



## Science at St John Vianney

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### Science Curriculum

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes. (NC 2014)

#### Intent:

At St John Vianney, our Science curriculum is intended first and foremost to meet the national curriculum requirements for this subject.

Through our teaching of this subject:

- It is our vision to instil a lifelong love of science within our pupils.
- We work hard to provide a rich and varied curriculum to challenge and meet the needs of our children. We believe all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science.
- Across all year groups pupils will build up a body of key foundational knowledge and concepts, pupils are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena.
- We provide our children with wider opportunities in science and make links to other subjects.
- Teachers plan and challenge pupils based on the progressive curriculum, always mindful of our children's needs.
- We monitor our schools progress in science regularly in line with our science policy constantly striving to improve.

Children will know more, remember more and understand more about the world and its people.

## Implementation

Our Science curriculum is organised into termly topics as discussed and agreed by all teaching staff (see appendix for whole school Science Policy and long term plan)

To move away from pupils believing they are learning about 'topic', we feel it is important for the subject of Science to be taught discretely, although links will be made with other subjects where appropriate.

To meet our curriculum intent for Science, we have agreed to do the following:

- Create a topic 'cover sheet' in pupils' books at the start of each new Science topic. This will include engaging diagrams or pictures, key vocabulary and key questions for the specific topic. It may include some necessary knowledge needed for the topic but will allow pupils the opportunity to gain this knowledge for themselves.
- Use skills progression grids to ensure that pupils are building upon skills already acquired and to provide appropriate challenge.
- Key vocabulary for the topic will be displayed, revisited, practised and checked upon not only during that specific topic but at other times to ensure it 'sticks'.
- Appropriate practical work, including a range of investigations and experiments, will be used to enhance learning and provide the 'wonder' for our pupils.

At St John Vianney, we recognise that our Science curriculum needs to be constantly evolving and through regular monitoring, evaluation and feedback, we will make the necessary changes to provide the best possible Science curriculum for our pupils. This will include keeping abreast of the latest Science schemes and programmes on offer externally.

## Impact

When we are successful in meeting our curriculum intent and implementation:

- pupils will see themselves as "scientists", recognising the unique nature of this subject and the knowledge and skills they have gained from it.
- pupils will know more, remember more and understand more about the natural world around them.
- pupils will understand about climate change and human impact upon the world, recognising the ways that they themselves can make a difference.
- pupils will make links between the physical and human features of different places, including locally, nationally and the world.
- pupils will use a developing vocabulary, appropriate to their age/stage, to discuss key scientific concepts.
- at the end of key stage 2 our pupils will be ready to tackle the challenges of key stage 3 Science.

## Plans for the future

Climate change/ environmental issues - Further raise the profile of this key area  
Links with secondary colleagues - making sure our pupils are high school ready  
Fieldwork - progression and making it happen! Outdoor learning and forest school  
Resources!