

Long Term Plan – Year A

Subject	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
KS1 Computing (Year 1 Cycle)	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies					
	Computing systems and networks – Technology around us	Creating media – Digital painting		Programming A – Moving a robot	Data and information – Grouping data	

Subject	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
KS2 Computing (Year 4 Cycle)	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies					
	Computing systems and networks – The Internet	Programming A – Repetition in shapes	Creating media – Photo editing	Data and information – Data logging	Creating media - Audio production	Programming B – Repetition in games

Long Term Plan – Year B

Subject	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
KS 1 Computing (Year 1 and Year 2 Cycle)	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies					
	Creating media – Digital writing		Programming B - Programming animations		Computing systems and networks – IT around us 2	Creating media – Digital photography

Subject	Autumn 1 Computing Systems	Autumn 2 Creating Media	Spring 3 Creating Media	Spring 4 Data & Information	Summer 5 Programming	Summer 6 Programming
KS2 Computing (Year 3 Cycle)	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies					
	Computing systems and networks – Connecting computers	Creating media - Stop-frame animation	Programming A - Sequencing sounds	Data and information – Branching databases	Creating media – Desktop publishing	Programming B - Events and actions in programs Connecting computers Sharing information

Long Term Plan – Year C

Subject	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
Computing (Year 2 Cycle)	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies					
	Programming A – Robot algorithms		Data and information – Pictograms		Creating media - Digital music	Programming B - Programming quizzes

Subject	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
KS2 Computing (Year 6 Cycle)	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies					
	Computing systems and networks - Communication and collaboration	Creating media – Web page creation	Programming A – Variables in games	Data and information - Introduction to Spreadsheets	Creating media – 3D Modelling	Programming B - Sensing movement

Long Term Plan – Year D

Subject	Autumn 1	Autumn 2	Spring 3	Spring 4	Summer 5	Summer 6
KS2 Computing (Year 5 Cycle)	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies					
	Computing systems and networks - Systems and searching	Creating media - Video production	Programming A – Selection in physical computing	Data and information – Flat-file databases	Creating media – Introduction to vector graphics	Programming B – Selection in quizzes

Computing Unit: Computing systems and networks

Lesson	Learning Objectives
1	Y1 LO: I can identify examples of computers in school and at home.
	Y2 LO: I can identify examples of computers in school, at home and in the wider world.
2	Y1 LO: I can recognise how information technology helps people.
	Y2 LO: I can explain how information technology helps people in different environments.
3	Y1 LO: I can identify what the internet is used for.
	Y2 LO: I can explain what the internet is and ways in which it is used.
4	Y1 LO: I can explore how to communicate safely online.
	Y2 LO: I can describe how to communicate safely online and identify kind and unkind behaviour online.
5	Y1 LO: I can recognise which personal information is safe to share online and which is not.
	Y2 LO: I can identify personal information and explain how it should be used.
6	Y1 LO: I can safely search for images and information online.
	Y2 LO: I can identify whether a website is suitable for children.
7	Y1 LO: I can identify ways to stay safe on the internet.
	Y2 LO: I can explain how to be SMART when using the internet.

Computing Unit: Creating media – Digital painting

Lesson	Learning Objectives
1	Y1 LO: I can make marks and lines on a computer programme.
	Y2 LO: I can paint with different brushes and colours on a computer programme.
2	Y1 LO: I can create shapes and fill spaces on a computer programme.
	Y2 LO: I can make, edit and move shapes on a computer programme.
3	Y1 LO: I can add text to a picture on a computer programme.
	Y2 LO: I can edit the size and font of text on a computer programme.
4	Y1 LO: I can identify differences between paintings on a computer and on paper.
	Y2 LO: I can compare paintings on a computer and on paper.
5	Y1 LO: I can create a digital painting in the style of an artist on a computer programme.
	Y2 LO: I can create a digital painting in the style of an artist on a computer programme.
6	Y1 LO: I can design my own digital painting on a computer programme.
	Y2 LO: I can design and evaluate my own digital painting on a computer programme.

Computing Unit: Programming A – Grouping data

Lesson	Learning Objectives
1	Y1 LO: I can identify and find keys on a keyboard.
	Y2 LO: I can add and remove text on a word processor.
2	Y1 LO: I can type letters and spaces to add text and use backspace to remove.
	Y2 LO: I can type sentences using capital letters and punctuation on a word processor.
3	Y1 LO: I can use bold, italic and underline to change the text on a word processor.
	Y2 LO: I can use the toolbar to edit text on a word processor.
4	Y1 LO: I can edit the font, size and colour of text on a word processor.
	Y2 LO: I can organise text into boxes on a word processor.
5	Y1 LO: I can explain which tool I have used to change the writing on a word processor.
	Y2 LO: I can add and format an image.
6	Y1 LO: I can compare using a computer to write with using a pencil and paper.
	Y2 LO: I can present information on a word processor so it is appealing for an audience.

Computing Unit: Data and information – Moving a robot

Lesson	Learning Objectives
1	Y1 LO: I can follow clear and precise instructions.
	Y2 LO: I can follow and give clear and precise instructions.
2	Y1 LO: I can sequence pictures to create step-by-step instructions.
	Y2 LO: I can write a simple algorithm.
3	Y1 LO: I can program a Beebot toy to move forwards and backwards.
	Y2 LO: I can use the same commands to create different algorithms.
4	Y1 LO: I can program a Beebot toy to move forwards, backwards and turn left and right.
	Y2 LO: I can predict the outcome of a sequence.
5	Y1 LO: I can interpret sequences and predict the outcome.
	Y2 LO: I can design, create and test a mat for a Beebot.
6	Y1 LO: I can create a program and test it on the Beebot.
	Y2 LO: I can create an algorithm to achieve a desired goal.
7	Y1 LO: I can plan how I will achieve the same outcome using the Beebot in two different routes.
	Y2 LO: I can find and fix errors in algorithms and programs.

