sample Tests vs Teacher assessment of Science in 2013- ~26%
- Results from 2016 test will be released in July 2017. Predicted 50% difference.

I feel that I would benefit from extra CPD for science. I didn't have many opportunities to teach it during my training year. **Year 3 (NQT).**

6

9				9				9				9				
Staff Development, Monitoring and Curriculum				Other Faiths Week Info				Global Week Info				END OF TERM				
2019-20				Science Week Info				Global Week Info				B All staff meetings will take place via Zoom until further notice.				
11.11.19	Parents week	Parental questionnaire	Other Faiths Week 1	11.11.19	Parents week	Parental questionnaire	Other Faiths Week 1	13.4.20		Science Online CPD-Zoom	Subject leader meetings	Geography Week 1				
2.9.19	INSET	School diary	Anti-bullying Week	18.11.19	Maths Twilight	History standardisation	Lesson observations - maths skills within science lessons- J. Boyce, J. Evans	6.1.20	Twilight- ICE CATS	D&T Standardisation	Whole school book monitoring	Global Week	20.4.20			
9.9.19	Ofsted Update including Well Being	PE- Get Set 4 PE	Year 1 Science Messy Morning	25.11.19	Reading Moderation	Writing Moderation	Whole school data	6.1.20	Feedback from phonics environment checks	Wed 22 nd Subject Leaders network meeting	Planning files	27.4.20	Jigsaw update	RE CPD-Zoom	SPP and SED review	
23.9.19	PAC Planning and assessment	Science 2019-2020 focus	Science Week	7.12.19	Phonics update Anna and Jayne	Pupil voice questionnaires	Year 2 Science Messy Morning	6.1.20	Jigsaw update	Science Capitals and Vision	Environment monitoring	4.5.20		Geography Online CPD-Zoom		
16.9.19	Speaking and listening- Jack	Healthy Schools- Chrs	Year 2 Science Messy Morning	2.12.19	Science	Thursday 6 th Dec	Subject Leader	7.12.20	Speaking and listening- Jack	Maths check in- Jason	PAC update Mark	11.5.20			KS1/2 SATs week	
30.9.19	Code Studio-Michela	Staff Twilight- Safeguarding	Year 2 Science Messy Morning	7.12.20			NEED Week	6.1.20	D&T Week Info	Review SPP/SED	Sofer Internet Day 11.2.20	18.5.20	Speaking and	History	KS1 SATs week cont	
7.10.19	Wed 9 th Oct- 3.45 Ofsted training @	AE Moderation														

Jenny Evans <j.evans@stmatthewscps.co.uk>
 to teachers@stmatthewscps.co.uk >

Hi all,
 Please see the link below from Ogden Trust for your science learning tasks. They have endless links to high quality websites. It is broken down into different year groups too and includes lots of great resources for EYFS too!
 Have a lovely week and it was great seeing everyone today.
 Jen xxx ☺ ☺ ☺ ☺

<https://www.ogdentrust.com/coronavirus-home-learning-resources-hub>

Continual Professional Development (2 of 2)

to Emma, Jack, Alex >

Hi all,
 I hope you are all well and keeping safe at this strange time.
 I thought now would be a good time to offer any support regarding science as we start to come to the end of the academic year. Obviously, when we are in school, I know that you feel comfortable to come and see me when you have questions and/or want advice. I am aware that this is not possible and as you come towards the end of your NQT/RQT years, I thought it may be beneficial to offer any support if you need it.
 I am happy to answer any questions over email or by phone if you need to.
 I know you all have my number but just incase it is 07557986735.
 Please don't think that any question is too small, I am happy to help!
 Thanks
 Jen

3

Free online CPD for primary science

Peter Herron has invited you to try Reach Out CPD - the new online science CPD resource for UK primary school teachers.

Reach Out CPD has been developed by Imperial College London, one of the worlds leading science universities, and Tigtag, the award-winning science resource.

Hi, I've just completed a unit of online CPD for primary science. It's really useful site - and free to browse.

