

PHYSICS DEPARTMENT INFORMATION

THE SCHOOL

Have you got what it takes to provide outstanding teaching and learning opportunities for highly able boys in Isaac Newton's old school? If so, we would like to hear from you.

The first mention of the school dates back to 1327. In 1528 the school was re-founded by Bishop Fox of Winchester. Though proud of our heritage we are a forward looking school keen to recruit and train the best colleagues in order to provide the best possible opportunities for boys.

The King's School is a learning School committed to educating the whole person and to effective lifelong learning for all its members. As a Grammar School, it prepares students to achieve the highest grades and to enter the most competitively sought after universities, careers and professions.

OUR AIMS

We aim to inspire intellectual curiosity, a competitive spirit, and develop creative thinking, a sense of social responsibility and leadership skills. A strong sense of community underpins everything we do – learning to respect each other's backgrounds and beliefs. We value commitment, we celebrate success and we offer an environment which not only leads to academic success but also to self-discovery and a sense of personal worth.

THE POST

The successful candidate will be expected to teach Science in Y7 & Y8 and Physics Y9 – 13 with a particular emphasis at GCSE and 'A' level. In addition you will be expected to promote physics as a career choice and/or a life-long source of interest.

THE DEPARTMENT

The Physics department is comprised of four full time teaching staff and a term time technician. The department has three fully equipped laboratories and two preparation rooms.

YEARS 10 AND 11

All students study triple science to GCSE level. GCSE group sizes are usually around 24 students. The department presently follows the AQA GCSE Physics course which can be found on their website, course code 8463. In 2017 we achieved 60% A*-A grades and 100% A*-C grades in GCSE Physics which continued our steady improvements since 2014.

YEARS 12 AND 13

Physics A-Level is a popular choice in year 12. In the current Year 12 we have 2 groups with 40 students in total. In the current Year 13 we have 2 groups with a combined number of 38 students. The department follows the new OCR A-Level Physics A, course code H556. In 2017 we achieved 31% A*-A grades, 39% A*- B grades and 92% A*-E

grades in A-level Physics. A large number of our students go on to study Physics or Engineering based subjects at university every year, which we publicise to our present students.

ASSESSMENT AND LEARNING

The school aims to deliver outstanding Physics lessons designed to inspire natural curiosity and develop a lifelong interest in the subject. Every class taught is in preparation for an examination or controlled assessment, therefore assessment is a key element of the department. Assessment in the classroom is also important and the use of both formative and summative assessment on a regular basis provides vital information to inform interventions strategies and plot student progress. All members of the department are expected to use assessment for learning strategies to inform their lesson preparation and teaching. The department assesses all work in terms of effort and attainment to try to stretch the gifted and talented and to monitor the less able. Homework is set on a weekly basis for all groups. Years 10 and 11 are expected to complete 1-2 hours of assessed homework for Physics each week. Years 12 and 13 are expected to complete 2-3 hours of assessed homework each week, with another 1-2 hours of other work/reading as well. Marking must be done quickly and accurately based on examination criteria, usually levels of response.

ENHANCING THE CURRICULUM

The department has increased the number of extra-curricular activities we involve our students in. We have a school based Science Club and Y8 students have been involved in an engineering competition as well as our Y9 students taking part in the Physics IoP day. We ran a CERN residential for sixth form in the summer of 2016 and 36 of our Y12 and Y13 students took advantage of this, this is running again in July 2018. We try to attend as many public lectures as possible including the RAF Cranwell annual Newton Lecture and the local Gravity Field events. We also attend the GCSE Science Live lectures as well as A level Physics Live. Trying to extend our student's aspiration and enthusiasm is a priority for us.

DEVELOPING OUR STAFF

We aim to appoint ambitious staff who will be prepared for their next career stage during their time in the school. We provide a differentiated training programme tailored to individual needs specific features include:

- NQT programme
- Outstanding teacher programme
- Middle leadership development programme
- Aspiring senior leadership development programme
- Coaching and mentoring development

DEVELOPING OUR SCHOOL SITE

The school site is an eclectic mix of buildings dating back to 1497. We constantly strive to provide facilities fit for delivering educational experiences in the twenty first century. Most recently we received funding for a new Sports Hall, which opened in January 2015, along with a substantial grant to cover an extensive roofing project.

If appointed, you will be coming to the school at an exciting time in its development. I hope you will want to join us.

