

# KEY STAGE 3

## CURRICULUM INFORMATION

### KEY STAGE 3 SCIENCE

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#### Course Summary:

Our 3 years KS3 Science Curriculum follows the progression model. It provides ideal preparation for all pupils to develop a solid foundation of scientific knowledge and conceptual understanding in all 3 Sciences (Biology, Chemistry and Physics). The curriculum is broadly balanced and ensures skills and knowledge are embedded based on the 'Big ideas' in science. It provides insight into how science works, stimulating students' curiosity and encouraging them to think about science in their everyday lives.

#### What will students learn?

##### In Year 7:

Biology	Chemistry	Physics
<ul style="list-style-type: none"> <li>• Building blocks of living organisms</li> <li>• Reproduction</li> <li>• Exchange and transport in Plants</li> <li>• Plant nutrition</li> <li>• Respiration</li> <li>• Ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>• Particles</li> <li>• Pure and impure substances</li> <li>• Periodic table</li> <li>• Chemical reactions</li> <li>• Our Earth</li> </ul>	<ul style="list-style-type: none"> <li>• Space</li> <li>• Energy</li> <li>• Forces</li> <li>• Light</li> <li>• Electricity</li> </ul>

##### In Year 8

Biology	Chemistry	Physics
<ul style="list-style-type: none"> <li>• Exchange and transport in humans</li> <li>• Animal nutrition</li> <li>• Exercise</li> <li>• Muscle and bones</li> <li>• Biodiversity</li> <li>• Plant reproduction</li> <li>• Inheritance and evolution</li> </ul>	<ul style="list-style-type: none"> <li>• Patterns in the periodic table</li> <li>• Reactions of metals</li> <li>• Separation techniques</li> <li>• Earth's resources</li> <li>• Earths Atmosphere</li> </ul>	<ul style="list-style-type: none"> <li>• Energy Transfer</li> <li>• Forces on Earth</li> <li>• Moving and turning</li> <li>• Sound</li> <li>• Light</li> <li>• Magnetism</li> </ul>

##### In Year 9

Biology	Chemistry	Physics

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- Cell Biology 1
- Cell Biology 2
- Organisation- Enzymes
- Organisation- Human Body

- Chemistry Fundamentals
- Atomic Structure
- Periodic Table
- Covalent Bonding
- Ionic and Metallic Bonding

- Energy 1
- Particle Model
- Energy 2
- Atomic Structure (Radioactivity)

### HOW WILL STUDENTS BE ASSESSED?

#### Year 7

- Students will sit a baseline assessment in term 1 to determine the knowledge gained during primary education and enable science staff to tailor teaching to allow students to access the baseline knowledge required. Students will complete summative assessments in Terms 3 and 5 which will look at all units covered up to that point in the academic year.
- Students will also complete a 15 mark diagnostic formative assessment at the end of each unit to help inform future teaching and identify gaps and misconceptions in student knowledge.

#### Year 8

- Students will sit a summative assessment in Term 1 based upon content taught so far in Year 8 and also during the previous academic year, this will enable science staff to tailor teaching to allow students to access the baseline knowledge required. Students will complete summative assessments in Terms 3 and 5 which will look at all units covered up to that point in the academic year.
- Students will also complete a 15 mark diagnostic formative assessment at the end of each unit to help inform future teaching and identify gaps and misconceptions in student knowledge.

#### Year 9

- Students will sit formative assessments for Biology, Chemistry and Physics during terms 2, 4 and 6 which will cover all content covered up until that point. These assessments are tailored to the needs of the course.
- Students will also complete a 25 mark diagnostic formative assessment at the end of each unit to help inform future teaching and identify gaps and misconceptions in student knowledge.

### WHAT CAN I DO TO SUPPORT MY CHILD AT HOME?

- Use KS3 Exploring Science books
- Purchase any CGP KS3 Science revision guide and practice book.
- Year 9- AQA Combined or Separate Science revision guides
- Use the BBC bite size website to go over topics covered in class to support revision.
- Use Educake log in details to complete homework tasks set and keep an eye out for assessment dates.

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- You can also use videos on cognito specifically for KS3 Sciences at [Cognito - Learn GCSE Biology, Physics and Chemistry - Completely Free \(cognitoedu.org\)](#)

### TEACHING STAFF CONTACT DETAILS

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