

# Ripponden J&I School



## Computing Policy December 2022

To be reviewed December 2023

Computing Policy  
Ripponden J & I School  
December 2022

## **INTENT**

At Ripponden Junior and Infant School, our Computing curriculum aims to develop pupils' key skills and knowledge of Information Technology, Digital Literacy and Computer Science to ensure that they can stay safe, thrive and make a positive contribution to an increasingly 'digital' world. We aim to develop transferable computing thinking skills amongst learners which have an important impact on their whole development and attainment across our broad curriculum. Through the teaching of Computational thinking concepts, we will to teach children 'how to think' rather than 'what to think'. Throughout the computing curriculum children will be taught key-life skills such as presenting information, analysis of data, communication and critical thinking allowing further development of pupils' cultural capital. A key focus of our computing curriculum is to inspire a love for computing in order for children to achieve their full potential.

## **Aims**

The school's aims are to:

- To provide a relevant, challenging and enjoyable computing curriculum for all pupils
- To meet the requirements of the national curriculum programmes of study for computing.
- To use technology as a tool to enhance learning throughout the curriculum.
- To inspire a love for computing through equipping pupils with the confidence and capability to use technology throughout and beyond their lives at school.
- To develop the understanding of how to use technology safely and responsibly
- To give children access to a variety of high-quality hardware, software and unplugged resources
- To instil critical thinking, reflective learning and a 'can do' attitude; teaching children 'how to think' Computationally rather than 'what to think' Computationally.

## The National Curriculum and Coverage

Computing at Ripponden is in line with the 2014 National Primary Curriculum in England, including requirements for KS1, KS2 and the EYFS Framework

Foundation pupils are taught through the EYFS curriculum using 'Development Matters' goals and is assessed using the Early Learning Goals where clear outcomes are found in the section related to Understanding the World (UTW). The work is ongoing throughout the year and is differentiated according to ability.

### **Key Stage 1 outcomes:**

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

### **Key Stage 2 outcomes:**

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Use sequence, selection and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs.
- Understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration.

## IMPLEMENTATION

From January 2022, all Computing teaching will follow the Purple Mash Computing Scheme of Work. This scheme ensures progression of knowledge and skills year on year. Purple Mash is a creative online space from 2Simple. It hosts an exciting mash-up of curriculum focused activities, creative tools, programs and games to support and inspire creative learning every day. The curriculum provides a clear coverage of the 3 areas of computing as seen on the long term overview.

## Long Term Overview

**Key:** Yellow Digital Literacy/ Red Computer Science/ Blue Information Technology

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Saplings	<span style="background-color: yellow;">Unit 1.1 Online Safety &amp; Exploring Purple Mash (4 weeks)</span> <span style="background-color: red;">Unit 1.2 Grouping and Sorting (2 weeks)</span>	<span style="background-color: blue;">Unit 1.3 Pictograms (3 weeks)</span>  <span style="background-color: red;">Unit 1.4 Lego Builders (3 weeks)</span>	<span style="background-color: red;">Unit 1.5 Maze Explorers (3 weeks)</span>  <span style="background-color: blue;">Unit 1.6 Animated Stories (5 weeks)</span>	<span style="background-color: red;">Unit 1.7 Coding (6 weeks)</span>	<span style="background-color: blue;">Unit 1.8 Spreadsheets (3 weeks)</span>	<span style="background-color: yellow;">Unit 1.9 Technology outside schools (2 weeks)</span>
Great Oaks	<span style="background-color: yellow;">Unit 2.2 Internet Safety (2 weeks)</span> <span style="background-color: red;">Unit 2.1 Coding (5 weeks)</span>	<span style="background-color: blue;">Unit 2.3 Spreadsheets (4 weeks)</span>	<span style="background-color: blue;">Unit 2.4 Questioning (5 weeks)</span>	<span style="background-color: yellow;">Unit 2.5 Effective Searching (3 weeks)</span>	<span style="background-color: blue;">Unit 2.6 Creating Pictures (5 Weeks)</span> <span style="background-color: blue;">Unit 2.7 Making Music (3 Weeks)</span>	<span style="background-color: blue;">Unit 2.8 Presenting Ideas (4 weeks)</span>
Chestnuts	<span style="background-color: red;">Unit 3.1 Coding (6 weeks)</span>	<span style="background-color: yellow;">Unit 3.2 Online safety (2 weeks)</span> <span style="background-color: blue;">Unit 3.3 Spreadsheets (3 weeks)</span>	<span style="background-color: blue;">Unit 3.4 Touch Typing (4 weeks)</span> <span style="background-color: yellow;">Unit 3.5 Email (6 weeks)</span>	<span style="background-color: blue;">Unit 3.6 Branching Databases (4 weeks)</span>	<span style="background-color: blue;">Unit 3.7 Simulations (3 weeks)</span>	<span style="background-color: blue;">Unit 3.8 Graphing (3 weeks)</span>
Willows	<span style="background-color: yellow;">Unit 4.2 Online Safety (2 weeks)</span> <span style="background-color: blue;">Unit 4.7 Effective Searching (3 weeks)</span>	<span style="background-color: red;">Unit 4.1 Coding (6 weeks)</span>	<span style="background-color: blue;">Unit 4.3 Spreadsheets (6 weeks)</span>	<span style="background-color: red;">Unit 4.5 Logo (4 weeks)</span> <span style="background-color: red;">Unit 4.8 Hardware investigators (2 weeks)</span>	<span style="background-color: blue;">Unit 4.4 Writing for different audiences (5 weeks)</span>	<span style="background-color: blue;">Unit 4.6 Animation (3 weeks)</span> <span style="background-color: blue;">Unit 4.9 Making Music (4 weeks)</span>
Maples	<span style="background-color: yellow;">Unit 5.2: Online Safety (3 weeks)</span> <span style="background-color: blue;">Unit 5.3:</span>	<span style="background-color: blue;">Unit 6: 3D Modelling (4 weeks)</span>	<span style="background-color: red;">Unit 5.1: Coding (6 weeks)</span>	<span style="background-color: blue;">Unit 5.8: Word Processing (8 weeks)</span>	<span style="background-color: red;">Unit 5.5: Game Creator (5 weeks)</span>	<span style="background-color: blue;">Unit 5.4: Databases (3 weeks)</span> <span style="background-color: blue;">Unit 5.6:</span>

