

HAREWOOD PRIMARY COMPUTING SCHEME OF WORK 2020-21

Yr Gp	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	<u>USING THE MOUSE</u> Tizzy's Toy Box	<u>GRAPHICS</u> 2Paint	<u>FOUNDATIONS OF MODELS AND SIMULATION</u> 2 Simple Modelling Toolkit	<u>CODING – CONTROL</u> Beebot and Roamer	<u>GETTING TO KNOW THE COMPUTER</u> Early Years ICT	<u>DIGITAL MEDIA SOUND/MUSIC</u> 2 Simple Music toolkit
<u>CODING – CONTROL – also running alongside other topics throughout year - Beebot and Roamer</u>						
Rec.	<u>MODELS AND SIMULATIONS AND MOUSE SKILLS</u> 2 Simple Modelling Toolkit 2 Simple City	<u>DIGITAL ART</u> Topic link: RE – Christmas pictures Colour Magic and 2Paint	<u>TEXT AND GRAPHICS AND KEYBOARD SKILLS</u> Topic link: 2 Create a story	<u>CODING - CONTROL</u> Beebots Roamer 2Go software	<u>DIGITAL MEDIA SOUND/MUSIC AND PUBLISHING</u> 2 Simple Music and 2Publish	<u>CODING - INTRODUCTION TO MAKING COMPUTER GAMES</u> 2DIY PLUS: PRACTISING LOGGING ONTO COMPUTER
Year 1	<u>TEXT AND GRAPHICS</u> Topic links: Science - Plants DT – Veg soup 2 Create a story PRINT	<u>INTRODUCTION TO DB LEARNING PLATFORM And E-SAFETY</u> <u>DIGITAL ART</u> Topic link: RE – Christmas pictures Colour Magic	<u>DIGITAL MEDIA MAKING MUSIC</u> 2 Simple Music toolkit <u>DATA HANDLING – PICTOGRAMS</u> Topic link: Maths – Collecting data 2Count PRINT	<u>CODING - INTRO TO COMPUTER PROGRAMMING</u> Discovery Coding E-SAFETY – Hector's World (1 week)	<u>CODING – CREATING COMPUTER GAMES</u> 2DIY E-SAFETY – Hector's World Cont. (1 week)	<u>2D ANIMATION</u> Topic Link: Geography - Seaside 2Animate <u>MODELS AND SIMULATIONS</u> Spex+ PRINT
Year 2	<u>MODELS AND SIMULATIONS</u> Topic Link: DT – Can you build the queen a castle? Spex+ PRINT <u>CODING – CREATING COMPUTER GAMES</u> 2DIY E- SAFETY and DB Learning Platform	<u>DIGITAL MEDIA – SOUND/MUSIC</u> 2 Simple Linked to fireworks <u>TEXT AND GRAPHICS AND KEYBOARD SKILLS</u> Topic Link: Geography – Arctic and Antarctic animals Publisher PRINT <u>DIGITAL ART</u> Topic link: RE – Christmas pictures Colour Magic	<u>TEXT AND GRAPHICS</u> Topic Links: Paddington Bear and Chinese New Year 2Create a Story PRINT <u>2D ANIMATION</u> Topic Link: DT – Vehicles 2Animate	<u>CODING - INTRO TO COMPUTER PROGRAMMING</u> Discovery Coding E-SAFETY – Jessie and Friends resource (1 week)	<u>CODING – CONTROL</u> Floor roamer Roamer world <u>DATA HANDLING - INTRODUCTION TO DATABASES</u> Topic Link: Science – Living things and habitats 2Investigate	<u>RECOGNISE COMMON USES OF IT BEYOND SCHOOL (Health care) DIGITAL RESEARCH AND PRESENTING INFO</u> Topic link: Science – Keeping healthy Internet PowerPoint PRINT E-SAFETY – Childnet – Smart Crew resource (1 week)

