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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 are  implemented as programs on digital devices, and that  programs execute by following precise and unambiguous instructions  to create and debug simple programs  to use logical reasoning to predict the behaviour of simple programs  to use technology purposefully to create, organise, store, manipulate and retrieve digital content  to recognise common uses of information technology  beyond school  to 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:**  to design, write and debug programs that accomplish  specific goals, including controlling or simulating physical  systems; solve problems by decomposing them into  smaller parts  to use sequence, selection, and repetition in programs;  work with variables and various forms of input and  output  to use logical reasoning to explain how some simple  algorithms work and to detect and correct errors in  algorithms and programs  to 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  to use search technologies effectively, appreciate how  results are selected and ranked, and be discerning in  evaluating digital content  to 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  to use technology safely, respectfully and responsibly;  recognise acceptable/unacceptable behaviour; identify a  range of ways to report concerns about content and  contact | **40-60 months**  I can complete a simple program on a  computer  I use ICT hardware to interact with age  appropriate computer software  **Early Learning Goa**l  I recognise that a range of technology is  used in places such as homes and  schools  I select and use technology for particular  purposes  **Exceeding statements**  I find out about and use a range of  everyday 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 texts  I can use editing skills to improve my work  I select different presentational features  I can save and retrieve my work independently  I can use the mouse, arrow keys or  touchscreen to insert text  I can use graphics, video and sound to  enhance my work  I can talk about how my use of graphics,  sound and video enhance the mood  I can use different layouts and templates  for different purposes  **Digital Media**  I can talk about the advantages and  disadvantages of using a graphics package  over paper based art activities  I can use a variety of skills using a range of  tools and techniques to communicate a  specific idea or artistic style /effect  I can choose an art programme or app for  a purpose and explain my choice  I can import photos and explore effects  I can select and edit and change images  Begin to change or enhance photographs  and pictures (crop, re-colour)  **Programming**  I can talk about how everyday devices can  be controlled  I can control actions on screen by  sequences of instructions  I can create a sequence of instructions to  control a programmable robot to include  direction, distance and turn  I can use a range of control devices and  programmes/apps  I 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 online  communications with a wider audience  **Data**  I can use a graphing package to record  information, adding labels and numbers  I can use ICT to edit and change the  information quickly.  I can talk about how ICT helps them to  organise their information  **Network:**  I can save and retrieve work  I 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 rules  in all aspects of my ICT work  To 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 poli  teness 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 a  document/presentation  I can select and import graphics from  digital media and the Internet  I can select and import sounds and video/  visual effects  I choose freely from a range of text styles  I use more than two fingers to enter text  I can make corrections using spell check  I can use short keys  **Digital Media**  I can use visual effects such as filters, hues  and painting over photographs.  I can manipulate digital stills or video  I can create patterns and montages  can plan and create audio  **Programming**  I can navigate different programming apps  I can use conditional statements (if…  then) within my game.  I can create a 3D digital world for a game  with land, water and scenery.  I can create a user controlled sprite and  sprites with different behaviours.  I can add a variety of inputs to control my sprite  I can use repetition loops.  I can program my sprite to navigate my  3D world  I can use conditional statements  (‘if…then’) to give objects behaviours  **Communication and Collaboration**  I can select my best work to organise and  save  I can discuss advantages and  disadvantages of different communication  methods  I can use different levels of formality  when I communicate with different  people online  **Data**  I can enter data into a graphing package  to create a range of graphs, and to  interpret data across all subjects  I can compare how different graphs can  be used for different purposes  I 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 database  to organise and analyse information  compare the use of graphing software,  branching database and card-based  database for organising and interpreting  data  I can explore real-life examples of  branching databases, such as keys for  animal identification  **Network:**  I can understand how the internet is a network  I can understand how the school is networked  **E-Safety**  I demonstrate the school’s e-safety rules in  all aspects of my ICT work  To 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 them  to be able to relate some of the safety rules to the communication technologies. | **Multimedia and Word Processing**  I can plan the structure of a  Presentation  I can use a hyperlinks in my work  I can cut and paste between  applications.  I can use a multimedia program to  organise, refine and present information  for a specific audience  I can delete/insert and replace text to  improve clarity and mood.  I can use both hands when typing  **Digital Media**  I can use different filming techniques  and camera angles  I can plan a video or animation by  drawing a storyboard  I can use sound effects, music and voiceovers  to create mood/ atmosphere  I can select and edit sounds, text and  movie clips to suit a purpose  I can evaluate and improve work with a  view to purpose and audience  I can record and import sounds using  sound editing software  I use sounds from a variety of sources  I can layer and edit sounds  I can save work as a web compatible  format for uploading  **Programming**  I can create a basic HTML page with  head and body sections.  I can create more complex games  I can shift camera angles in settings and  in the code  **Communication and Collaboration**  can understand blogs and posts  I understand that websites such as  Wikipedia are made by users  I can create and publish a new post  I use strategies to check the reliability of  information and websites  **Data**  I can change variables in a spreadsheet  to solve problems  I can enter formulae for the four  operations (+-x/) into a spreadsheet  I can use 'SUM' to calculate the total of  a set of numbers in a range of cells  I can change data in a spreadsheet to  answer 'what if...?' questions  I can create a simple spreadsheet model  and 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 rules  in all aspects of my ICT work  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.  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.  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