Computing Long Term Plan – Curriculum Map

The Computing curriculum at Kingswood Parks matches the breadth and ambition of the National Curriculum. The key substantive and disciplinary knowledge has been mapped out so teachers know precisely what to teach and when, can demonstrate a logical progression and can cite how new knowledge and skills build upon what has been taught before. Computing vocabulary is mapped out so that teachers know precisely what to teach and when. This is in a logical progression so that vocabulary development builds over time. End points have been defined as curricular goals which pupils will work towards. These end points are progressive and enable pupils to apply their knowledge and skills in an open-ended, measurable way which teachers can then assess against. Curriculum plans are adapted to meet the needs of SEND pupils as well as providing pupils with opportunities to deepen their understanding through challenging outcomes which are not limiting. Provision for SEND pupils is personalised for individuals and strategies used will be indicated in planning. Specific programmes for use have been identified throughout the planning document. These have been chosen to ensure children can achieve the planned curricular goals.

EYFS

Computing is not assessed as part of the Development Matters Framework. Although there is not an outcome, the children are exposed to Computing throughout the Early Years beginning with understanding the function of a switch for example the use of a torch or camera. This progresses further by the children exploring how a Bee bot can move and understanding how to code the Bee bot on a journey. (Computer Science.) The children are exposed to technology through the use of the interactive whiteboards and age-appropriate programmes when using the iPads, such as making marks and changing colours, progressing to creating an illustration. (Digital Literacy) The children are taught the importance of e-safety, understanding basic warning signs and to always seek an adult when they are unsure. (Safe Use)

Year 1

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
Key Concept – Information and Presentation **Curricular Goal:** To use the JIT programme to add pictures and text on a page	**Key Concept –** Data Handling **Curricular Goal:** To be able to use the JIT programme to display information using pictographs	**Key Concept –** Algorithms **Curricular Goal:** Create a series of instructions and plan a journey for an on screen turtle/sprite	**Key Concept –** Story Telling **Curricular Goal:** To be able to make a short animation using a piece of clip art	**Key Concept –** Privacy **Curricular Goal:** To understand the term E-Safety and how to keep personal information private

Year 2

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
Key Concept – Information and Presentation **Curricular Goal:** To be able to create an e-book using the JIT programme that incorporates pictures, layout and font	**Key Concept –** Data Handling **Curricular Goal:** To be able to use the JIT programme to input data in a bar chart or pie chart	**Key Concept –** Algorithms **Curricular Goal:** To be able to write an algorithm to accomplish a specific task using block based software on J2E level 1	**Key Concept –** Story Telling **Curricular Goal:** To be able to make an animation using two pieces of clip art and speech bubbles to enhance on screen work using the JIT programme	**Key Concept –** Support **Curricular Goal:** To know how to identify dangers and where to find help when using technology

Year 3

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
Key Concept – Information and Presentation **Curricular Goal:** To be able to publish a non-narrative piece of writing with an audio commentary using the J2E programme	**Key Concept –** Data Handling / Data Logging **Curricular Goal:** To record information about light, temperature or sound and producing a graph	**Key Concept –** Algorithms **Curricular Goal:** To be able to use coding to create a simple game using J2E level 2	**Key Concept –** Story Telling **Curricular Goal:** To be able to create an animation using a webcam	**Key Concept –** Personal Safety **Curricular Goal:** To make a presentation to explain how to game on line safely

Year 4

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
Key Concept – Information and Presentation **Curricular Goal:** To be able to make an online presentation on J2E using appropriate and carefully selected complimentary music	**Key Concept –** Data Handling / Data Logging **Curricular Goal:** To be able to use different software to construct a graph To use a data logger to record more than one of light, temperature or sound and produce a graph and interpret the results	**Key Concept –** Algorithms **Curricular Goal:** To be able to create a game to achieve more than one goal on J2E – Level 2	**Key Concept –** Story Telling and Virtual Locations **Curricular Goal:** To explore using green screen technology To be able to create an animation with multiple characters for a purpose	**Key Concept –** Personal Safety **Curricular Goal:** To be able to create a set of E-Safety rules that can be followed at home and at school and explain why these are important

Year 5

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
Key Concept – Information and Presentation **Curricular Goal:** To be able to create a multi-page presentation including pages that have a consistent layout and include transitions on J2Office to share information	**Key Concept –** Data Handling / Data Logging **Curricular Goal:** To be able to use data loggers to formulate and test a hypothesis To be able to use a spreadsheet to record data	**Key Concept –** Algorithms **Curricular Goal:** To be able to code to create a game where actions incur penalties on J2E – Level 3	**Key Concept –** Virtual Locations **Curricular Goal:** To be able to use green screen technology to produce a video presentation	**Key Concept –** Personal Responsibility **Curricular Goal:** To be able to write a code of conduct for working online

Year 6

Digital Literacy	Data	Computer Science	Multimedia	Safe Use (Ongoing Throughout Every Unit)
Key Concept – Information and Presentation **Curricular Goal:** To be able to create a presentation for a purpose incorporating visual, sound and text elements that includes appropriate software using J2Office	**Key Concept –** Data Handling / Data Logging **Curricular Goal:** To be able to make decisions about when to use data loggers to investigate scientifically To be able to use formulae to manipulate data within a spreadsheet	**Key Concept –** Algorithms **Curricular Goal:** To be able to develop a game to include a timer or a score using J2E – Level 3	**Key Concept –** Film Making **Curricular Goal:** To be able to create a video with various green screen locations for a given purpose	**Key Concept –** Personal Protection **Curricular Goal:** To be able to write a code of conduct for working online, messaging and using social media