'We are a small school that makes a big difference'

'To provide excellence for all within a happy, safe, and stimulating learning environment'

Computing Policy

SNAPE WOOD PRIMARY AND NURSERY SCHOOL				
Approved by: Full Governing Body	Date: Spring 2023			
Review Date: Spring 2023	Spring 2024			

Rationale:

Computing is an essential part of modern life and is becoming increasingly important in the workplace. The National Curriculum (2014) for computing aims to equip pupils with the skills and knowledge they need to use technology effectively and responsibly. The curriculum also aims to inspire pupils to pursue further study and careers in computing and related fields.

Aims:

- To develop pupils' computational thinking skills, including their ability to solve problems and to design and create programs.
- To develop pupils' understanding of how computers and networks work, and to help them to use technology safely and responsibly.
- To inspire pupils to take an interest in computing and to pursue further study and careers in computing and related fields.
- To ensure that all pupils have access to the same opportunities to learn about and use technology.

Curriculum Intent:

The computing curriculum is designed to provide pupils with the skills and knowledge they need to use technology effectively and responsibly, and to inspire them to pursue further study and careers in computing and related fields. The curriculum is structured to ensure that pupils develop a secure understanding of computational thinking, programming, and digital literacy, and that they are able to apply these skills in a range of contexts.

iMedia:

The computing curriculum is planned and delivered by Junior Jam within iMedia sessions. Their intent is to educate pupils on how to use technology academically and outside of school, combining the computing curriculum with a wide range of media subjects. Topics such as music production and stop motion animation support pupils in developing their understanding of computer applications, as well as promoting vocationally relevant interests in engaging and creative technology industries.

iMedia	Progr	essio	n Map)	₩]ر	unior	Jam
	EYFS Lite Level 1R	Year 1 Lite Level 1	Year 2 Lite Level 2	Year 3 Level 1	Year 4 Level 2	Year 5 Level 3	Year 6 Level 4
iJam	rJam Pupils to: - name instruments - clap to beats - create basic rhythms on apps	iLoop Pupils to: - understand song structure - use live loops to create music	iGenre Pupils to: - understand the term Genre - use genre filters on GarageBand	iSong Pupils to: - understand Music Production - use Live instruments to create music	iDance Pupils to: - understand sub genres of dance - create songs to specific BMPs	iHipHop Pupils to: - understand characteristics of HipHop - create a HipHop based song	iRemix Pupils to: - understand sampling + Remixing - remix a popular song.
iProgram	rProgram Pupils to: - recognise technology - name parts of a computer	iCode Pupils to: - know that computers use code - create simple algorithms	iBlockly Pupils to: - know what an algorithm is - Write code in Blockly	iLogic Pupils to: - understand Computer Science - create patterns using code	iFunction Pupils to: - Know what a function is - Use conditionals and variables to code	iDebug Pupils to: - know what debugging is - Create a game using programming	iDevelop Pupils to: - recreate real- world programs - code with complex variables and functions
KS1 iAnimate KS2 iOffice	rAnimate Pupils to: - know that cartoons are animated - animate a basic character on IOS	iMove Pupils to: - understand stopmotion films - animate using stopmotion	i2D Pupils to: - understand that 2D means flat - draw a 2D animation	iSafety Pupils to: - understand basic instant safety - use basic functions of Word	iSocial Pupils to: - use more advanced functions of word - understand when to use them	iCompany Pupils to: - use basic function of Excel - understand how Excel is used in business	iC.V Pupils to: - Use apps word, keynote and Excel to create a C.V
iCreate	rCreate Pupils to: - learn how to take a photo on an iPad - create digital art	iPhotograph Pupils to: - understand focal point, fore/ background - photograph using their key words	iMagazine Pupils to: - layout and create a magazine and it's content	iStopMotion Pupils to: - create own stop motion - edit animation using sound FX and green screen	iEdit Pupils to: - create a storyboard - Splice and fast cut existing footage	Advanced i2D Pupils to: - understand that 2D is drawn then animated - create 2D animations	iDigital Pupils to: - edit a master cut - create a gif, 3D Art and a Cinemagraph
iCommunicate	rComm Pupils to: - name ways to communicate - understand pros and cons of those ways	iSecure Pupils to: - know basics of internet safety - discuss topics surrounding trust	iConnect Pupils to: - discuss methods of communication - layout and compose an email	iCollaborate Pupils to: - create a podcast, a blog and a vlog - create content for an audience	iPublish Pupils to: - discuss distribution of media - understand an editors role	iAdvertise Pupils to: - understand branding and taglines - Create a radio, tv, and print ad	iGraphics Pupils to: - create a website homepage - Understand WYSIWYG
iTech	rTech Pupils to: - Know differences between photos and videos - Create basic storylines	iInvent Pupils to: - Discuss and understand the technological timeline	iFilm Pupils to: Name different camera angles Shoot footage using those angles	iControl All KS2 2020/21 Pupils to: - Use java and Blockley to code an external device	iCSI - Evidence trace All KS2 2021/22 Pupils to: - Use and understand technology used to solve crime	iCSI - Cold case All KS2 2022/23 Pupils to: - Understand and use technology used to solve cyber crimes.	iBuild All KS2 2023/24 Pupils to: - How Minecraft can reused to create worlds and fulfil briefs.

