



GENERAL BACKGROUND INFORMATION

Walton High opened in 1999 with 120 Year 8 students. Since then the school has grown; has opened a second campus at Brooklands and now has over 1750 students on roll, including over 350 Post 16. The school has an excellent reputation and is consistently oversubscribed.

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In 2011 the Governors of Walton High founded Milton Keynes Education Trust with the following aims:

Milton Keynes Education Trust Statement of Aims

The educational aims and objectives of Milton Keynes Education Trust (MKET) are based on our commitment to securing social justice through high quality education that promotes inclusion and embraces diversity.

The Trust aims to **enhance** and **enrich** the lives of children and young people by **enabling** them to make the most of outstanding learning opportunities within and beyond the curriculum; instilling an appreciation that there are **no limits** to what they can achieve and developing the attributes needed to successfully shape and respond to the future.

A clear secular moral framework will promote honesty, integrity, tolerance and respect as well as an appreciation of individual and collective responsibility.

In this way we will bring out **the very best** in our children and young people.

We will realise our aims and secure sustainable school improvement through high quality transformational leadership, professional development and collaborative partnerships.

The schools that are currently part of Milton Keynes Education Trust are:

- New Chapter Primary School, Coffee Hall, Milton Keynes
- Heronsgate School, Walnut Tree, Milton Keynes
- Kents Hill School, Kents Hill, Milton Keynes

The creation of the multi-academy trust has enabled more cross phase working and the schools within the partnership have pooled resources to provide additional educational services to support children's learning, e.g. Educational Psychologist, Education Welfare Officer and back office staff.

Science details – Jan 2018



WALTON HIGH'S APPROACH TO LEARNING AND TEACHING

Walton High is committed to making personalised learning a reality. Our flexible and varied curriculum is an essential foundation for this, providing as it does personal learning pathways which are challenging, relevant and significant.

Personalised learning and teaching is a commitment to ensuring **all learners** reach or exceed expectation, fulfil early promise and develop latent potential. At the heart of personalisation is the expectation of participation, fulfilment and success. Personalised learning sets ambitious objectives, challenging personal targets, rapid intervention to keep students on trajectory, and vigorous assessment to check and maintain progress.

Core components of personalised learning are:

Assessment for Learning - the process of seeking and interpreting evidence for use by learners and their teachers to decide where they are in their learning, where they need to go and how best to get there;

Developing students' capacity to learn - by building the confidence and capacity of the learner and developing personal skills and strategies to enable self-management and self-direction;

Teaching and Learning strategies that actively engage and challenge learners - Walton High's approach to lesson planning ensures all the key elements of outstanding learning are considered.

OUR VISION FOR OUTSTANDING LEARNING

We aim to develop students who:

- are stimulated and challenged by the science they learn, and enjoy their learning;
- feel ownership and pride in the work they carry out;
- see the progression they are making – lesson-by-lesson and year-by-year;
- recognise the value of Science both for themselves as individuals, and for society as a whole;
- are confident, independent learners who can use a range of learning talents.

As teachers, we aim to:

- plan interesting, engaging lessons that allow all to make progress;
- inspire students;
- set challenging targets for students and support them in reaching those goals;
- use AfL strategies to identify what progress has been made and by whom;
- give students feedback on their work that allows further progress to be made;
- develop students' enquiring mind.

THE SCIENCE DEPARTMENT

There are 16 teaching members of staff in the department, who are supported by a team of 5 technicians. The team is led by a Director of Science, assisted by two Leading Teachers of Science and three subject leaders.

Science details – Jan 2018



OUR OUTSTANDING SCIENCE CURRICULUM

Key Stage 3

The Key Stage 3 course has been developed in-house from the Collins scheme of work, and follows a modular approach with assessment and investigation work integral to the course. At KS3 all teachers teach modules from across the Sciences.

Year 7 and 8 is taught in mixed ability groups. Class sizes vary between 25 and 30. We moved to a three year KS4 curriculum in September 2010.

Key Stage 4

At KS4 we aim to match subjects taught with staff background and expertise. The OCR Gateway course has two options, either the GCSE Combined Science or the GCSE Separate Science route.

Post-16

As would be expected of a thriving and successful department, there is a healthy interest in the Sciences Post16. Typically we have 35 students studying AS Biology, 35 students studying AS Chemistry and 25 students studying AS Physics. All of these students are expected to continue their studies to A2 level where they take their terminal examinations.

Students study the following subjects at post-16 AS.

Biology:	OCR A
Chemistry:	OCR A
Physics:	OCR A

BTEC Subsidiary Diploma, Diploma and Extended Diploma in Applied Science.

ADVANCED LEARNING DAYS, SESSION 9 AND ENRICHMENT

The science team make a major contribution to Walton High's enriched curriculum. *Advanced Learning Days* involving Whipsnade Zoo, Space centre trip and a CSI murder mystery have been developed and a well-attended Science club also runs weekly. We also offer a wide range of Science enrichment activities and Master Classes, with links to the Open University which is a very near neighbour.



FACILITIES TO SUPPORT OUTSTANDING LEARNING

WALNUT TREE CAMPUS

- There are eleven purpose-built and fully equipped, flexible spacious laboratories on one corridor where all science teaching is carried out. These are supported by two well-equipped prep rooms, and a separate office.
- There is easy access (for the whole school) to the well-resourced ICT rooms, with scientific software and data-logging equipment used.
- We have a dedicated ICT room in the Science curriculum area.
- Every laboratory has its own interactive Promethean Smart board.
- Each member of staff is loaned the use of a networked laptop for use at work and at home.

BROOKLANDS CAMPUS

- There are 12 purpose-built, flexible spacious laboratories all on one corridor, situated either side of a generously proportioned, well-equipped prep room.
- Well-resourced ICT rooms, scientific software and technician support contribute to the learning and teaching of the sciences
- Every laboratory has its own interactive Promethean Smart board.
- Each member of staff is loaned the use of a networked laptop for use at work and at home.

We look forward to meeting you on interview and giving you the opportunity to meet the outstanding science team at Walton High.