









Curriculum Plan Subject : Biology Key Stage 3 Year 7

	HALF TERM 1	HALF TERM2	HALF TERM3	HALF TERM 4	HALF TERM 5	HALF TERM 6
Topic Titles	Cells and Organs	Material cycles and energy - photosynthesis	Interactions and interdependencies	Genetics and evolution	Experimental skills and investigations	Analysis and Evaluation
Objectives (The things we want the pupils to make progress in)		Photosynthesis	Relationships in an ecosystem	Selective Breeding	How to work Scientifically.	How to work Scientifically
Stage 4 GCSE 3-4	how to observe, interpret and record cell structure using a light microscope B the functions of the cell wall, cell membrane, cytoplasm, nucleus, vacuole, mitochondria and chloroplasts B the similarities and differences between plant and animal cells B	Demonstrate an adequate understanding of the requirements of plants for healthy growth. Produce clear and adequate evidence of the reactions and products of photosynthesis. State the requirements of plants to maintain healthy growth and independently elect appropriate tools and prepare a seed tend.	Demonstrate an adequate understanding of the interdependence of organisms in an ecosystem, including food webs and insect pollimated crops the importance of plaint ergorduction through insect pollination in human food security how organisms affect, and are affected in the control of the con	Demonstrate an adequate understanding of the variation between species and between initial desired and a species and between species and between initial desired and a species and species	Demonstrate a developing understanding in asking questions and developing a line of enquiry based on observations of the real word. As disquise prior browkedge and experienced in also predictions using experienced in also predictions using a contract of the properties beginning and observations of the properties beginning to specify and materials during fieldwork and abboratory work, paying attention to health and safety. I make and record observations and maximum and the properties of t	apply developing mathematical concepts and exclusive results 31 present observations and data using appropriate methods, including tables and graphs 31 interpret observations and data, including tables and graphs 31 interpret observations, measurements and data for draw data to draw measurements and data to draw data to draw data to draw data to draw of the draw o
Stage 3 GCSE 1-2	fundamental unit of living organisms, including how to observe, interpret and record cell structure using a light microscope ill the functions of the cell wall, cell membrane, cytoplasm, nucleus, vacuole, mitochondria and chloroplasts ill the similarities and differences between plant and animal cells ill	Demonstrate some understranding of the requirements of plants for health produce some evidence of the reactions and products of the reactions and products of requirements of plants to maintain health growth and independently select appropriate tools and prepare a seed bed.	Demonstrate some understanding of the interdependence of organisms in an ecosystem, including food webs and inexes politicated trops the control of the control of the control of through inexet politication in human food security how organisms affect, and are affected by, their environment, including the accumulation of toxic materials	Demonstrate some understanding of the variation between species and between individuals of the same species means sume organisms. species means sume organisms species means sume organisms and the species of the species of species means summarized individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may leave in the importance of maintaining the importance of maintaining banks to preserve hereditary material.	Demonstrate some understanding in stating questions and developing all net enquiry based on observations of the real word, alongstee pire knowledge and experience. If make predictions using scentific knowledge and understanding a sperior piece of the state of the state of appropriate bytes of scientific mounted years and the state of provides, where appropriate Buse appropriate techniques, apparatus, and materials during fellowers and abboardor work, paying attention to health and safety measurements using a range of methods for different investigations, and evaluate the reliability of methods and suggest possible improvements ill apply sampling lechniques.	apply some mathematical concepts and calculate results if present observations and data using appropriate methods, including tables appropriate methods, including tables and data, including identifying better and calculated data, showing random and systematic error of identify further questions arising from their results.
Stage 2 GCSE Entry Level 3	fundamental unit of living organisms, including how to observe, interpret and record cell structure using a light microscope II the functions of the cell	Demonstrate basic understranding of the requirements of plants for health produce some evidence of the reactions and products of the reactions and products of requirements of plants to maintain health growth and independently select appropriate tools and prepare a seed bed.	Demonstrate a basic understanding of the interdependence of organisms in an ecosystem, including food webs and insect pollinated rougs the many of the control of the contr	Demonstrate a basic understanding of the variation between species and between individuals of the same species means some organisms. Suppose the same species means some organisms can develope the same species means some organisms can develope the same species, see and some entire species, less well adapted to compete successfully and reproduce, which in turn may leave in the same species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction? It is supportance of maintaining the importance of maintaining banks to preserve hereditary material.	Demonstrate basic understanding in axing questions and developing a fine of enquiry based on observations of the real world, alongied prior involvedge and experience. Il make predictions using scientific knowledge and understanding if sector, productions, including electricity and productions of the production of the productions, including identifying independent, dependent and control variables, where appropriate If use appropriate techniques, apparatus, and materials during fellowish and salvely makes and the control of the productions of the limits of the control of the productions of productions of pr	apply basic mathematical concepts and calculate results if present observations and data using appropriate methods, including tables and graphs if interpret observations patterns and using observations, patterns and using observations, measurements and data to draw conclusions if present reasoned explanations, including explaining data in relation to predictions and hypotheses if evaluate data, showing random and systematic error if identify further questions arising from their results.
Stage 1 Entry Level	as the fundamental unit of living organisms, including how to observe, interpret and record cell structure using a light microscope 2 the functions of the cell wall, cell membrane, cytoplasm, nucleus, vacuole, mitochondria and chloroplasts 2 the similarities and differences between plant and animal cells 28 the role of diffusion in the	Demonstrate an emerging understanding of the requirements of plants for healthy growth. Produce some evidence of the reactinate and products of photosynthesis. State the requirements of plants to maintain healthy growth and independently seeked specifically and proper as seed bed.	Demonstrate an emerging understanding of understanding of understanding of understanding of understanding of understanding of understanding to understanding to understanding to understanding underst	Demonstrate an emerging understanding of the variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection if changes in the environment may leve individuals within a species, and some entire expressive size of the species, see well adapted to compete successfully and reproduce, which in importance of maintaining blodiversity and the use of gene banks to preserve hereditary material.	Demonstrate an emerging understanding in asking questions and developing allne of enquiry based on observations of the real words, slonguist part on observations of the real words, slonguist parts traveledge and experience? In all the predictions using a second control of the state of the s	apply an emerging mathematical concepts and existate results 3 present observations and data using appropriate methods, including tables and graphs 3 interpret observations and data, including tables and graphs 3 interpret observations, and data, including desired by a patterns and using observations, measurements and data to draw conclusions 8 present reasoned adaptation, and conclusions 8 present reasoned data to relation to predictions and may be a supplementations, including explaining data in relation to predictions and may be a supplementation of the predictions and predictions of the predictions and predictions and predictions and predictions and predictions and predictions are also as a supplementation of the predictions and predictions and predictions are also as a supplementation of the predictions and predictions are also as a supplementation of the predictions and predictions are also as a supplementation of the predictions and predictions are also as a supplementation of the predictions and predictions are also as a supplementation of the predictions and predictions are also as a supplementation of the predictions and predictions are also as a supplementation of the predictions and predictions are also as a supplementation of the predictions are also as a supplementation of the predictions and predictions are also as a supplementation of the prediction of the predictions are also as a supplementation of the predictions and the prediction of the predictions are also as a supplementation of the prediction of the