IMPACT REPORT TO MARYLAND PRIMARY SCHOOL GOVERNORS
SUBJECT: Science **TERM:** Summer 2022
SUBJECT LEADER: Anastasia Boreham

1. KEY POINTS FROM SCHOOL DEVELOPMENT PLAN (SDP)

a) Ensure that science standards remain high and we are Ofsted ready
b) To ensure core skills in English, Maths and Computing underpin all aspects of learning and provide necessary skills to become 'future ready'.
c) Teachers are confident with assessment for learning strategies and understand what greater depth looks like in science.
d) To review the quality of conclusions and children's skills at evaluating experiments, which will be achieved through book looks, pupil interviews and review of planning.

2. PROGRESS AND IMPACT TO DATE

Science at Maryland

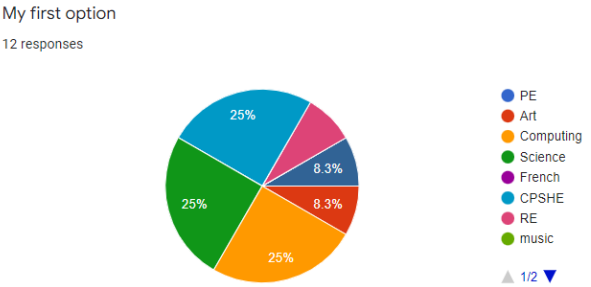
Governor feedback: '*Can I express my thanks to all those involved in the Science Fair. It was the best one yet! Parents and pupils were really engaging with the experiments and there was something to catch every child's attention regardless of their age.' March 2022*

Parent feedback (Parent survey February 2022)
- Science was selected as children's favourite subject along with maths

Staff feedback (February 2022)
- Science was chosen by teachers to be evaluated in the next Ofsted inspection.

Pupil feedback (April 2022)
- 'I love science and how I can test things to find things out'

Scope of science at Maryland (part of Ofsted statement) and part of objective a
- At Maryland, pupils learn how **scientific knowledge becomes established through scientific enquiry.**
- By learning this, pupils appreciate the nature and status of scientific knowledge: for example, knowing it is **open to revision in the light of new evidence.**



Multidisciplinary approach: children learn about its **uses and significance to society and their own lives**. (with links to geography, maths, computing, D&T)
For example:
- Eradicating smallpox (Year 6)
- Melanin and the colour of our skin (Year 2)
- Climate change in Year 6.
- Dealing with the problem of single use plastic in Year 5
- controlling disease (Year 2)
- access to water (Year 4) and how to purify water (Year 5)
- growing food (across the school) Nature Club

Pupils begin their learning about science in the **early years foundation stage (EYFS).** This involves learning foundational knowledge primarily through the '**understanding the world: the natural world'** area of learning. This provides a number of rich contexts for pupils to learn a wide range of vocabulary. These words **form the beginnings of scientific concepts** that will be built on in Year 1 and beyond. For example: observing metamorphosis of butterflies, observing toad spawn hatch into tadpoles

- Nature Club is going very well, with children using the new greenhouse to carry out experiments with growing watermelons, physalis and seeds from South Africa. The group was invited to take part in the Jubilee recording of Gardeners Question Time. Unfortunately our questions were not asked, but you can hear the group cheering in the background. The show will be broadcast in July 2022.
- In the spring and summer term, pond dipping and pond trays with tadpoles, dragonfly nymphs, etc have been set up at break times and lunchtimes to enable **all** Junior children to engage.
- Infants have been supported to pond dip and observe tadpoles during science lessons and when they are using the garden.

CPD has focussed on ensuring that **'fun activities'** are **an opportunity to develop a deep understanding of the associated scientific concepts**. We follow the National Curriculum, going above in some areas (when deemed appropriate. useful and achievable).

- This year's priorities include:

CURRICULUM GOAL 1: To ensure every child is secure in English, maths and computing

Core skills in English, maths and Computing underpin all aspects of learning and provide necessary skills to become 'future ready'.

CURRICULUM GOAL 2: To deliver a broad, balanced and rich curriculum that creates independent, resilient critical thinkers

Our six school values underpin this ethos: teamwork, respect, kindness, courage, ambition, resilience.

CURRICULUM GOAL 3: Deliver a curriculum that champions diversity and equality

Pupils have a global perspective and are well prepared for life in modern Britain. Our pupils see themselves represented in what they learn and the school itself so that equality, diversity and anti-racism are seamlessly interwoven into the curriculum.

New Ipads are in use and training has been provided on incorporating into science lessons. For example, in Year 3 and Year 5, pupils are (will be) creating an online plant diary and a minibeast digital guide. Digital microscopes are used in most lessons for children to observe closely.

- Summer monitoring of learning through book looks and learning walks has shown **consistently good** pupil understanding in drawing conclusions. Pupil interviews will be conducted in the late summer term to evaluate this further.

3. LOOKING AHEAD

a) Deep dive to be conducted in science in the summer term as part of the Ofsted preparation
b) Incorporating more technology into experiments
c) Continue to investigate funding opportunities for the garden and chickens. (consider more living eggs projects)