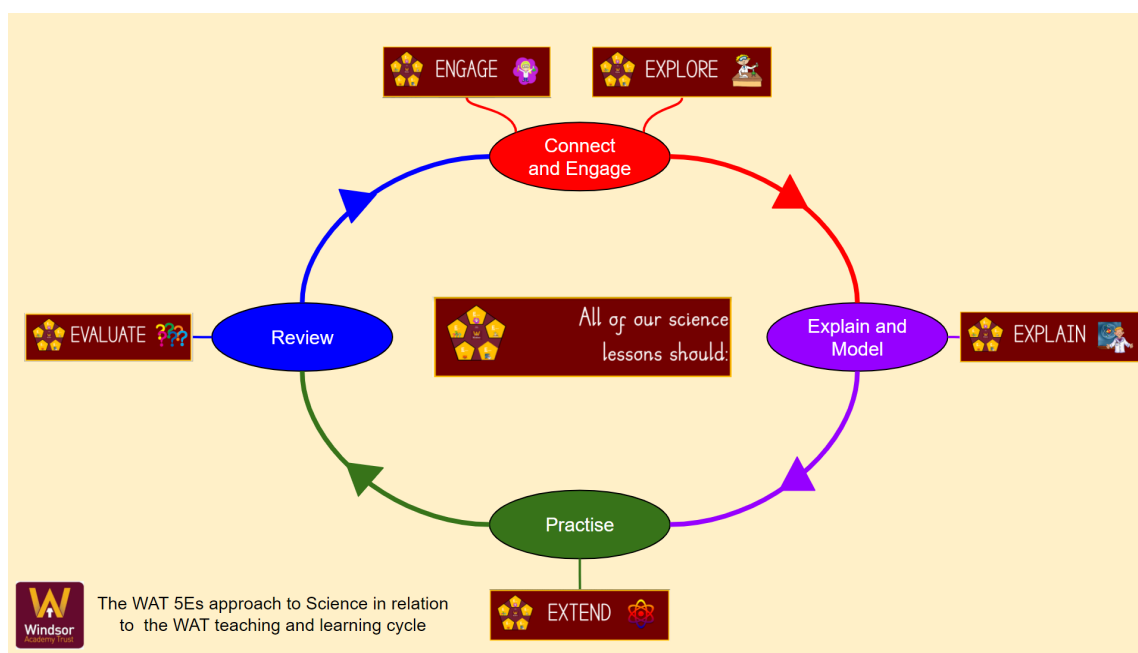


# Science

**WAT Aspire Curriculum** – our curriculum develops students’ aspirations so that they strive to be the best that they can be. In all subjects we carefully plan the subject knowledge, skills and vocabulary, coupled with specific Aspire learner skills and character virtues, so that our students have the tools to be successful in learning and in life. This document sets out the key principles in this subject area.



## Teaching and Learning Cycle



## Long Term Overview

### Science Long Term Overview

#### **EYFS**

In the EYFS, scientific knowledge and skills form part of the three Prime Areas and four Specific Areas of learning and will be delivered as planned by the Early Years practitioners in line with guidance set out in the Statutory framework for the early years foundation stage, published March 2021. The progression in science from EYFS to Key Stage One document below shows the knowledge and skills that pupils at the end of EYFS should have acquired and how these are built upon in Key Stage One.

#### EYFS/KS1 Progression in Science

### **KS1 and KS2**

- Units should be taught in the order detailed in the WAT 2020-2021 Science Overview Document.
- Working Scientifically units are the first 3 weeks of each year group to be embedded in units throughout the year.
- Pupils in Key Stage One and Key Stage Two will follow the National Curriculum Programmes of Study as set out in the

## **Knowledge Organisers**

Knowledge organisers for each unit of work set out the skills, knowledge and vocabulary to be developed through the unit.