1

Free online CPD for primary science

Jack Chalmers has invited you to try Reach Out CPD - the new online science CPD resource for UK primary school teachers.

Emma Little has invited you to try Reach Out CPD - the new online science CPD resource for UK primary school teachers.

Reach Out CPD has been developed by Imperial College London, one of the worlds leading science universities, and Tigtag, the award-winning science resource.

Hi, I've just completed a unit of online CPD for primary science. It's really useful site - and free to browse. I thought you might want to take a look.

1

1

J Chalmers
 to me >

Hi Jen,
 I'm fine thanks, hope you're doing well too!

Thanks for the offer - I'm sure I'll carry on taking you up on your offer. The lessons and experiments has been a big help. The Staff Development and other members of staff.

Thanks for your help,
 Jack

Hi,
 Thank you so much for this! You're amazing and I know I can always go to you for advice (about anything really but science too!). I've been really enjoying thinking of science tasks for the Dojos because those tasks are really interactive but would welcome any other examples you can think of!

I hope you and your family are safe and well!

Thanks,
 Emma xx

Resources

Mr P Evans

to me ▾

Hi Jenny

Following on from our recent email exchange can I also confirm that in the new academic year we care very much for our science labs - all of which can hold up to 28 pupils. Obviously boys and girls are welcome to come and use our science labs. We have a few pupils who may look to SFX as their secondary school?

Jenny Evans <j.evans@stmatthewscps.co.uk>
to Claire ▾

Hi Claire,
These are the rest of the orders for my budget from this year. I haven't ordered anything from the E...
Could you sign these and give it to Tracy please?
Tracy is going to kill me 😬😬

Thanks
Jen xx

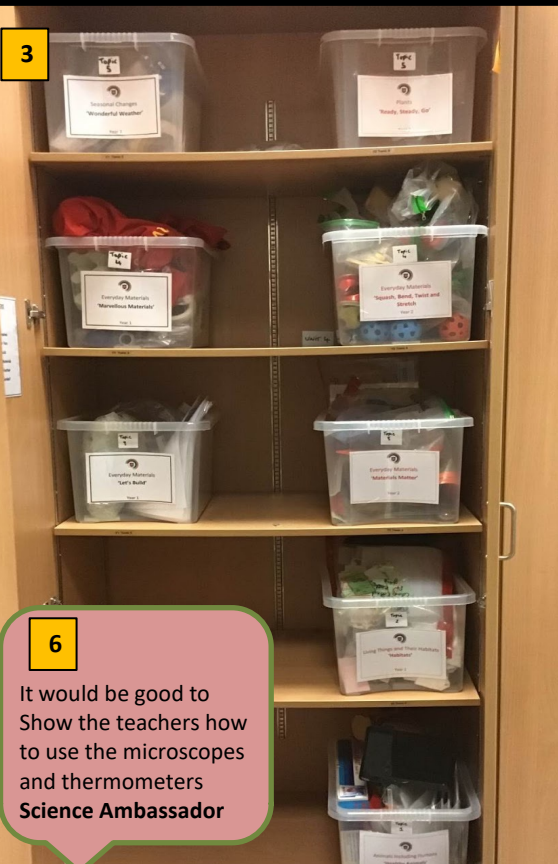
5 Attachments

The data logger cheat sheet saved me hours. Thanks!
Year 6 teacher

8



3



3



4



3

6

It would be good to Show the teachers how to use the microscopes and thermometers
Science Ambassador

1	Equipment (A-Z)	7	Yr Group	Subject	Box/area	Quantity
2	Beakers (small)		ALL	Working Scientific		15
3	Agar solution		Y6	Living things and th		1 1 bottle
4	Ammeters		Y4,Y6	Electricity		20 13
5	At The Dentist-Activity pack-		Y4	Teeth		5 1
6	Batteries (various)		Y4,Y6	Electricity		20 many
7	Battery chargers (AA batteries)		Y4,Y6	Electricity		20 3 x 4
8	Battery holders and wires		Y4,Y6	Electricity		21 30+
9	Battery holders and wires		Y4,Y6	Electricity		22 40+

5

Vu Data Logger User Guide

Buttons	Built-in Sensors	Which software will I need?
▶ Enter	Sound	Easy Log Software
◀ Stop	Light level	How to Switch Off
⬇️ Up and down	Temperature	Scroll down to System
		then select > arrow.

