



Subject: Biology

Lead Teacher: Mrs S Dainty

Year: 8

Curriculum organisation

Students are taught in mixed groups of 30 for one hour per week. They are not grouped by ability.

Overview of Topics & Key Information					How will your child be learning?
Term	Unit(s) of Work	Key Enquiry Questions	Key Content/ Terminology	Skills developed	
Autumn Term	<ul style="list-style-type: none"> Digestion and enzymes. 	<ul style="list-style-type: none"> What is digestion? Why is digestion important? 	<ul style="list-style-type: none"> Benedict's reagent Biuret Iodine Emulsion test Enzyme Active site 	<ul style="list-style-type: none"> Practical skills <ul style="list-style-type: none"> - testing for biological molecules. - investigating enzyme -scientific method and variables 	<ul style="list-style-type: none"> Whole class discussion Pair work Practical activities Watching short video clips
Spring Term	<ul style="list-style-type: none"> Microbes Respiration 	<ul style="list-style-type: none"> What is a microbe? How do we grow microbes? Are microbes good or bad? What is the process of respiration? Why do all organisms have to respire all the time? 	<ul style="list-style-type: none"> Pathogen Agar Aseptic technique Petri dish Respiration Anaerobic respiration Bomb calorimeter 	<ul style="list-style-type: none"> Practical skills – growing microbes Microscopes and observing microbes Practical skills – burning food Mathematical skills – calculating energy values in food. 	

Summer Term	<ul style="list-style-type: none"> • Respiration continued • Photosynthesis 	<ul style="list-style-type: none"> • Why photosynthesis is integral to life on earth. • How do plants make their own food? 	<ul style="list-style-type: none"> • Photosynthesis • Chlorophyll • Starch • Variegated • Chemosynthesis 	<ul style="list-style-type: none"> • Practical work – testing a leaf for starch • Scientific method – fertiliser and germination. 	
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Equipment needed for lessons	How will learning and progress be assessed?
<ul style="list-style-type: none"> • Standard school stationery • Exercise book • Calculator 	<ul style="list-style-type: none"> • End of unit tests (subject knowledge focus) • Formal assessment week (May) • Peer and self-assessment • Homework tasks Retrieval practice activities

Extension & Enrichment opportunities	What can you do to support your child?
<ul style="list-style-type: none"> • Lunch time drop in • Biology Google site. Students will have the address in their exercise book. • Websites which are very helpful are: <ul style="list-style-type: none"> - The Science Break https://www.youtube.com/@TheScienceBreak - BBC Bitesize https://www.bbc.co.uk/bitesize - Fuseschool https://www.youtube.com/@fuseschool 	<ul style="list-style-type: none"> • Encourage your child to use the resources on the google site. • Help your child to learn content using retrieval practice methods for example use of flash cards.

Inclusion	
In lessons	Subject specific
<ul style="list-style-type: none"> • All teachers read the individual student passports and SEND requirements. • Teachers will make reasonable adjustments and adapt aspects of their teaching delivery to accommodate viable changes and modifications to allow all pupils to access the subject content. • Exams access - We follow the JCQ guidelines on access in unit tests, end-of-year assessments and mock examinations. • Light sensitivity – students can wear coloured glasses in lessons to reduce glare • Visual impairment – sat in front, larger fonts where possible or magnified photocopies if the article/activity is not available for modification digitally • Hearing impairment – sat in front or where student passport suggests is the best position • Physical impairment – student can under certain circumstances be allocated a word processor. They can also photocopy of classmate’s notes, take photos of a classmate’s notes to print, change classrooms for mobility or room access • Dyslexia – Word processor as advised by school SEND coordinator • ADHD – Movement breaks, fidget toys • Autism spectrum – clear and logical set of instructions, writing homework on the board, use of ear defenders 	<ul style="list-style-type: none"> • For pupils with visual impairment, enlarged graph paper for plotting graphs during experiments • Physical impairment – where possible we amend practical equipment or provide a magnifying glass to view instruments • Hearing impaired – show videos with subtitles • Some laboratories have height-adjustable benches for wheelchair access • Cater for latex allergies by providing disposable gloves

If you have any questions about this Learning Overview, please contact the named Teacher above.