Curriculum Implementation:

Junior Jam have created a curriculum that spans from Reception to Year 6. They have mapped the full framework of content including concepts, knowledge, skills, keywords and objectives.

Computing activities are planned with one or more of these three core areas in mind:

- Computer Science the understanding of coding and programming across a range of physical devices and digital resources.
- Information Technology the range of skills required to operate and manipulate specific programmes, systems and content.
- Digital Literacy the knowledge required to use technology safely and to evaluate and react to any potential risks of the online/digital world.

Within the curriculum, aspects of computational thinking are interweaved in all of the activities and modules to help children to gain independence and skills in problem solving. Definition of computational thinking;

- Decomposition: Solve a problem by breaking it into smaller pieces.
- Pattern: Find the order and analyse the data.
- Abstraction: Ignore/take away anomalies within the pattern.
- Algorithmic Design: Create a solution using a series of ordered steps.

Knowledge is learned and applied through Apple apps such as Scratch, Hopscotch, Tynker and Lightbot to ensure development of pupil knowledge. The curriculum map is supplemented with additional resources such as complex programming booklets and animation extras to enhance the learning and give appropriate challenges to our pupils.

In line with National Curriculum requirements and our commitment to the safety and wellbeing of our pupils, internet safety is foregrounded, with a whole half term dedicated to this within KS1 and KS2. Alongside this, internet safety knowledge is emphasised at various points throughout the year.

As evidenced within Junior Jam's planning documents and knowledge organisers, keywords are taught and used frequently throughout the course. This is designed to build core language for pupils to use when discussing computing, technology and software.

Curriculum Impact:

The success of the computing curriculum is measured through formative and summative assessment, including teacher assessment, pupil self-assessment, and external assessments. Teachers use assessment to identify pupils' strengths and weaknesses and to plan future learning. Pupils are encouraged to reflect on their learning and to set targets for improvement. The computing curriculum aims to ensure that pupils make progress in their computational thinking skills, programming abilities, and digital literacy, and that they are able to use technology safely and responsibly.

From summer 2023, Junior Jam measure and evidence the impact of the computing curriculum through the following methods:

- Verbal feedback during lessons.
- Session Forms These are weekly reports on whether the learning objective for the lesson was achieved which are accessible via the school portal.
- Course Evaluations These are half-termly reports for each class, measuring how the class performs against a range of statements specific to the course, allowing Junior Jam instructors to track how each class performs against national expectations.
- Reporting and Assessing These are individual grades for each child covering attainment, behaviour and progression within the course.
- Uploads Each half term work from each class is collated and shared with school.

Monitoring:

The computing curriculum intent, implementation and impact are monitored through a range of strategies, including lesson observations, work scrutiny, and analysis of outcomes. Senior leaders and subject leaders work together to monitor the quality of teaching and learning, and to identify areas for improvement. Regular feedback is provided to Junior Jam and the contract would be terminated if there were concerns about quality.