### **Year 1 Units**

[Year 1 Working Scientifically](#)

[Year 1 Animals including Humans Part 1](#)

[Year 1 Animals including Humans Part 2](#)

[Year 1 Plants](#)

[Year 1 Everyday Materials](#)

[Year 1 Forces and Magnetism](#)

[Year 1 Year Long Investigation](#)

### **Year 2 Units**

[Year 2 Working Scientifically](#)

[Year 2 Earth and Space](#)

[Year 2 Animals including Humans Part 1](#)

[Year 2 Animals including Humans Part 2](#)

[Year 2 Everyday Materials](#)

[Year 2 Living Things and their Habitats](#)

[Year 2 Year Long Investigation](#)

### **Year 3 Units**

[Year 3 Working Scientifically](#)

[Year 3 Rocks](#)

[Year 3 Light and Shadows](#)

[Year 3 Plants](#)

[Year 3 Animals including Humans](#)

[Year 3 Forces and Magnetism](#)

### **Year 4 Units**

[Year 4 Working Scientifically](#)

[Year 4 Living Things and their Habitats](#)

[Year 4 Sound](#)

Year 4 States of Matter

Year 4 Animals including Humans

Year 4 Electricity

### **Year 5 Units**

Year 5 Working Scientifically

Year 5 The Earth and Beyond

Year 5 Plants and Living Things

Year 5 Forces and Motion

Year 5 Animals including Humans

Year 5 States of Matter

### **Year 6 Units**

Year 6 Working Scientifically

Year 6 Evolution and Inheritance

Year 6 Light

Year 6 All Living Things and their Habitats

Year 6 Animals including Humans

Year 6 Electricity

## **Vocab**

Science vocabulary is planned progressively from EYFS through to Year 6 and shared on the Knowledge Organisers.

Science vocabulary Progression EYFS-Year 6

## **Assessment**

The purpose of our assessment is to give appropriately timed feedback that focuses on moving learning forward. We use both formative and summative assessment to assess pupils' understanding, knowledge and skills.

### **Formative assessment;**

These assessments take place in lessons as part of our teaching cycle. It can take many forms, such as Key Learning Tasks, multiple choice quizzes, short-answer quizzes or the use of whiteboards. They are often used in Smart Starts which frequently take the form of low-stakes retrieval quizzes. Marks from these are not collected or analysed centrally; they inform what the teacher does next. The teacher will then deliver appropriately timed feedback that focuses on moving learning forward  
eg:

- Retrieval practice
- Evaluating 'What a Good One Looks Like'.

- Modelling, explaining and whole-class learning checks
- Use of our High Challenge for All framework to support scaffolding and high expectations for all

Progress in science is assessed summatively at the end of key phases within a unit using a key assessment task eg [W Aut1/2 - KAT - Animals including Humans.docx](#) . In Key Stage One and Key Stage Two, teacher's assessments of Science against the judgements of 'Working towards the expected standard', (WTS) and 'Working at the expected standard' (EXS) are collected termly on INSIGHT.

### High Challenge for All

Challenging and interesting work is an entitlement for all our learners irrespective of their ability. High challenge is a focus for us at Tenterfields and this is our 'High Challenge for All' rationale which sits alongside our Teaching and Learning cycle. [High Challenge for all Our models](#)

### SEND

When a pupil has been identified with special needs, their learning will be further scaffolded or differentiated by the class teacher to remove barriers to learning to enable them to access the curriculum. Teachers use a range of teaching strategies to involve every child in learning based upon what they already know and can do. This may include the use of specific resources and strategies:

- the use of visual prompts
- sensory audits
- task management boards to chunk tasks
- reading rulers, concentration cushions, fidget toys, sand timers
- Overlays etc.

All staff have high expectations of all pupils. By reviewing children's progress through formative, and summative assessments then gaps in their understanding, skills and knowledge can quickly be identified and support can be put into place to enable them to make progress. At Tenterfields the interests of the child are always considered when planning the curriculum to ensure that children are engaged and enthusiastic about their learning.

### Science Learner Tools

Each classroom has a science Learning/Working Wall. This is reflective of current learning and displays modelling, key vocabulary, working scientifically vocabulary and examples of high quality learning. Scientific equipment is available to teach each unit of work when required and used effectively with other resources, such as presentations, animations and videos on interactive whiteboards. Use of Ipads are also encouraged for scientific research and further study of key scientific concepts.