Modes

- Snapshot Mode**
Capture sensor readings every time > is pressed|
- Pictogram Mode**
Image, block or bar to represent data. Readings every time > is pressed
- EasyLog Mode**
Logs continuously until stopped.

Review Mode

Allows you to check your data sets on the screen.
Scroll to Review and press >. Scroll Up and down to find data set needed. Press > for full details

9



Community Project (1 of 2)

We wouldn't have had sports day at Windsor Gardens because there was broken glass and dumped rubbish. Parents would have complained.
Assistant Head Teacher



Project ID: 20160796

Hello Jenny

We're going to fund your idea

We're really happy to tell you we will be funding your project following your application for National Lottery Awards for All. And we want to give St Matthew's Community Support and Hub £10000 to help your community thrive.

St Matthew's Windsor Gardens Wildflower Meadow

33 Tweets



You Retweeted

Tim Jeeves @timjeeves · 1 Oct 2020

A pleasure to discuss plans to spruce up Windsor Gardens for the children of St Matthew's and local residents this morning. Look forward to supporting things as they develop



St Matthew's Windsor Gardens Wildflower Meadow @ · 1 Oct 2020

Thank you so much for the meeting at Windsor Gardens today. Such a great project with exciting prospects ahead. Clearance of the fly tipping has made a huge difference. @LiverpoolParks @lpoolcouncil @timjeeves @stmatthewscps @KarlMcLoughlin



Please see You tube video of lottery funding plan <https://www.youtube.com/watch?v=KgMI98HKuuA&feature=youtu.be>

Frank Vaudrey

to Catherine, Claire, me

Jenny, just fantastic what you have done I'm sure a report to the next governors meeting will go down really well And with



Thanks Frank

Meeting to discuss wildflower project at St Matthew's CPS

Jenny Evans <j.evans@stmatthewscps.co.uk>

to barry.kushner, tim.jeeves, Barry

Good morning,

My name is Jen Evans and I am a teacher and Science Lead at **St Matthew's Catholic Primary School** in Walton. We have recently received confirmation that we will be involved in planting a wildflower/Community garden at Windsor Gardens, an area of grassland next to McDonalds on Queen's Drive.

We have received confirmation of funding from the National Wildflower Trust through Liverpool City Council and the planting will be going ahead within the next month or two (date TBC).

Myself and Barry Walker, Green Spaces Development Officer from the Council would like to invite you to a meeting in April sometime to discuss this project further and your possible involvement. Would this be possible for you both to attend? We could be flexible with dates to suit you both?

We are extremely excited at the idea
Kind regards
Jen Evans

Jeeves, Tim

to Roz, Sarah, Karl, me



Hi Jen - we did discuss what you proposed and everyone really liked the sound of it. That mix of doing activity outside, education for the children and being able to link up with the broader community is brilliant and something we're really keen to support.

That being the case, we'd like to make a £5000 contribution to the Awards for All application that you're planning to make; our understanding is that the chances of success with the application will be increased if you have match funding.

c.sime@stmatthewscps

to All

Hi all,



Lovely bit of good news for half term. Today we have received confirmation of lottery bid Jen and I have been looking at for developing outside learning. They have awarded us £10,000 and with other grants Jen has sourced we are able to move forward with our plans.

Our plans include the installation of an outside classroom on the Windsor Garden's - which will enable us to deliver lessons there year round and use the site for many other events including parents, parent and importantly the local community.

Please see the video below - for an idea of the exciting plans:

<https://youtu.be/KgMI98HKuuA>

I have to say Jen has worked so hard on this for our children and deserves congratulating - well done Jen

I am excited to see what happens in the future and how we can continue to develop outside learning

Claire x

...