	Spreadsheets (6 weeks)					Concept Maps (4 weeks)
Redwoods	Unit 6.1 Coding (6 weeks)	Unit 6.2 Online Safety (2 weeks) Unit 6.3 Spreadsheet (5 weeks)	Unit 6.4 Blogging (4 weeks)  Unit 6.5 Text Adventures (5 weeks)	Unit 6.6 Networks (3 weeks)  Unit 6.7 Quizzing (6 weeks)	Unit 6.8 Understanding Binary (4 weeks)	Unit 6.9 Spreadsheets (with Microsoft Excel or Google Sheets) (8 weeks)

## Progression of Skills

Our computing curriculum provides a clear progression of both skills and knowledge year on year. The subject specific language is taught, at the right time, throughout the Key Stages. Children develop computational thinking, which enables them to independently break down problems, solve them and give reason. Children learn about the importance of E-Safety and therefore develop digital resilience - enabling a higher self-esteem and the ability to apply 'growth mind-set' thinking.

### Computing Progression N.C. Statements KS1 Year 1



	Computer Science			Information Technology	Digital Literacy	
Statement	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	Create and debug simple programs.	Use logical reasoning to predict the behaviour of simple programs.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Recognise common uses of information technology beyond school.	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.
Outcome	Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program.	Children can work out what is wrong with a simple algorithm when the steps are out of order, e.g. <a href="#">The Wrong Sandwich</a> in Purple Mash and can write their own simple algorithm, e.g. <a href="#">Colouring in a Bird activity</a> . Children know that an unexpected outcome is due to the code they have created and can make logical attempts to fix the code, e.g. <a href="#">Bubbles activity in 2Code</a> .	When looking at a program, children can read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program. Children can, for example, interpret where the turtle in <a href="#">2Go challenges</a> will end up at the end of the program.	Children are able to sort, collate, edit and store simple digital content e.g. children can name, save and retrieve their work and follow simple instructions to access online resources, use Purple Mash <a href="#">2Quiz</a> example (sorting shapes), <a href="#">2Code</a> design mode (manipulating backgrounds) or using pictogram software such as <a href="#">2Count</a> .	Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can make a distinction between objects that use modern technology and those that do not e.g. a microwave vs. a chair.	Children understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons. Children take ownership of their work and save this in their own private space such as their My Work folder on Purple Mash.

