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| Hanslope – Computing Progression Map 2019 |
| NC objectives: | EYFS | KS1 (Red = year 1, Black = Year 2) | LKS2 (Red = year 3, Black = Year 4) | UKS2 (Red = year 5, Black = Year 6) |
| **Key Stage 1:** to understand what algorithms are, how they areimplemented as programs on digital devices, and thatprograms execute by following precise and unambiguous instructionsto create and debug simple programsto use logical reasoning to predict the behaviour of simple programsto use technology purposefully to create, organise, store, manipulate and retrieve digital contentto recognise common uses of information technologybeyond schoolto use technology safely and respectfully, keepingpersonal information private; identify where to go forhelp and support when they have concerns about content or contact on the internet or other online technologies**Key Stage 2:**to design, write and debug programs that accomplishspecific goals, including controlling or simulating physicalsystems; solve problems by decomposing them intosmaller partsto use sequence, selection, and repetition in programs;work with variables and various forms of input andoutputto use logical reasoning to explain how some simplealgorithms work and to detect and correct errors inalgorithms and programsto understand computer networks, including the internet;how they can provide multiple services, such as the WorldWide Web, and the opportunities they offer forcommunication and collaborationto use search technologies effectively, appreciate howresults are selected and ranked, and be discerning inevaluating digital contentto select, use and combine a variety of software(including internet services) on a range of digital devicesto design and create a range of programs, systems andcontent that accomplish given goals, including collecting,analysing, evaluating and presenting data andinformationto use technology safely, respectfully and responsibly;recognise acceptable/unacceptable behaviour; identify arange of ways to report concerns about content andcontact | **40-60 months**I can complete a simple program on acomputerI use ICT hardware to interact with ageappropriate computer software**Early Learning Goa**lI recognise that a range of technology isused in places such as homes andschoolsI select and use technology for particularpurposes**Exceeding statements**I find out about and use a range ofeveryday technology**E-Safety:**For children to understand the importance of politeness and courtesy on and off the internet.To encourage children’s awareness of what information should or should not be given out on social networking sites. | **Multimedia and Word Processing**I can log on/ open different programs independently**.**I can word process a range of short textsI can use editing skills to improve my workI select different presentational featuresI can save and retrieve my work independentlyI can use the mouse, arrow keys ortouchscreen to insert textI can use graphics, video and sound toenhance my workI can talk about how my use of graphics,sound and video enhance the moodI can use different layouts and templatesfor different purposes**Digital Media**I can talk about the advantages anddisadvantages of using a graphics packageover paper based art activitiesI can use a variety of skills using a range oftools and techniques to communicate aspecific idea or artistic style /effectI can choose an art programme or app fora purpose and explain my choiceI can import photos and explore effectsI can select and edit and change imagesBegin to change or enhance photographsand pictures (crop, re-colour)**Programming**I can talk about how everyday devices canbe controlledI can control actions on screen bysequences of instructionsI can create a sequence of instructions tocontrol a programmable robot to includedirection, distance and turnI can use a range of control devices andprogrammes/appsI can create a sprite for a game.I can add inputs to control my sprite.I can create simple programs.I can talk about how to improve/change and debug their sequence of commands**Communication and Collaboration**I can understand what emails are used for.I can talk about benefits of using onlinecommunications with a wider audience**Data**I can use a graphing package to recordinformation, adding labels and numbersI can use ICT to edit and change theinformation quickly.I can talk about how ICT helps them toorganise their information**Network:**I can save and retrieve workI can understand how to use the folder system I can understand basic networks e.g. Bank, library or supermarket system**E-Safety**I demonstrate the school’s e-safety rulesin all aspects of my ICT workTo help raise awareness of the dangers of giving personal information on the internet.For learners to understand that people are not always who they say they are.For learners to realise the importance of politeness and courtesy both on and off the internet.For learners to know what action to take if they feel they may be in danger.For learners to understand the uses of ICT inside and outside of school and to use it responsibly.To embed good practice in keeping safe when using online technology.To enable learners to have the ability to resist pressure to reveal personal information when using online technology.To teach children that personal information is as valuable online as it is offline, and should therefore not be shared without a parent or teacher’s permission.To teach children to understand that not everyone they meet is automatically trustworthy.To enable children to begin to identify the characteristics of people that are worthy of their trust and who can help them make positive choices to keep them safe.To teach children to begin to understand some of the qualities that can be used to assess if a person is trustworthy.To