F. Hedley Head Master

BACKGROUND INFORMATION

The King's School is a selective Grammar School for boys which converted to Academy status in August 2011. King's consistently achieves excellent examination results and an overwhelming percentage of students go on to further education with the majority achieving their first place choice and many of these within Russell Group Universities.

The School has always enjoyed a strong reputation in the town and surrounding area. King's also enjoys an international reputation because of its association with Sir Isaac Newton, a pupil at the School in the 1650s before he left for Trinity College, Cambridge, with whom we maintain strong links.

Our students come from local Lincolnshire Primary Schools as well as from towns and villages in the neighbouring counties of Nottinghamshire, Leicestershire and Rutland. Each year the available places in Year 7 are oversubscribed. The School has expanded by over forty per cent in the last fifteen years to its present 1,140 students on roll, with 260 of those in the Sixth Form. In September 2014 the school expanded taking in an extra form of entry at Year 7 to increase our Published Admission Number from 145 to 174. By 2020 we anticipate the school roll to be around 1200 students. At Sixth Form level there is a link with Kesteven and Grantham Girls' school which allows students access to a greater range of A Level courses.

Extra-curricular activities figure largely in the School's life: music, both choral and instrumental, is outstanding. The School has a long tradition of sporting excellence at both local and national levels. The scale and variety of the sports and activities programme is comparable with that found in the private sector. Indeed many of the School's fixtures and contacts, especially in rugby, water polo and cricket, are with independent Schools. Some 200 students are involved in the CCF (Army and Air Sections) and the School maintains strong links with the military tradition of the town and surrounding area.

The School occupies a prominent position within the heritage centre of Grantham and includes grade 1 and 2 listed buildings, which include the original School House of our most famous alumni, Sir Isaac Newton and Lord Burghley – Lord Treasurer to Elizabeth I. Whilst the main School site is at capacity, we have a twenty three acre sports facility a short walk from the School. In recent years over £3 million has been invested in extensive building and refurbishment including: a new three storey teaching Block; Sixth Form Centre; Music Department; a major Kitchen and Dining Room refurbishment; new Science Laboratory; a Conferencing suite, a Food Technology Classroom and most recently a new Sports Hall at the playing fields. We continue to bid for the refurbishment of our science laboratories along with ongoing maintenance of the school estate.

The School currently employs 65 teaching staff and 64 support staff. The Head Master is supported by a Senior Leadership Team consisting of 2 Deputy Headmasters, 2 Assistant Head Teachers and a Bursar. The King's School is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment.

Further information about the School, including a full prospectus, can be found at www.kings.lincs.sch.uk

THE LOCALITY

- Grantham is a pleasant, historic market town the current population is approximately 40,000 however Grantham has Growth Point status with the District Council having plans to increase both employment and the population to 60,000 in 15 to 20 years.
- Lincolnshire is one of the safest places to live in the UK.
- Grantham and South Kesteven District (population about 130,000) has good quality and very affordable housing in a wide range of price brackets. Grantham retains some of the Medieval, Tudor, Georgian and Victorian splendour of its past, including an Arts Centre, Theatre and Museum.
- The town has a range of excellent primary and secondary Schools. There are well regarded comprehensive Schools which co-exist well with The King's School and Kesteven and Grantham Girl's School the town's Grammar Schools.
- Grantham is well served by good transport links the East Coast main railway line (King's Cross in 65/70 minutes), the A1 next to the town and good cross country rail and road links with the major towns of Peterborough, Lincoln and Nottingham. A number of airports are also close by - East Midlands, Stansted, Birmingham and Robin Hood airport near Doncaster.
- Grantham is surrounded by some lovely villages in a very large green County, a culture of healthy outdoor activity is widely shared in the community. Smaller centres such as Stamford and Oakham are 30 40 minutes by car and the countryside to the west in the Vale of Belvoir is magnificent. A baroque palace at nearby Harlaxton Manor hosts the UK College of an American University, and the large National Trust Property, equestrian centre and deer park of Belton House sits to the east.
- Grantham boasts its own hospital and College of Further Education, is well
 provided with parks and walks along the River Witham and is surrounded by
 picturesque villages affording a very high quality of life in an area which preserves
 strong community ties.
- There is a wide choice of good housing either in the town or surrounding country and the roads are relatively traffic free making journeys to work both easy and pleasant.