[Message clipped] [View entire message](#)



Community Project (2 of 2)

We live in the 'Ship roads' and don't have a garden. Since lockdown. I take the kids here to play. Its such a lovely space to be in.
Local resident

6

This is my new favourite part of Clubmoor. The sound of the birds block out the noise from Queen's Drive.
Local Resident

3

I walk a longer route to get to my daughters house now the flowers are here. The poppies are gorgeous!
Local resident

4

5

Please see video site starting to grow
<https://www.youtube.com/watch?v=8S4R4vo81dw>

5

It's much more enjoyable walking Ruby here now. Its easy to see God in all his glory here. Father Connor St Matthew's Church.
Father Connor-St Matthew's Church

2

Please see video of rotivated site
<https://www.youtube.com/watch?v=6ifRHi6qwe8>

Hi Jenny,
Hope you are well.

6

Johnnie Maguire
to me, Bob, Karen, Danie

Good afternoon Jenny,

1 of the 2 1.5 by 0.5 metre information lecterns made for the wildflower site to educate visitors



Just a quick update on the Planters being supplied by MyClubmoor - we have them, just waiting for Lockdown restrictions to be lifted and on touch about their delivery

Take Care,
Karen

Karen Muldoon
MyClubmoor Administrator
Office: 0151 287 3477



Please find attached a letter on behalf of our board about an offer we would like to make to Primary Schools in our ward.

8

MyClubmoor would like to offer each school up to £2,000 to help support them in supplying the necessary IT

Walker, Barry <Barry.Walker@liverpool.gov.uk>
to me

Please extend our thanks to MyClubmoor for their computer offer. It has really helped the children learn during lockdown. We were able to buy a notebook which allows them to do all that they need to do for school
Year 1 parent

8

Windsor Gardens is around 1 acre

Hi Jenny
Yes we are very hopeful that the wild flower planting will take place at Windsor Gardens close to your school. The application has been put forward to the North West Wild Flower trust and we are waiting for confirmation from them.
As soon as they get back to me with an update I will let you know.

2

Walker, Barry <Barry.Walker@liverpool.gov.uk>
to me

Tue, 21 Apr 2020, 20:46

Hi Jenny
Yes all preparation work done and the wild flower seeding will take place in mid May (fingers crossed) so when school returns to normal we should be on track for our door class room at Windsor Gardens
Hope you and family are well and safe.



5 x A4 Habitat information boards
5 x A4 Bee Information Boards
(not installed due to Covid-19 restrictions)



Leadership Beyond School (1 of 2)



Mentoring Role- Meeting with E.Cantrill Science Subject Lead at De La Salle

Following today's meeting I have suggested to implement the following targets:

1

- Read and highlight key messages from Ofsted/EEF research about 'Outstanding' Science inc leadership, teaching and progress
- A suggested meeting with Head Teacher to discuss her role as Science Lead (to distinguish her role from Faculty Lead)
- For Miss Cantrill to be involved in book monitoring of Science (presently carried out by SLT)
- Copy of KS3 data to address strengths and weaknesses
- Assessment of key groups such as pupil premium, EAL, More able and underachieving groups. This will be used to inform subject leader plan
- Identify key strengths and weaknesses within the department
- Work with SLT to observe Teaching of Science in KS3 and 4
- Speak to HT to discuss having ownership of budget
- Start staff meetings to feedback best practise/CPD opportunities
- Apply for CREST award
- Use website to evidence extracurricular activities such as clubs/trips etc.
- Monitor environment to encourage chn to be proud of their learning environment
- Work with St Matthew's to share ideas etc.
- Monitor plans and ensure coverage
- Contact outreach programmes (Adrian Greenhall and LIMU outreach to encourage real scientists to speak to chn)
- Devise and implement a pupil voice questionnaire and use feedback
- Monitor plans to fit in with assessment and monitor as a whole cycle.
- Equipment log for science resources
- To implement collaborative roles in Science

The following documents have been shared with Miss Cantrill:

- Copy of subject leader report
- Timetable/curriculum overview
- Assessment sheets
- Book scrutiny template
- Pupil voice template
- Subject Leader action plan
- Copy of science role badges
- Data analysis of groups (pupil premium, on tract, EAL, boys and girls etc)

Mrs J Evans

As part of my HT's role as SLE, I was asked to mentor a newly appointed Science Head of Department at a local Secondary School. This includes a list of next steps given to her to provide support. We looked carefully at the monitoring and evaluation cycle and how best to support her staff. I was due to complete a book scrutiny then a learning walk/lesson observation however, the school received an OFSTED inspection and was given support by the Local Authority following this.