<p>Year 3</p>	<p><u>DIGITAL RESEARCH AND PRESENTING INFO</u></p> <p>Topic Link: Science – Animals including humans</p> <p>Internet Publisher PRINT</p> <p><u>TEXT AND GRAPHICS</u></p> <p>Topic Link: History – The Stone Age</p> <p>Word PRINT</p>	<p><u>CODING - COMPUTER PROGRAMMING</u></p> <p>Discovery Coding</p> <p>E- SAFETY – Childnet – Smart Crew resources (1 week)</p> <p><u>DIGITAL ART</u></p> <p>Topic link: RE – Christmas pictures</p> <p>2Create a picture</p>	<p><u>2D ANIMATION</u></p> <p>Topic link: DT – Making a monster move</p> <p>2Animate</p> <p>E- SAFETY Espresso resources (1 week) (linked to Safer Internet Day)</p>	<p><u>CODING – CREATING COMPUTER GAMES</u></p> <p>2DIY</p> <p><u>MULTIMEDIA PRESENTATION</u></p> <p>Topic Link: History – The Romans</p> <p>Powerpoint Internet PRINT</p>	<p><u>DATABASES</u></p> <p>Topic Link: Geography general knowledge – Country/Climate/Flag</p> <p>2Investigate Database</p> <p>E- SAFETY – Animal Magic resource (1 week)</p>	<p><u>USING THE INTERNET</u></p> <p>Topic Link: Geography – Europe and Capital Cities</p> <p><u>Photostory</u></p> <p>E-SAFETY and <u>Communicating Online DB Primary</u></p>
<p>Year 4</p>	<p><u>DIGITAL RESEARCH AND PRESENTING INFO</u></p> <p>Topic Link: Science – Living things and habitats</p> <p>Internet Publisher PRINT</p> <p><u>CODING – CREATING COMPUTER GAMES</u></p> <p>2DIY</p>	<p><u>TEXT AND GRAPHICS</u></p> <p>Topic Link: Geography – Italy - Volcanoes</p> <p>Word PRINT</p> <p>E-SAFETY – DB Primary e-safety resources (1 week)</p> <p><u>DIGITAL ART</u></p> <p>Topic link: RE – Christmas pictures</p> <p>2 Paint a picture</p>	<p><u>DIGITAL MEDIA - 2D ANIMATION</u></p> <p>Topic links: – Geography - Africa</p> <p>2Animate</p> <p><u>DIGITAL MEDIA – PHOTO EDITING PROJECT</u></p> <p>Topic links: – Geography - Africa</p> <p>Photo Simple Publisher Internet</p>	<p><u>USING THE INTERNET AND MULTIMEDIA PRESENTATION</u></p> <p>Topic Link: History – Normans</p> <p>Internet Powerpoint PRINT</p> <p>E-SAFETY – Know your friends resource And Design poster - Publisher (2 weeks)</p>	<p><u>CODING – COMPUTER PROGRAMMING</u></p> <p>Discovery Coding</p>	<p><u>DIGITAL MEDIA – COMPUTER ANIMATION</u></p> <p>Styckz software</p> <p>E-SAFETY – Thinkuknow Play, like,share and Band runner (1 week)</p> <p><u>CODING – CONTROL</u></p> <p>LOGO</p>

