

### **Worlingham CEVC Primary School**

**Annual Subject Review for: Science** 

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How effective is ... ? How do you know ? What impact has your work had? What are the next steps?

# What impact has your work had over the past 12 months? How do you know? How has your subject developed?

Recently I delivered a Science staff meeting to implement some new ideas for Science teaching at Worlingham. This staff meeting was focussed around giving the children lots of independence and autonomy in their Science learning. It had a very practical focus and has encouraged staff to be more confident with allowing children to lead their practical learning, understanding how different key stages can carry out and record their practical. Assessment for knowledge and working Scientifically were discussed and teachers are now clearer on how this can be done in a meaningful and manageable way. Key vocab is now placed on mark stickers across most of the school, which means it is easier for the children to use and access this. I have shared the subject progression and checked that teachers are covering all areas of the curriculum, including Scientific skills. I have ensured this by checking the long term plan and looking at books and displays to ensure the correct topic is being taught in the correct term. I have additionally handed out a 'Working Scientifically' pack to each Key Stage, with experiments for each topic and each skill, to ensure teachers are covering all areas of this too.

#### Highlights of the Year.

Science week 2020 – Innovation for the future LKS2 use of Explore, engage extend carousel Planned for Summer term – KS1 trip to Africa alive

- Science week 2022 with hands on workshop

#### How well do children achieve in your subject? How do you know?

As a school, the children are achieving well in Science. From discussing lessons with staff, looking at children's books, seeing photographs and discussing Science learning with children, it is clear that children enjoy Science and the practical aspect, which supports achievement of Science at Worlingham to be very good. Although in Science, children are assessed nationally as 'secure' or 'not secure', we understand that some of our children are also working at a level above the expectation for their age. It is clear there are children who are 'Greater Depth' because in discussion with teachers and children, there are children who think in a deeper way about their science, discussing why some ideas work and why others don't, thinking of ways to extend and improve research. There are also children who are working at a 'not

secure level', and I can see this through book looks and in discussion with teachers. These children are being supported, as discussed below.

What steps are you taking to tackle underachievement and improve provision? For children who are 'not secure', there are provisions in place to scaffold and support their learning. In Science, teachers use templates/work sheets with sentence starters and key vocabulary. Questioning is used to ensure the children's learning is clarified and extended. At Worlingham, Science involves lots of group, pair and whole class work to expose underachievers to new ideas, key vocabulary being used in context and to help them to access the learning.

To improve provision for underachievement, the staff meeting which was delivered in February 2022 had ideas and strategies to extend children, and to support those who are not secure. This will be monitored further into next year.



## **Subject Action Plan for:**

Priority	To develop a consistent approach to the teaching of Science across the school.				
Rationale					
Success Criteria	<ul> <li>-To develop a more child led approach to Science teaching.</li> <li>-To ensure assessment is consistent and informs teaching.</li> <li>-To embed key Scientific vocabulary across the school and build upon this throughout the year groups.</li> </ul>				

Intended Outcomes		Actions	Who is responsible?	Resources/Time needed	Timescale	Monitoring and Evaluation
1.	A child led ethos in practical Science.	AS deliver staff meeting to inform. Teachers to give children more freedom and autonomy in their practical work. More use of group, pair and whole class practical. Eliminate 'teacher led' practical. Allow children to make mistakes but ensure they reflect upon them.	AS and class teachers	Staff meeting has been delivered. Science week-£1350	To be reviewed each term until March 2023	
2.	Assess knowledge and practical at the beginning of a topic in an engaging way.	AS deliver staff meeting to inform. Teachers in KS2 to use the Explore, Engage, Extend resource to implement a carousel of activities at the beginning of a subject. KS1 to use concept cartoons. AS to create a carousel for KS1 on their first topic in September to try out.	AS and class teachers	Staff meeting has been delivered. EEE book has been ordered for UKS2 Resource audit as been completed	To be reviewed each term until March 2023	
3.	Key Scientific will be clear and accessible for children.	AS deliver staff meeting to inform. Teachers to include key vocab on the mark stickers. Teachers to refer back to the key vocab a number of times during the lesson and encourage the children to use it in their written and verbal work.	AS and class teachers	Staff meeting has been delivered. Mark stickers	To be checked in book looks. To be fully implemented by July 2022	