help children to identify situations in which it is wise to turn to a trusted adult for help.To enable children to understand that their emotions can be a powerful tool to help them assess unsafe situations.To ensure that children can identify some of the physical sensations that alert us to unsafe situations.To ensure that children understand the importance of checking with an adult before participating in the online environment.To encourage children to be open about their online experiences with a trusted adult. | **Multimedia and Word Processing**I can plan the structure and layout of adocument/presentationI can select and import graphics fromdigital media and the InternetI can select and import sounds and video/visual effectsI choose freely from a range of text stylesI use more than two fingers to enter textI can make corrections using spell checkI can use short keys**Digital Media**I can use visual effects such as filters, huesand painting over photographs.I can manipulate digital stills or videoI can create patterns and montagescan plan and create audio**Programming**I can navigate different programming appsI can use conditional statements (if…then) within my game.I can create a 3D digital world for a gamewith land, water and scenery.I can create a user controlled sprite andsprites with different behaviours. I can add a variety of inputs to control my spriteI can use repetition loops.I can program my sprite to navigate my3D worldI can use conditional statements(‘if…then’) to give objects behaviours**Communication and Collaboration**I can select my best work to organise andsaveI can discuss advantages anddisadvantages of different communicationmethodsI can use different levels of formalitywhen I communicate with differentpeople online**Data**I can enter data into a graphing packageto create a range of graphs, and tointerpret data across all subjectsI can compare how different graphs canbe used for different purposesI can use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.I can create and use a branching databaseto organise and analyse informationcompare the use of graphing software,branching database and card-baseddatabase for organising and interpretingdataI can explore real-life examples ofbranching databases, such as keys foranimal identification**Network:**I can understand how the internet is a networkI can understand how the school is networked**E-Safety**I demonstrate the school’s e-safety rules inall aspects of my ICT workTo understand the benefits and risks of communication technologies.To be familiar with a range of communication technology.To be familiar with a range of technical terms.to be able to identify personal information that is unique to themto be able to relate some of the safety rules to the communication technologies. | **Multimedia and Word Processing**I can plan the structure of aPresentationI can use a hyperlinks in my workI can cut and paste betweenapplications.I can use a multimedia program toorganise, refine and present informationfor a specific audienceI can delete/insert and replace text toimprove clarity and mood.I can use both hands when typing**Digital Media**I can use different filming techniquesand camera anglesI can plan a video or animation bydrawing a storyboardI can use sound effects, music and voiceoversto create mood/ atmosphereI can select and edit sounds, text andmovie clips to suit a purposeI can evaluate and improve work with aview to purpose and audienceI can record and import sounds usingsound editing softwareI use sounds from a variety of sourcesI can layer and edit soundsI can save work as a web compatibleformat for uploading**Programming**I can create a basic HTML page withhead and body sections.I can create more complex gamesI can shift camera angles in settings andin the code**Communication and Collaboration**can understand blogs and postsI understand that websites such asWikipedia are made by usersI can create and publish a new postI use strategies to check the reliability ofinformation and websites**Data**I can change variables in a spreadsheetto solve problemsI can enter formulae for the fouroperations (+-x/) into a spreadsheetI can use 'SUM' to calculate the total ofa set of numbers in a range of cellsI can change data in a spreadsheet toanswer 'what if...?' questionsI can create a simple spreadsheet modeland use it to solve problems**Network:**I can create basic maps of networks.I can understand HTML coding**E-Safety**I demonstrate the school’s e-safety rulesin all aspects of my ICT workTo understand the risks and possible outcomes of giving away personal information on line.To know how to communicate safely and effectively.To understand that not everything on the internet is reliable or true.To understand where they might see adverts online and how these work.To be aware that not everyone on the internet is who they say they are and how they can protect themselves.To know that information given on the internet is instant, irretrievable and goes straight to a wide audience and the consequences this can have.Pupils will know there are safe and appropriate behaviours to use when receiving and sending text and multimedia messages.To understand the risks and possible outcomes of giving away personal information on line.To know how to communicate safely and effectively.To understand that not everything on the internet is reliable or true.To understand where they might see adverts online and how these work.To be aware that not everyone on the internet is who they say they are and how they can protect themselves.To know that information given on the internet is instant, irretrievable and goes straight to a wide audience and the consequences this can have.Pupils will know there are safe and appropriate behaviours to use when receiving and sending text and multimedia messages. |