## Computing Progression N.C. Statements KS1 Year 2



	Computer Science			Information Technology	Digital Literacy	
Statement	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	Create and debug simple programs.	Use logical reasoning to predict the behaviour of simple programs.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Recognise common uses of information technology beyond school.	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.
Outcome	Children can explain that an algorithm is a set of instructions to complete a task. When <a href="#">designing simple programs</a> , children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into code.	Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors, e.g. <a href="#">Debug Challenges: Chimp</a> . Children's program designs display a growing awareness of the need for logical, programmable steps.	Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause and effect sentence of what will happen in a program.	Children demonstrate an ability to organise data using, for example, a database such as <a href="#">2Investigate</a> and can retrieve specific data for conducting simple searches. Children are able to edit more complex digital data such as music compositions within <a href="#">2Sequence</a> . Children are confident when creating, naming, saving and retrieving content. Children use a range of media in their digital content including photos, text and sound.	Children can effectively retrieve relevant, purposeful digital content using a search engine. They can apply their learning of effective searching beyond the classroom. They can share this knowledge, e.g. <a href="#">2Publish example template</a> . Children make links between technology they see around them, coding and multimedia work they do in school e.g. <a href="#">animations, interactive code and programs</a> .	Children know the implications of inappropriate online searches. Children begin to understand how things are shared electronically such as posting work to the Purple Mash display board. They develop an understanding of using email safely by using <a href="#">2Respond</a> activities on Purple Mash and know ways of reporting inappropriate behaviours and content to a trusted adult.

## Computing Progression N.C. Statements KS2 Year 3



	Computer Science			Information Technology	Digital Literacy		
Statement	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact.
Outcome	Children can turn a simple real-life situation into an algorithm for a program by deconstructing it into manageable parts. Their design shows that they are thinking of the desired task and how this translates into code. Children can identify an error within their program that prevents it following the desired algorithm and then fix it.	Children demonstrate the ability to design and code a program that follows a simple sequence. They experiment with timers to achieve repetition effects in their programs. Children are beginning to understand the difference in the effect of using a timer command rather than a repeat command when creating repetition effects. Children understand how variables can be used to store information while a program is executing.	Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. For example, 'if' statements, repetition and variables. They make good attempts to 'step through' more complex code in order to identify errors in algorithms and can correct this. e.g. traffic light algorithm in <a href="#">2Code</a> . In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately.	Children can list a range of ways that the internet can be used to provide different methods of communication. They can use some of these methods of communication, e.g. being able to open, respond to and attach files to emails using <a href="#">2Email</a> . They can describe appropriate email conventions when communicating in this way.	Children can carry out simple searches to retrieve digital content. They understand that to do this, they are connecting to the internet and using a search engine such as Purple Mash search or internet-wide search engines.	Children can collect, analyse, evaluate and present data and information using a selection of software, e.g. using a branching database <a href="#">2Question</a> , using software such as <a href="#">2Graph</a> . Children can consider what software is most appropriate for a given task. They can create purposeful content to attach to emails, e.g. <a href="#">2Respond</a> .	Children demonstrate the importance of having a secure password and not sharing this with anyone else. Furthermore, children can explain the negative implications of failure to keep passwords safe and secure. They understand the importance of staying safe and the importance of their conduct when using familiar communication tools such as <a href="#">2Email</a> in Purple Mash. They know more than one way to report unacceptable content and contact.

## Computing Progression N.C. Statements KS2 Year 4



	Computer Science				Information Technology		Digital Literacy
Statement	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact.
Outcome	When turning a real-life situation into an algorithm, the children's design shows that they are thinking of the required task and how to accomplish this in code using coding structures for selection and repetition. Children make more intuitive attempts to debug their own programs.	Children's use of timers to achieve repetition effects are becoming more logical and are integrated into their program designs. They understand 'if statements' for selection and attempt to combine these with other coding structures including variables to achieve the effects that they design in their programs. As well as understanding how variables can be used to store information while a program is executing, they are able to use and manipulate the value of variables. Children can make use of user inputs and outputs such as 'print to screen'. e.g. <a href="#">2Code</a> .	Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. For example, 'if' statements, repetition and variables. They can trace code and use step-through methods to identify errors in code and make logical attempts to correct this. e.g. traffic light algorithm in <a href="#">2Code</a> . In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately.	Children recognise the main component parts of hardware which allow computers to join and form a network. Their ability to understand the online safety implications associated with the ways the internet can be used to provide different methods of communication is improving.	Children understand the function, features and layout of a search engine. They can appraise selected webpages for credibility and information at a basic level.	Children are able to make improvements to digital solutions based on feedback. Children make informed software choices when presenting information and data. They create linked content using a range of software such as <a href="#">2Connect</a> and <a href="#">2Publish</a> . Children share digital content within their community, i.e. using <a href="#">Virtual Display Boards</a> .	Children can explore key concepts relating to online safety using concept mapping such as <a href="#">2Connect</a> . They can help others to understand the importance of online safety. Children know a range of ways of reporting inappropriate content and contact.

