

## Subject Intent through our Values

### Community

In our community focused approach, students collaborate in groups, sharing and valuing each other's thoughts whilst appreciating similarities and differences. We teach science with links to the school and local community and foster an understanding that everyone can make a positive impact.

### Peace

Our curriculum emphasizes gaining peace through nature by incorporating gardening, observing the natural environment, achieving lesson goals, and fostering investigations and new discoveries.

### Love

Awe for our natural world, passion for teaching, and collaborative love define us.

### Resilience

Introduce tools foster self-initiated investigations, encouraging resilience, experimentation, adaptability, and learning from scientists' examples.

### How we make our curriculum exciting and engaging and increase children's cultural capital:

- Hands on, practical, use of environment
- Exciting themes with clear purpose – e.g. Y2 making lighthouses
- Cross-curricular approach
- We use real life photos and scenarios
- Trips and visiting workshops: Early years – Canal Centre (boat trip, pond trip, water safety), Y2 Beale Park (habitats), petting zoo (EY & Y1), Butser Farm, Y3 Rocks and soils workshop, Y5 Astronomy workshop etc
- Forest School Club, Gardening Club

## Our Curriculum Approach

We use **White Rose Science** across The Walsh Schools, based on the national curriculum. Our curriculum is sequenced well with clear identification of knowledge and scientific skills. Where possible, we link our Science to other subjects – particularly with English, D&T and geography.

The curriculum is designed so that learners review and build on previous skills. We utilise the resources and environment around us and incorporate first-hand experiences where possible to bring the curriculum to life.



# SCIENCE

## At Walsh Infants and Juniors

### How we develop children's language, including subject specific and technical vocabulary and oracy:

Within each unit, key vocabulary is identified across the school. Learning walls are used to remind pupils and support pupils in their independent learning. Many of our Science lessons link with our English units and support pupils to develop their vocabulary and oracy skills. Vocabulary from knowledge organisers is shared with parents and pre-teaching takes place in school to support learners.

### Spirituality

- Awe and wonder
- Asking big questions "what if"
- Variety of the world – e.g. habitats, plants, animals
- Windows – glory of the world around us, wonders of creation, value of all in the world
- Mirrors – reflecting on individual value in the world and impact on others, care for the world
- Doors – reflecting on the impact of changes e.g. if one element of a food chain is no longer there

### How we Adapt Teaching to meet the needs of our Pupils:

- Teachers use the '**1 do, we do, you do**' teaching cycle.
- **Scaffolded learning** through adult support, questioning, smaller steps, apparatus and visuals.
- Prioritise **understanding** over task completion.
- **Differentiated recording** – tables, diagrams, close procedure
- **Group working**

### How we assess:

- Retrieval practice
- Key questioning
- End-of-unit assessments
- Formative, summative and teacher assessment is used to triangulate termly judgements.

## Big Ideas

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| <ul style="list-style-type: none"><li>○ Plants</li><li>○ Animals &amp; humans</li><li>○ Materials</li><li>○ Theory of evolution</li><li>○ Earth and space</li><li>○ Light</li><li>○ Sound</li><li>○ Habitats</li><li>○ Climate</li><li>○ Forces</li><li>○ Electricity</li><li>○ States of Matter</li></ul> | <ul style="list-style-type: none"><li>○ <b>Observing</b></li><li>○ <b>Comparing, identify, group &amp; classify</b></li><li>○ <b>Solve problems</b></li><li>○ <b>Predicting</b></li><li>○ <b>Testing</b></li><li>○ <b>Concluding</b></li><li>○ <b>Critical thinking</b></li></ul> |
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### Teaching and Learning Approaches used in this subject:

- Teacher input – recapping prior knowledge; instruct new knowledge, questions, deep probing
- Pupils – undertake independent activity, investigation, exploration.
- Recording is carried out in a variety of ways including photos, drawings, written records.
- We use our school grounds, where possible, to ensure that pupils gain first-hand experience of the knowledge and skills we want them to apply.