As part of my HT's role as SLE, staff were asked to be observed by the HT, DHT, Faculty Lead and Science Lead. Myself, our HT and staff from the secondary school observed Science throughout the school. We individually filled out lesson observations and fed back to triangulate thoughts. The aim was to show the stretch and challenge offered throughout Primary School so that transition in KS3 would be maximised.

Hi

Are you ok if the head of De La Salle observes with me on the 7th?
Not to judge you but to get good ideas for helping his staff

Thanks

1

Good morning Jen,

2

It was great to meet you earlier in the month – I don't know where this month has disappeared!

When we met, we talked about the Ogden Trust School Partnership Scheme; please see The Ogden Trust's [Schools Partnership Webpages](#) including details of [how to apply](#), and a link to the [online application process](#). We are currently accepting expressions of interest for new partnerships in 2020-21, with a closing date of **01 February 2020**. I've spoken with our primary school programme manager who agrees with me that you are already doing excellent work, and are would make a strong candidate.

May I introduce you to Michelle Yates, Ogden Trust Regional Representative (copied). Michele can advise you and support you with making an expression of interest application – please do speak with Michele if you're planning to apply.

Michele – may I introduce you to Jen Evans at St Matthew's Catholic Primary School, Liverpool. Jen is doing some amazing work there and is already working with other primary and secondary schools in the northern half of Liverpool.

Leadership Beyond School (2 of 2)

4

Thank you again so much for the plans you had made to come and speak with the Science department at SFX. We know what you planned to present to our Science department would have been invaluable to us in planning for next academic year. It is important as a department that we understand what is covered during Key Stage 2 to allow us to provide adequate stretch and challenge.

An additional Secondary School, the two mentioned previously, wanted me to meet with their Science Department to share the expectations at KS2 in Science. This was because they wanted to ensure stretch and challenge in KS3 especially for the high attaining pupils. This has been postponed until next academic year because of Coronavirus.

I am currently supporting a local Primary School Lead with planning, assessment and subject leadership. After visiting on-site, we looked at ways to support the staff with planning. As the partnership continues, we will address other areas for development such as resources and assessment.

Would it be possible for us to look at dates for the start of the next academic year?

Thanks
Peter

1

Peter Evans
Assistant Head

Andrew Rosser <rossera@townfield.wirral.sch.uk>
to me

Hi Jenny

I really appreciate you getting in touch, thank you. I'm at home too but with trying to home school two little ones I'm finding I don't have much time for anything else. We are supposed to be going on to block teaching next term so I was in the middle of planning all science lessons for summer when this whole crazy situation kicked off. I'm hoping that I can get them finished before we go back and also for Autumn term for next year as well. The documents that you sent me especially the plans have been invaluable and I'm not sure how I would have been able to do the planning for the whole school without them so thank you so much for that. Yes I would definitely like any extra documents that you have. At times doing all this planning has felt a little overwhelming so any extra help would be much appreciated. How are things with you? Has the new head settled in ok? Hope you're keeping safe and thanks again for all your help.

Peter Evans
Assistant Head

St Francis Xavier
Woolton Hill Road
Woolton
Liverpool

Miss M Galbraith
to me

3

Hi

Mon, 24 Feb, 12:52

I hope you don't mind me emailing. I was given your email by our head teacher Cathie. She mentioned that you are the science subject leader and that you have done a lot of work in relation to progression of skills across year groups, working scientifically and recording in science. This is something I'm really keen on improving and was wondering if we could arrange to meet up or if I could come to your school to see how you lead science to see if there is anything I could be using in OLI. Any help you could offer would be greatly appreciated.