## Computing Progression N.C. Statements KS2 Year 5



	Computer Science				Information Technology		Digital Literacy
Statement	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact.
Outcome	Children may attempt to turn more complex real-life situations into algorithms for a program by deconstructing it into manageable parts. Children are able to test and debug their programs as they go and can use logical methods to identify the approximate cause of any bug but may need some support identifying the specific line of <a href="#">code</a> .	Children can translate algorithms that include sequence, selection and repetition into code with increasing ease and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures. They are combining sequence, selection and repetition with other coding structures to achieve their <a href="#">algorithm design</a> .	When children code, they are beginning to think about their code structure in terms of the ability to debug and interpret the code later, e.g. the use of tabs to organise code and the <a href="#">naming of variables</a> .	Children understand the value of computer networks but are also aware of the main dangers. They recognise what personal information is and can explain how this can be kept safe. Children can select the most appropriate form of online communications contingent on audience and digital content, e.g. <a href="#">2Blog</a> , <a href="#">2Email</a> , <a href="#">Display Boards</a> .	Children search with greater complexity for digital content when using a search engine. They are able to explain in some detail how credible a webpage is and the information it contains.	Children are able to make appropriate improvements to digital solutions based on feedback received and can confidently comment on the success of the solution. e.g. creating their own program to meet a design brief using <a href="#">2Code</a> . They objectively review solutions from others. Children are able to collaboratively create content and solutions using digital features within software such as collaborative mode. They are able to use several ways of sharing digital content, i.e., <a href="#">2Blog</a> , <a href="#">Display Boards</a> and <a href="#">2Email</a> .	Children have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of a few different technologies and <a href="#">online services</a> . Children implicitly relate appropriate online behaviour to their right to personal privacy and mental wellbeing of themselves and others.

	Computer Science				Information Technology		Digital Literacy
Statement	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.	Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact.
Outcome	Children are able to turn a more complex programming task into an algorithm by identifying the important aspects of the task (abstraction) and then decomposing them in a logical way using their knowledge of possible coding structures and applying skills from previous programs. Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a <u>problem</u> .	Children translate algorithms that include sequence, selection and repetition into code and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures, including nesting structures within each other. Coding displays an improving understanding of variables in coding, outputs such as sound and movement, inputs from the user of the program such as button clicks and the <u>value of functions</u> .	Children are able to interpret a program in parts and can make logical attempts to put the separate parts of a complex algorithm together to explain the <u>program as a whole</u> .	Children understand and can explain in some depth the difference between the internet and the World Wide Web. Children know what a WAN and LAN are and can describe how they access the <u>internet in school</u> .	Children readily apply filters when searching for digital content. They are able to explain in detail how credible a webpage is and the information it contains. They compare a range of digital content sources and are able to rate them in terms of content quality and accuracy. Children use critical thinking skills in everyday use of online communication.	Children make clear connections to the audience when designing and creating digital content. The children design and create their own blogs to become a content creator on the internet, e.g. <u>2Blog</u> . They are able to use criteria to evaluate the quality of digital solutions and are able to identify improvements, making some refinements.	Children demonstrate the safe and respectful use of a range of different technologies and online services. They identify more discreet inappropriate behaviours through developing critical thinking, e.g. <u>2Respond</u> activities. They recognise the value in preserving their privacy when online for their own and other people's safety.

## Inclusion

Computing is part of the broad and balanced curriculum for all children at Ripponden J and I School. We plan to provide for all children to achieve and ensure that all children have the opportunity to gain computational skills, knowledge and understanding regardless of gender, race, class, physical or intellectual ability. Teacher's planning will include children of all abilities and appropriate tasks will be set for children with SEND. Teachers will address the different abilities in the class by differentiated questioning, and using open-ended tasks which can be completed by all children where the outcome is flexible depending on ability. Teachers can use higher level questioning to develop children's understanding and provide extension tasks for those who need them. Some ability grouping may be used to enable all children to access the learning. Technology can make certain lessons more accessible for children with SEND. The merit of using technology for these individuals will be discussed on an individual basis



## Early Years Provision

Teaching computing is not in the new early year's framework however, at Ripponden we will provide the early years with the opportunities to learn computing skills through a broad, play-based experience of Computing in a range of contexts.

- Recording devices to support children to develop their communication skills
- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in role-play.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Algorithms – We aim for the children to have a basic understanding that algorithms are clear step by step instructions.

## How will Computing link with other subjects?

Computing links with every subject. Purple Mash hosts a range of curriculum focused activities, creative tools, programs and games to ensure the children are linking their learning to other subjects, such as:

- painting tools and photography (art and design)
- creating music
- using spreadsheets, databases, graphing (mathematics)
- 3D modelling (ART/DT/mathematics)
- conducting research using secondary sources
- writing and presenting
- developing digital resilience and becoming responsible digital citizens (PSHE/RE)
- online mapping (geography)
- data logging (science)
- photography (art and design)

Purple Mash also ensures resources link to the early learning goals in EYFS.