Computing – Computing systems and networks – The Internet

Lesson	Learning Objectives
1	LKS2 LO: I can start to explain that computers can be connected together to form systems.
	UKS2 LO: I can explain that computers can be connected together to form systems.
2	LKS2 LO: I can start to recognise the role of computer systems in our lives.
	UKS2 LO: I can recognise the role of computer systems in our lives.
3	LKS2 LO: I can start to recognise how information is transferred over the internet.
	UKS2 LO: I can recognise how information is transferred over the internet.
4	LKS2 LO: I can start to explain how sharing information online lets people in different places work together.
	UKS2 LO: I can explain how sharing information online lets people in different places work together.
5	LKS2 LO: I can start to contribute to a shared project online.
	UKS2 LO: I can contribute to a shared project online.
6	LKS2 LO: I can evaluate different ways of working together online.
	UKS2 LO: I can evaluate different ways of working together online.

Computing Unit: **Creating media – Photo editing**

Lesson	Lesson Objective
1	LKS2 LO: I can use photo editing software to crop an image
	UKS2 LO: I can explain why I might crop an image
2	LKS2 LO: I can explain that different colour effects make you think and feel different things
	UKS2 LO: I can experiment with different colour effects
3	LKS2 LO: I can add to the composition of an image by cloning
	UKS2 LO: I can identify how a photo edit can be improved
4	LKS2 LO: I can experiment with tools to select and copy part of an image
	UKS2 LO: I can use a range of tools to copy between images
5	LKS2 LO: I can describe the image I want to create
	UKS2 LO: I can choose suitable images for my project
6	LKS2 LO: I can review images against a given criteria
	UKS2 LO: I can use feedback to guide making changes

Computing Unit: Creating media - Audio production

Lesson	Lesson Objective
1	LKS2 LO: I can start to recognise video as moving pictures, which can include audio.
	UKS2 LO: I can recognise video as moving pictures, which can include audio.
2	LKS2 LO: I can start to identify digital devices that can record video.
	UKS2 LO: I can identify digital devices that can record video.
3	LKS2 LO: I can start to capture video using a digital device.
	UKS2 LO: I can capture video using a digital device.
4	LKS2 LO: I can start to recognise the features of an effective video.
	UKS2 LO: I can recognise the features of an effective video.
5	LKS2 LO: I can start to identify that video can be improved through reshooting and editing.
	UKS2 LO: I can identify that video can be improved through reshooting and editing.
6	LKS2 LO: I can start to consider the impact of the choices made when making and sharing a video.
	UKS2 LO: I can consider the impact of the choices made when making and sharing a video.

Computing Unit: Data and information – Data logging

Lesson	Lesson Objective
1	LKS2 LO: I can start to use a form to record information.
	UKS2 LO: I can use a form to record information.
2	LKS2 LO: I can start to compare paper and computer-based databases.
	UKS2 LO: I can compare paper and computer-based databases.
3	LKS2 LO: I can start to outline how grouping and then sorting data allows us to answer questions.
	UKS2 LO: I can outline how grouping and then sorting data allows us to answer questions.
4	LKS2 LO: I can start to explain that tools can be used to select specific data.
	UKS2 LO: I can explain that tools can be used to select specific data.
5	LKS2 LO: I can start to explain that computer programs can be used to compare data visually.
	UKS2 LO: I can explain that computer programs can be used to compare data visually.
6	LKS2 LO: I can start to apply my knowledge of a database to ask and answer real-world questions.
	UKS2 LO: I can apply my knowledge of a database to ask and answer real-world questions.

Computing Unit – Programming B – Repetition in games

Lesson	Lesson Objective
1	LKS2 LO: I can start to control a simple circuit connected to a computer.
	UKS2 LO: I can control a simple circuit connected to a computer.
2	LKS2 LO: I can start to write a programme that includes count-controlled loops.
	UKS2 LO: I can write a programme that includes count-controlled loops.
3	LKS2 LO: I can start to explain that a loop can stop when a condition is met.
	UKS2 LO: I can explain that a loop can stop when a condition is met.
4	LKS2 LO: I can start to conclude that a loop can be used to repeatedly check whether a condition has been met.
	UKS2 LO: I can conclude that a loop can be used to repeatedly check whether a condition has been met.
5	LKS2 LO: I can start to design a physical project that includes selection.
	UKS2 LO: I can design a physical project that includes selection.
6	LKS2 LO: I can start to create a controllable system that includes selection.
	UKS2 LO: I can create a controllable system that includes selection.

Computing Unit: Programming A – Repetition in shapes

Lesson	Lesson Objective
1	LKS2 LO: I can start to explain how selection is used in computer programs.
	UKS2 LO: I can explain how selection is used in computer programs.
2	LKS2 LO: I can start to relate that a conditional statement connects a condition to an outcome.
	UKS2 LO: I can relate that a conditional statement connects a condition to an outcome.
3	LKS2 LO: I can start to explain how selection directs the flow of a program.
	UKS2 LO: I can explain how selection directs the flow of a program.
4	LKS2 LO: I can start to design a program which uses selection.
	UKS2 LO: I can design a program which uses selection.
5	LKS2 LO: I can start to create a program which uses selection.
	UKS2 LO: I can create a program which uses selection.
6	LKS2 LO: I can evaluate my program.
	UKS2 LO: I can evaluate my program.