

## Broadening Horizons

Our intent is that all students have a full understanding of how to develop themselves as well rounded citizens, maintain healthy relationships and understand how to keep themselves safe both online and in their day-to-day life. We want all students to know what options are open to them in the future and understand the routes they have in order to progress on their life journey.

Our curriculum includes:

- Links with local industries and national organisations, innovative external speakers, events and resources
- Opportunities for students to visit University Science Departments
- Science based activity days
- First hand fieldwork

## Careers

We run a series of 'Careers in the Curriculum' weeks in our school. For Science, this week takes place in January.

Students take part in a number of activities to encourage them to think about how what they learn in the classroom can be applied in a number of future careers.

## Immerse Yourself



Access with your Google account

The WPT Science Study Lounge website offers students a place to find help, support and opportunities to further develop their understanding of Science.

Students can visit using the link below and explore the activities, videos, quizzes and exam questions designed to help them succeed in Science.



Access with your Google account

Read about Science in the news, latest scientific discoveries and find out more about the possible careers in Science by visiting the WPT digital science magazine 'Science in Focus'.

## Praise and Reward

Our rewards system can be broadly split into four categories: classroom level, subject level, school level and privilege rewards. We'll focus on classroom and subject rewards here - for more information about our rewards schemes, please see our website.

### CLASSROOM LEVEL REWARDS

Awarded for: working hard, taking risks and rising to a challenge, making mistakes and learning from them, helping others, and taking pride in the school community.

Rewarded by: praise postcards, positive phone calls to parents/carers, positive text messages home, and lesson based prizes.

### SUBJECT LEVEL REWARDS

Reward scheme: star of the week, curriculum awards (Subject/School Way, participation, working with pride, embracing the whole curriculum), high flyer, extra mile, most improved.

Rewarded by: names displayed on reward boards, certificates, social media posts.

## Contact



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## The Royal Society

Independent Scientific Academy of the UK, dedicated to promoting excellence in Science for the benefit of humanity.



SCIENCE  
YEAR 9 Curriculum Newsletter



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# Curriculum Intent

The Science curriculum is inclusive and ambitious for all students, designed to engage students and strengthen the memory of what is being learnt.

The curriculum is organised into 12 Big Ideas that are developed through a series of key concepts organised into teaching topics which are revisited throughout the KS3, 4 and 5 programmes of study.

The Science curriculum is planned to build increasingly sophisticated knowledge of the products and practices of Science.



# Year 9 Curriculum

In Year 9 students will study six topics in Science linked to the 12 Big Ideas.

## Unit 13 - Reactions and Energy

In this unit students will learn about a number of different chemical reactions including combustions, displacement, thermal decomposition and oxidation.

## Unit 14 - Genetics and Evolution

DNA is the genetic code which makes up genes, which are responsible for giving an organism a specific characteristic. Students will learn about variation due to genes and how evolution by natural selection has led to the formation of new species over time.

## Unit 15 - Electricity and Magnetism

In this unit students will learn about the fundamentals of circuits and magnetism before developing further their understanding of current, potential difference and

resistance in a circuit and the uses of electromagnets.

## Unit 16 - The Earth's Resources

We depend on the Earth for its resources. In this unit students learn about the structure of the Earth and how we use and need to protect the limited resources the Earth provides us.

## Unit 17 - Biodiversity

Biodiversity is a measure of the range of living organisms within a habitat. Students will learn about the different ecosystems and how human interactions with them can be damaging. They will also explore different ways of protecting vulnerable ecosystems in the future.

## Unit 18 - Space

Students will learn about our solar system and beyond. Focussing on the differences in gravity on different planets and how humans explore the universe.



# Assessment Points

Students are assessed at the end of each topic, roughly once per half term. Assessments are online and include short and long answer written questions and multiple choice questions. Students will also sit two written summative assessments during the year, assessing accumulative knowledge.

# Have your say!

At WPT we're always looking for feedback. If you have any thoughts/opinions on this Curriculum Newsletter, its content or the curriculum in general, please scan the QR code to fill out a short feedback form.



# The Science Way

The Science Way is followed in all of our lessons. It is designed to help students become young subject specialists and has two main purposes: to teach students the vital skills needed to achieve their full potential, and to demonstrate how Science relates to the wider world.

**THE SCIENCE WAY**

THE SCIENCE WAY  
THE SUBJECT WAYS

WE MAKE LINKS BETWEEN BIG IDEAS IN SCIENCE

We can make observations & describe what we see

We can explain everyday things in a scientific way

We work safely & look out for hazards

We can work practically with people with different skills & knowledge

We can learn from successes & failures and adapt to do things better

WE EVALUATE EXPERIMENTAL RESULTS IN LIGHT OF THE ORIGINAL PROBLEM

We use scientific vocabulary accurately & talk like a scientist

We can use numbers and data to support our work and obtain meaningful information

We can identify key issues in a problem and use our scientific knowledge to tackle them

WE ALWAYS ASK QUESTIONS AND TRY TO FIGURE OUT WHY

BUCKERSLEY PARTNERSHIP TRUST

SUBJECT WAYS