## CPD for Staff

Due to the fast-moving nature of technology, which cannot be future proofed, it is clear that equipment needs to be relevant and challenging. Teachers may lack confidence in IT skills as a result of changes to technology. The Purple Mash Computing Scheme of Work aims to tackle this as lessons are ready-made with a range of resources. CPD is provided by 2Simple through tutorial videos online and a training session in school to ensure that staff feel confident in teaching Computing.

## E-Safety at school

E-safety is a term which means not only the internet but other ways in which young people communicate using electronic media, e.g. laptops, tablets, mobile phones and games consoles. It means ensuring that children and young people are protected from harm and supported to achieve the maximum benefit from new and developing technologies without risk to themselves or others. The aim of promoting e-safety is to protect young people from the adverse consequences of access or use of electronic media.

E-safety is taught at school through assemblies, class discussions and online resources, which have been carefully chosen to be appropriate for the year group. E-safety lessons are part of our computing curriculum and are considered to be important to keep our children safe.

## Hardware

We have an array of software to support the teaching of computing within school which includes:

- A dedicated classroom for the teaching of computing.
- 32 laptops enabling whole class teaching of computing – each child having their own computer for the entirety of the lesson. These laptops are available for whole school use when not being used for computing lessons.
- 16 I pads to support learning in the classroom.
- Each classroom has an interactive whiteboard.
- There are a number of desktop computers available for classrooms should teachers request this.
- Beetbots
- Data loggers

## Software

Every child in school has a Google Classroom account to support remote learning as and when this is required. Additionally, all children in KS2 have an Office 365 account which gives them access to an email account and suite of Office products.

Dedicated software is used to support both computing and other subjects for example:

- Purple Mash
- Where appropriate: Scratch/Code for Life/Barefoot Computing
- Google Classroom
- Microsoft Office
- Sum Dog
- Timestable Rockstars

## **IMPACT**

As children progress throughout Ripponden J and I school, we want them to develop a deep knowledge, understanding and appreciation of technology and its used both in and out of school. Children will develop the technical knowledge and skills to help them explore, navigate and understand the wider world. They will be equipped to deal with both social and practical situations that technology may present them with therefore encouraging them to be responsible e.citizens who are ready to undertake new life experiences now and in the future.

### **Monitoring**

The subject leader will monitor planning, and the teaching of RE.

They will also monitor pupil engagement and enjoyment of the subject though:

- talking to pupils
- monitoring work in RE books

### **Assessment**

Assessment in foundation subjects, including Computing, takes place in many forms, including quizzes, paired work, participation in class activities and marking of work. As a staff, we have trialled RAG rating the key objectives from each unit of work and passing this on to subject leaders. However, after 2 terms of doing this, we evaluated the impact of this and found it to be minimal for both class teacher and for subject leaders. It was a lengthy task for teachers to complete for each foundation subject for each half term, so we decided against doing this moving forward. Additionally, a number of subject leaders went on Calderdale network meetings where they were told that there is no need to formally assess the foundation subjects.

Instead, teachers have a sound knowledge of the children, their needs and their abilities. They can talk with authority about which children do well and those which need more support.

Subject leader monitoring is given a high priority and time is given for monitoring activities. During monitoring activities, the subject leaders look at planning, look at children's work and speak with children. This is then triangulated when they speak to the class teacher. Due to these activities, the subject leaders can be confident of the standards in their curriculum areas.

### **Recording**

Computing work is produced by the children from Year 1 to Year 6. This is saved in a variety of places:

- Their folders on the school network and Purple Mash
- Their Google Classroom Accounts
- In the format of print outs from apps they use

## Marking and feedback

Feedback to children will be given as much as possible in the lesson to encourage on the spot learning and enable the embedding of skills, knowledge and understanding.

## Reporting

Feedback to parents should be provided through a parents' evening during the autumn and spring terms and a report featuring progress and attainment information during the summer term.

<b>Date of Ratification:</b>		<b>Signed:</b>  <b>Mrs Lorraine Bamforth (HEAD TEACHER)</b>  <b>Stephen Fisher (CHAIR OF GOVERNORS)</b>
<b>Review date:</b>		<b>Signed:</b>  <b>Mrs Lorraine Bamforth (HEAD TEACHER)</b>  <b>Stephen Fisher (CHAIR OF GOVERNORS)</b>