Andrew Rosser <rossera@townfield.wirral.sch.uk>
to me

Fri, 16 Oct 2020, 16:13

1

Hi Jenny,

I'm good thanks. So far we've had one class off isolating and a few staff members but it's not been too bad. Sounds like it's a lot worse in your school. Thanks a lot for getting in touch and funny enough I had been meaning to email you myself. We've had the first block of our science teaching and it went really well. The kids have really enjoyed it and the feedback from staff has been really positive. This is in no small part to you and I just wanted to say thank you so much for all the resources, plans and help and support you have so kindly given. Creating a scheme of work for the whole school was such a massive job and I can't imagine how I could have done it if I hadn't had your support so thank you very much. Glad to hear that you have nearly completed your PQSM. Mine was supposed to start after Easter but because of COVID it got delayed. I have my first Zoom session next week which I'm really looking forward to. I'm sure after that I will be pestering you with lots of questions asking for help!!!

2

LIVERPOOL HOPE UNIVERSITY
FACULTY of EDUCATION
Core, Foundation and partnership mentor
Tuesday 17th March 9.30am
Hope Sports Hall 107

Tim Griffiths <griffit@hope.ac.uk>
to me

2

Hi Jenny

Tim Griffiths, Primary Science Curriculum Coordinator at Hope University asked if I could act as a 'critical friend' at A Hope Partnership Mentor Meeting. I was unable to attend this meeting as I was called back into work as a result of staff shortages caused by Coronavirus.

This is great news - many thanks for sorting out cover with your head.

I suggest that we meet at the Education faculty help desk in the EDEN building (8 on the attached map) at 9.00 am. The meeting isn't scheduled to start until 9.30 am, however it will be a coffee and wander across to the Sports Hall.

I've attached an agenda for the day. Don't stress about the content as I'm not quite sure about the precise remit of the meeting. However it would be really useful to have a critical friend

Agenda Item	Outcomes/Actions	Responsibility
Introduction	Partnership communication and documents OFSTED BA QTS Training plan Year Groups	GM
BA QTS Training Plan overview Subject specific	Subject teams work together to communicate University and School based	ALL
BA QTS school based Training Plan	Subject teams work together to communicate University and School based	ALL
Check audit		ALL
Implications and next steps		ALL



MAITT School Direct Trainees

Jenny Evans – Science 1 & 2

Friday 22nd and Friday 29th November 2019

Friday 24 th November - Science 1 & 2	Poor %	Satisfactory %	Good %	Outstanding %
How would you rate the quality of the content of the session?				100%
How would you rate the quality of the materials used?				100%
How did the session compare to your expectations?				100%

Verbatim Comments

Loads of fun! Very interesting, learned new ways to teach, encourage independent learning and open-endedness.

Amazing planning tips! Thank you :)

Excellent examples and demonstrations plenty of opportunity to apply skills and approaches to teaching.

Very practically useful with planning. Engaging and refreshing approach to science. Step by step advice for making most of lesson time. Brilliant session.

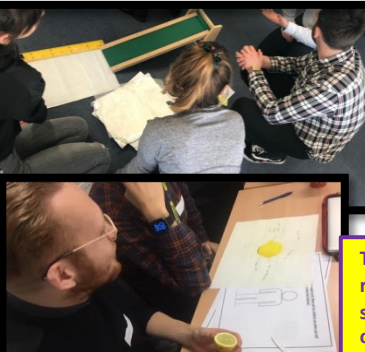
Brilliant session. It was all very applicable and changed the way I will look at planning science in the future. Look forward to next week.

Relevant and useful information. Focus on planning was very helpful. practical activities very engaging.

