**Intent**

We want the young people who study Science to have meaningful experiences that are appropriate for their ability level. They will apply scientific ideas to their everyday life to problem solve, during and after their time at Belvue School. We want them to be curious and safe as they explore their immediate and wider community. We will build on the understanding and confidence gained through exploration and practical work in school and local areas.

**Overview**

Year 7, 8 & 9 access the National Curriculum through a custom Belvue curriculum. It has been designed and created in house to ensure that it supports the progression and development of all students, across all pathways, in Science. It is a working document and will be updated as the demographic of our students change. The time allocation is 2 lessons of 40 minutes each per week to each class group

In years 10 & 11 whilst following the National Curriculum students work towards achieving the AQA Entry Level Qualification in Science. Pupils follow the syllabus as advised by AQA. For those students that cannot access the qualification the syllabus has been adapted to make it more accessible and they will be awarded a Belvue Certificate. The time allocation is 3 lessons of 40 minutes each per week to each class group

Science

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| KS4 | Autumn | Spring | Summer |
| **Cycle 1** | ***Human Body*** | ***Elements Mixtures and Compounds*** | ***Chemicals in our World*** |
| Overview | The students will learn:* What the body is made of
* How the body works
* How the body fights disease
* How the body is coordinated

For this topic student will complete an assessment and write up a practical investigation. | The students will learn about:* Atoms, elements and compounds
* How structure affects properties
* How to separate mixtures
* Metals and alloys
* Polymers

For this topic student will complete an assessment and write up a practical investigation. | As this topic will not be externally assessed we teach this topic almost purely through experimental work to practise working scientifically skills and data analysisExamples of investigations include:* Reactions between metals and acids
* Neutralising acids
* Temperature changes in reactions
* Factors affecting the rate of reaction
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| **Cycle 2** | ***Electricity, Magnetism and Waves*** | ***Environment, Evolution and Inheritance*** | ***Energy Forces and the Structure of Matter*** |
|  | The students will learn about:* Electrical current
* Domestic Electricity
* Magnetism and Electromagnetism
* Different types of wave
* Electromagnetic waves

For this topic student will complete an assessment and write up a practical investigation. | The students will learn:* About the feeding relationships between different organisms
* What determines where particular species live
* How life has developed on Earth

For this topic student will complete an assessment and write up a practical investigation. | As this topic will not be externally assessed we teach this topic almost purely through experimental work to practise working scientifically skills and data analysisExamples of investigations include:* Factors that affect the rate of cooling
* The thermal conductivity of different metals
* How friction affects speed
* Factors that affect reaction time
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Science

