



Edition 4
January
2024

SCIENCE

YEAR 11

Contact

 David Frith
WPT Science
Subject Director
dfrith@wickersley.net

 Ruth Hayes
Wickersley Head of
Department
rhayes@wickersley.net

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. We aim to spark a lifelong passion for science by cultivating a sense of wonder and awe about the natural world.

Our curriculum intends to foster a spirit of curiosity and inquiry, encouraging students to ask questions and seek answer and connect science to their everyday lives, demonstrating its relevance and importance.

» ; - o²4 ; o²a ... a ; ... ž @ c ... ² - - @ ²X²a ... Ě ... ě @ a ... a o ... •²@ " ... ž^a c^až ... Ě @ a observation, data collection, analysis, and critical thinking. Students will be provided with opportunities for engaging in hands-on practical work, encouraging exploration and experimentation.

The Science curriculum also provides opportunities for students to explore the ethical and societal

@ a " X @ ě^a @ o c ž ... o3 ... ž @ c^a@ ... ě Ě ě c a c^až P ... R^a ... c o²- ě4 ž ... - @^a@ ě X .

Big Questions in Year 11 Science

1. How can we understand and combat emerging diseases? From pandemics to antibiotic resistance, how can we prepare for and combat new threats to our health?
2. How can we clean up pollution and remediate environmental damage? From soil contamination to plastic waste, can we develop chemical solutions to restore our planet's health?
3. How can we combat climate change using physics? Understanding the physics of the climate system is

Immerse Yourself

WPT Y11 Science Study Lounge

- ✓ Videos
- ✓ Quizzes
- ✓ Exam Practice

Educake Science Platform

- ✓ Interactive Homework
- ✓ Study Guides
- ✓ Independent Study

The WPT Science Study Lounge offers help, support and opportunities to further develop their understanding of science. Students can visit by clicking to the left and explore the resources available to help them succeed in Science.

Students also have access to interactive resources, auto-marked, and students get instant feedback. Students can practice. They can see how they are doing on every topic and can identify areas to revise based on their progress.

Quizlet



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: c ě a ž ... @ ž " X ě Ě ... o c ... - ě ě - ... o ě - ž K ... -^a@ ě^a ž K ... ž o @ ě X ... a

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.

Just some of the things our curriculum includes:

- Links with local industries and national organisations providing opportunities for students to engage with innovative external speakers, events and resources
- Opportunities for students to visit University Science Departments and experience exciting and engaging cutting edge science days to raise the aspirations and awareness of our students
- Science based activity days to engage and enthuse students in STEM subjects including the UKROC challenge
- E @ -; ě ě ... X ě o - U ...^a; ě^a ... " - o ě @ ž ... ž^{a2} c^a ž ... ě @^a; ... o " o -^{a2} c @^a @ ž ...^a o interest and work in the local and national environment

Students can also develop their science skills and knowledge further by visiting Science Museums further ě X ...^a; ě^a ... X @ c U ... @ c ... ě @^a; ...^a; ... á ě - ® @ c ...^a o " @ ž P ... »; ... Ě e ! • ... to broaden their science horizons should look into, click on the logos below for more information!

UKROC Challenge

The challenge is aimed at students aged 11 – 18 from any secondary schools, colleges, educational facilities or youth groups to design, build and launch a model rocket with a fragile payload.

Eden Project - Cornwall

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. In Year 11, we look at possible science career

The Science Way

Our subject has a 'Subject Way' at the heart of it. Our Subject Way is designed to help students become young subject specialists. The Subject Way has two main purposes:

Firstly, to teach students the vital skills they need to achieve their full potential and gain the very best grades they can. Secondly, to teach students how each subject relates to the wider world, incorporating the life skills they will learn.

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.

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.