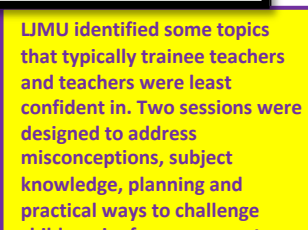
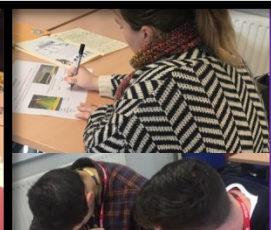
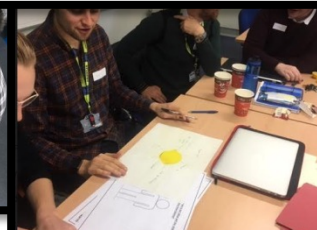
Ryan Murray <ryanmurray@gmail.com>
to me ▾

Hi Jenny,

I'm a trainee on the MAITT route. Thank you for all the help with the science activities and resources the other week, they've been so helpful. I was just wondering if it would be possible if you could send over the discovery dog worksheet? I've been trying to find it online and can't find it anywhere.



Trainee teachers were asked to reflect upon their experiences of science as children or what they have observed at school.



LJMU identified some topics that typically trainee teachers and teachers were least confident in. Two sessions were designed to address misconceptions, subject knowledge, planning and practical ways to challenge children in: forces, magnets, electricity and light. Impact- the students became more confident in these areas and learnt practical ways to teach these topics.

Sharing expertise beyond school community (1 of 2)



Very practical and fun, informative, interesting engaging enthusiastic, encouraging lots of resources. Very clear that Jenny has amazing subject knowledge & passion, inspiring.

Really fun and engaging, useful, enjoyable, practical ideas to take into the classroom.

Most engaging session we've had so far.

Great, engaging & useful session. Jenny pays great attention to our individual needs. The best session leaders have all done this.

Really fun session. Very engaging. Very useful lots of resources which really helps! Jen personalised it for us too which is fab!

Great use of resources, practical method of limiting input will be applied. Engaging session.



MAITT School Direct Trainees

Jenny Evans – Friday 13th December 19

Science 3

Friday 13 th December Science 2	Poor %	Satisfactory %	Good %	Outstanding %
How would you rate the quality of the content of the session?				100%
How would you rate the quality of the materials used?				100%
How did the session compare to your expectations?				100%

Verbatim Comments

Such a good session with lots of really useful resources to help with planning/subject knowledge etc.

Fab resources and guidance for our individual classes. Really helpful – couldn't have offered enough. Thank you! Great session.

Great resources and knowledge. Everything was linked to what we need to deliver science in school. Thank you =)

Excellent guidance as to how to plan and deliver science lessons. Engaged all students. Thank you.

Lots of great information and planning resources. It was so helpful to have advice from a former MAITT trainee.

Extremely reassuring. Practical ideas and planning. Resources that will help me massively.

Amazing session Jenny, thank you for sharing your wealth and experience to help us with our practice. My favourite session so far and massively beneficial.

Why am I here?

- Year 6 Teacher
- Studying for Senior Leadership Qualification (NPQSL)
- Currently mentor several local primary school leads and secondary science departments
- Mentor for MAITT students
- Science Coordinator for an 'Outstanding' Primary School
- Qualifications in Science (2 BSC graduate degrees Biochemistry and another in Biomedical Science)
- Worked as a Biomedical Scientist for 5 Years
- Transfusion and Haematology specialist
- Trained a secondary science teacher taught up to A Level
- I was training at MAITT 5 years ago and hope to try and make it a little easier for you (if possible)

Sharing expertise beyond school community (2 of 2)



MAITT School Direct Trainees

Jenny Evans – Science 4

Friday 6th of December 2019

Friday 1 st December '17 - Science 3 & 4	Poor %	Satisfactory %	Good %	Outstanding %
How would you rate the quality of the content of the session?				100%
How would you rate the quality of the materials used?				100%
How did the session compare to your expectations?				100%

Verbatim Comments

The most useful session for one particular subject so far. Extremely helpful to our future lessons in a way that will take pressure away from us regarding planning midterm scheme work.

Really useful session. Jenny is really thoughtful in her prep & her experience of the course is a real asset.

Another brilliant session: informative, helpful confidence booster. Planning was very helpful (thank you for the planning forms!)

Very useful tips for planning.

Really great help with planning.

