SCIENCE DEPARTMENT INFORMATION

The Department

The Science department currently includes 19 teachers plus 4 technicians. The leadership structure of the department includes:

- Head of Department Leadership and oversight across the department and leadership of KS4.
- **2i/c** Leadership of provision and progress and KS3.
- Heads of Physics, Chemistry and Biology Lead their specialism at KS5 and Triple Award.
- **Teacher in charge of Applied Science** Leads Applied Science at KS5.
- Key Stage 4 Combined Science Lead Leads Combined Science at KS4.

Each of the science subjects is currently taught by teachers who are specialists in their own subject. Of the 18 teachers in the department, 4 are specialists in Physics, 6 in Chemistry and 8 in Biology.

In addition, the vibrant department gives all teachers the opportunity and support to take a lead in areas of interest contributing to their own professional development.

The department is based in its own purpose-designed building, opened in 1994, which includes 10 modern laboratories, 2 large preparation areas and a staff work room. The department also has access to two more laboratories and 3 classrooms which are situated in the main school building. All laboratories have a teacher PC linked to a Prowise interactive board.

Science is a highly successful department that is characterised by strong team work and excellent relationships. Everyone contributes to the work of the department by developing resources and materials that make up our schemes of work. There is a supportive, collegiate atmosphere and a wealth of ideas and experience that are shared, both formally and informally, with each other.

As part of our Teaching School Alliance and the establishment of our SCITT, Manchester Nexus, which operates out of Blue Coat School, the department also supports the development of aspiring science teachers through the ITE programme.

Curriculum

In Key Stage 3 pupils follow a bespoke scheme of work which provides a rich, deep and diverse curriculum with close links to everyday science. We believe strongly that experimental skills are the bedrock of effective science teaching, and pupils have many opportunities to develop their skills in science investigations.

At Key Stage 4 we teach both Combined and Triple Science following the AQA (trilogy) specification. Students are advised about which course is best for them based on their achievement at KS3. On average 2 sets (approximately 60 students) take Triple award each year. Teachers teach in their chosen specialism at KS4 both for Triple and Combined Science.

Blue Coat has an oversubscribed 6th Form of over 400 students. Science is our most popular subject at A Level and all our A Level courses are thriving, with multiple groups in every discipline. Biology and Chemistry each have 4 teaching groups in Year 12 and Year 13, and Physics and Applied Science have 2 teaching groups in Year 12 and 13. We also run a separate AS in Physics, as part of our Futures Pathway.

Outcomes

Key Stage 5

| | A*-A | | | А*-В | | |
|-----------|------|------|------|------|------|------|
| | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 |
| Biology | 27% | 23% | 26% | 47% | 36% | 45% |
| Chemistry | 34% | 28% | 33% | 59% | 55% | 45% |
| Physics | 30% | 19% | 31% | 56% | 51% | 44% |

Key Stage 4

| | 9-7 | | | 9-4 | | | |
|---------------------|------|------|------|------|------|------|--|
| | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 | |
| Combined Science | 19% | 19% | 24% | 84% | 84% | 85% | |
| Biology | 60% | 63% | 80% | 100% | 100% | 100% | |
| Chemistry | 73% | 73% | 83% | 100% | 100% | 100% | |
| Physics | 69% | 68% | 78% | 100% | 100% | 100% | |