<p>Year 5</p>	<p><u>DIGITAL MEDIA ART/MUSIC PROJECT</u></p> <p>Topic Link: Geog – Caribbean</p> <p>2Create a picture Photo Story</p> <p><u>CODING - CREATING COMPUTER GAMES</u></p> <p>2DIY</p> <p>E-SAFETY – Espresso KS2 Digital Literacy resouces (1 week)</p>	<p><u>USING THE INTERNET AND MULTIMEDIA PRESENTATION</u></p> <p>Topic Link: History – WW1</p> <p><u>Internet</u></p> <p>Powerpoint PRINT</p> <p><u>TEXT AND GRAPHICS (3 weeks)</u></p> <p>Topic Link: Science – Earth and Space Word, Internet PRINT</p> <p><u>DIGITAL ART</u></p> <p>Topic link: RE – Christmas pictures</p> <p>2Paint</p>	<p><u>DATA HANDLING – INTRO TO SPREADSHEETS</u></p> <p>Excel PRINT</p> <p>E-SAFETY – Linked to Internet Safety Day – quiz and resources (1 week)</p>	<p><u>CODING – COMPUTER PROGRAMMING</u></p> <p>Scratch</p> <p><u>DIGITAL ART PROJECT</u></p> <p>Topic link: Art – David Hockney</p> <p>2 Paint</p>	<p><u>CODING – COMPUTER PROGRAMMING</u></p> <p>Discovery Coding</p>	<p><u>GRAPHICAL MODELLING</u></p> <p>Spex+</p> <p>E-SAFETY – Jigsaw video (1 week)</p> <p><u>DIGITAL ART AND PRESENTING TEXT AND GRAPHICS</u></p> <p>Topic Link: History – Great Fire of London</p> <p>2Paint a picture Publisher PRINT</p>
<p>Year 6</p>	<p><u>TEXT AND GRAPHICS/DIGITAL MEDIA</u></p> <p><u>SUSTAINED INDIVIDUAL PROJECT</u> (Introduction)</p> <p>Powerpoint</p> <p><u>CODING - CREATING COMPUTER GAMES (1)</u></p> <p>Introduction to Kodu Games Lab</p>	<p><u>CODING – COMPUTER PROGRAMMING</u></p> <p>Discovery Coding</p> <p><u>TEXT AND GRAPHICS/DIGITAL MEDIA</u></p> <p><u>SUSTAINED INDIVIDUAL PROJECT</u></p> <p>Powerpoint</p> <p>E-SAFETY – Espresso resources (1 week)</p>	<p><u>DATA HANDLING - SPREADSHEETS</u></p> <p>Excel PRINT</p> <p><u>TEXT AND GRAPHICS/DIGITAL MEDIA</u></p> <p><u>SUSTAINED INDIVIDUAL PROJECT</u></p> <p>Powerpoint</p> <p>E-SAFETY – Linked to Internet Safety Day – quiz and resources (1 week)</p>	<p><u>USING ONLINE RESOURCES</u></p> <p>Topic Link: Geography – Comparing our local area to London</p> <p>Digimaps</p> <p><u>TEXT AND GRAPHICS/DIGITAL MEDIA</u></p> <p><u>SUSTAINED INDIVIDUAL PROJECT</u></p> <p>Powerpoint</p>	<p><u>CODING - CREATING COMPUTER GAMES (2)</u></p> <p>Kodu Games Lab</p>	<p><u>SUSTAINED INDIVIDUAL PROJECT</u></p> <p>Powerpoint PRINT</p> <p>E-SAFETY – Internet Legends - Interland (1 week)</p> <p><u>CROSS CURRICULAR TOPICS</u> <u>Independent Project</u></p> <p>History - The Mayans PRINT</p>

COMPUTING CURRICULUM STRANDS:

COMPUTER SCIENCE – THIS IS THE SCIENTIFIC AND PRACTICAL STUDY OF COMPUTATION: WHAT CAN BE COMPUTED, HOW TO COMPUTE IT AND HOW COMPUTATION MAY BE APPLIED TO THE SOLUTION OF PROBLEMS.

INFORMATION TECHNOLOGY – THIS IS CONCERNED WITH HOW COMPUTERS AND TELECOMMUNICATIONS EQUIPMENT WORK AND HOW THEY MAY BE APPLIED TO THE STORAGE, RETREIVAL, TRANSMISSION AND MANIPULATION OF DATA. (INCLUDING FROM ABOVE E-SAFETY AND (USES OF IT BEYOND SCHOOL)

DIGITAL LITERACY – THIS IS THE ABILITY TO EFFECTIVELY, RESPONSIBLY, SAFELY AND CRITICALLY NAVIGATE, EVALUATE AND CREATE DIGITAL ARTEFACTS USING A RANGE OF DIGITAL TECHNOLOGIES.

National Curriculum Computing Program of study

Subject content Key stage 1

Pupils should be taught to:

- ♣ 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.

Key stage 2

Pupils should be taught to:

- ♣ 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 concerns about content and contact