Really personalised the session again. Made sure that we were all happy with the plan for the day. Adapted it to make sure we were gaining the most out of the session. Really useful! Really enthusiastic! Lots of good advice, thank you.

Great informative, helpful, encouraging, great guidance and advice. Well structured- all relevant and useful.

Really, really useful! More confident about science.

Many great ideas and support for lesson plans to take away. Useful and engaging sessions.

Advice on planning very useful, for all lessons not just Science. Resources very helpful.

Jen has been fantastic. She really taken time to cater the sessions specifically to our needs and the skills we have developed in these past two weeks can also be transferred into other subjects.]



Thanks for your order! #1618412629

YOU'RE GOING TO

Writing for ASE PS

1 TICKET SENT TO
j.evans@stmatthewsops.co.uk
[Change](#)

DATE
Tue, 23 Feb 2021 15:45 - 16:45 GMT

MAITT School Direct Trainees

Jenny Evans – Friday 10th January '20

Science 5

Friday 13 th December Science 2	Poor %	Satisfactory %	Good %	Outstanding %
How would you rate the quality of the content of the session?				100%
How would you rate the quality of the materials used?				100%
How did the session compare to your expectations?				100%

Verbatim Comments

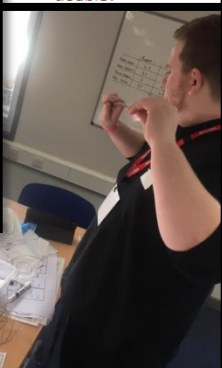
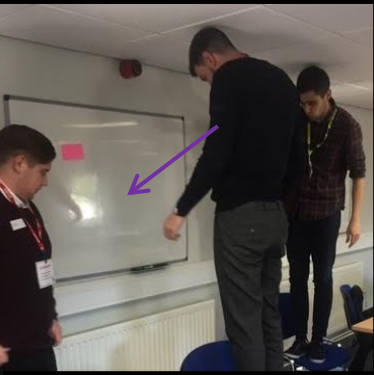
Beyond helpful really good resources and helped me with the upcoming science unit of work I have to plan. Learned a lot about considering misconceptions before experiments.

Fantastic! Really supportive, adapted the session to meet our emerging needs. AMAZING.

Outstanding session – Jenny is so helpful and supportive and had lots of great advice especially in terms of long term lesson planning for science.

Thanks for an amazing session for understanding children's misconceptions in science lessons. As well as all the resources to utilise within my lessons. Thanks Jenny ☺.

Amazing! Literally clears everything up and makes teaching science actually doable!



Roles

Einstein Finley Jack Mc Chidu Patrik	Pasteur Evarose Joel James Jack Burns	Watson and Crick David Ruby Luca George D	Tesla Sienna Evelina Damilare Thomas
Darwin Caiden Grace Callum L	Edison Georgia Kaiden Kevin	Newton Anthony Callum Mc Holly Oliver C	Galileo Emmy C Demilola Harvey George S
Lesson 1 R=Lab Technician P= Lead Scientist G=Experimenter O= Co Experimenter	Lesson 2 R=Experimenter P= Co Experimenter G=Lab Technician O= Lead Scientist	Lesson 3 R=Co Experimenter P= Experimenter G=Lead Scientist O= Lab Technician	Lesson 4 R=Lead Scientist P= Lab Technician G=Co Experimenter O=Experimenter

Dear Jen

Thank you for your email - the work you are doing sounds amazing, and certainly resonates with the aims and work of the Trust. We have an Ogden programme manager, Paul Sapple, who is based near Liverpool and he would be interested in talking to you further to see whether there could be any opportunities for you and your school to become more involved with the work of the Trust. Applications are currently open for new school partnerships and this might be something worth exploring? Paul is on annual leave at the moment but he will be in touch when he is back at work next week.

With regards to Phiz e-news, we feature articles from the Ogden website which have a definite Ogden link - from an Ogden partnership, featuring Ogden resources, an outcome from an Ogden training session, as examples. Currently (and unfortunately) I am not sure we would be able to feature an article on the work you are doing - but perhaps opportunities will emerge in the future.