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| **Year Group** | **Autumn Term** | | **Spring Term** | | **Summer Term** | | | |
| **Reception** | **Observe and Explore technology**  Can they observe technology around us such as automatic doors and cashpoints ?  Can they explore a range of real world technology ?  Can they explore a range of play technology  Can they know how to operate simple equipment and toys Show skill in making toys work by pressing parts or lifting flaps to achieve an effect **?** | **Early Computing skills**  **Drag and Drop**  Can they move a cursor purposefully ?  Can they control the cursor to perform an action ?  Can they use they drag to move an object purposefully ?  Can they drop an object with i inceasing control and purposefully ? | **Early key board skills and drawing skills**  Can they write their name using a keyboard on different devices?  Can they use the caps lock for the initial sound in their name?  Can they use the space bar, backspace and return key?  Can they select colours ?  Can the purposefully mark make ?  Can they begin to control the pencil  Can they use ythe undo button  Can they erase part of their picture | | **Communicating / Presentation.**  Draw a symmetrical picture using 2simple.  **Algorithms and Programs**  Can they use a range of control toys and devices?  Look at controlling a car around a track, cause and effect of pressing buttons. Use the buttons to make the bee bots move across a map or course.  Bee-bots | | | |
| **Mini Mash**  **All About Me**  **Autumn**  **Pirate** | **Mini Mash**  **Winter Christmas**  **Poppy’s**  **Make a Diwali** | **Mini Mash**  **Chinese New Year**  **The Three Little Pigs** | **Mini Mash**  **Spring**  **Growing**  **Mendhi Patterns** | **Mini Mash**  **Minibeasts**  **Summer**  **Farm**  **Paint a Mosque** | | **Mini Mash**  **Seaside**  **Under the Sea** | |
| **E Safety – revisit and reinforce at the start of each term.**  **E Safety**  Can they talk about what they are doing on a computer?  Can they say if something they find on the internet makes them feel bad?  Can they speak to an adult about what they have seen?  Can I follow the school’s safer internet rules?  Digiduck Big Decision, Smartie the penguin, Safer Internet Day | | | | | | | |
| **Using technology – reinforce across the curriculum.**  Can I recognise a range of technology that is used in places such as homes and schools?  Can I select and use technology for a particular purpose?  Can I access and use simple activities using touch technology with increasing control?  Can I begin to logon/unlock a digital device? (e.g. digital camera, iPads etc) | | | | | | | |
| **Year 1** | **E Safety**  Check it’s for real and protect yourself  *Hector’s World*  Think before you share and respect each other  <https://www.avg.com/stc/>  [campaign/magda-and-mo/magda-and-mo2-en.html](https://www.avg.com/stc/)  How to act if find inappropriate content  *Smartie Penguin (Yr1)* | **Using technology**  Use keyboard skills to type in simple usernames and passwords.  Launch appropriate programme to task.  Open and close a piece of equipment safely. | **Algorithms and programs**  Plan a journey for a programmable toy  Bee Bots  Create a series of instructions to move around a course  Bee Bots app on iPads  Know that commands affect algorithms.  Create and debug a simple program.  Purple Mash Unit 1.5 Maze explorers | | **Communicating and presentation**  The difference between e-books and story books.  Add animation.  Add sound.  Background through copying and pasting and share ebooks with class.  Purple Mash Unit 1.6 Animated story books | | | |
| **E Safety – revisit and reinforce at the start of each term.** | | | | | | | |
| **Using technology – reinforce across the curriculum.**  Explore technology in a range of jobs and look at the purposes of their uses and why they are needed for a variety of roles. | | | | | | | |
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| **Year 2** | **E Safety to include emails**  Check it’s for real  Twinkl – E-safety – Year 2 – Lesson 3 – Be The Judge  Send and receive class emails and understand email conduct  *Purple Mash- 2 Email*  Think before you share, protect yourself and be brave  [https://www.commonsense.](https://www.commonsense/)  [org/education/lesson/follow-the-digital-trail-k-2](https://www.commonsense/)  Can I identify kind and unkind behaviour online?  *Twinkl – E-safety – Year 2 – Lesson 5 – Being Kind Online* | **Data retrieving and organising**  Create graphs from data collected  *Purple Mash -2 Graph, 2 Count* | **Algorithms and programs**  Use floor turtles to explore ¼, ½ and full turn and sequencing of instructions  *Bee Bots*  Explore screen turtle to input sequences and draw shapes  *Purple Mash -2 Go(teacher options control 2 and 3)*  Understand the screen turtle can be directed through the use of text.  Use repeat and timer commands.  Debug a program.  *Purple Mash – 2.1 Coding* | | **Data retrieving and organising**  Use a branching database and use search tools  *Purple mash – 2 Investigate* | | | **Communicating and presentation**  Know digital content can be represented in many forms.  Add clip art.  Add photos.  Structure information in a table.  Manipulate and present digital content and information.  *Purple Mash – 2.8 Presenting ideas* |
| **E Safety – revisit and reinforce at the start of each term.** | | | | | | | |
| **Using technology – reinforce across the curriculum.**  Save work to a folder and retrieve it when needed.  Understand how to edit and copy information.  Capture a digital image, retrieve and manipulate. | | | | | | | |
| Explore technology in a range of jobs and look at the purposes of their uses and why they are needed for a variety of roles. | | | | | | | |
| **Year 3** | **E Safety to include emails**  Think before you share and Respect  Understand once an online message has been sent it can’t be taken back  *You tube – I don’t want everybody to see my bum*  *You tube – She sent me a poo*  *Digiduck*  How to respond if being asked for personal information  *Think You Know –lesson 3*  *Azoome – Search it up ‘I’ve Won’*  Use email address book  Open and send an attachment  *Purple mash – Unit 3.5 Emails*  Can I create strong passwords and understand privacy settings? *Twinkl – E-safety – Year 3 – Lesson 3 – Keep it to yourself* | **Data retrieving and organising**  Create a graph from a database  *Purple mash - 2 investigate*  Create simple branching database, identify objects, question to classify data  *Purple Mash Unit 3.6 Branching* | **Algorithms and Programs**  Plan complex series of instructions for screen and floor turtles and test and amend instructions for purpose  *Purple Mash 2 logo* | **Algorithms and Programs**  Create basic applications, investigating how different variables can be changed  *Purple Mash –Unit 3.1 Coding*  Explore simulations and discuss benefits  Use simulations to make and test predictions  *Lego WeDo- Roaring lion and hungry alligator* | **Communicating and Presentation**  Create a publishing tool to create a poster or a leaflet  *Desktop publishing*  Create presentation using powerpoint  Changes layout of slides and adding images and sounds  *Powerpoint* | | | **Communicating and Presentation**  Sequence short pieces of music using pre-recorded sounds  *Purple Mash 2 Sequence* |
| **E Safety – revisit and reinforce at the start of each term.** | | | | | | | |
| ***Using technology – reinforce across the curriculum.***  Use technology to suit a particular purpose.  Navigate the internet.  Find relevant information by browsing a menu.  Search by keyword, using a child friendly search engine.  Bookmark a page into favourites | | | | | | | |
| **Year 4** | **E Safety to include emails**  Social networking sites and gaming sites carry risks.  Benefits of a nickname for online use.  Behave appropriately online.  Cyber bullying and reporting.  *Twinkl – E-safety*  *Azoome – Search it up*  *What does your selfie say?*  Twinkl – E-safety – Year 4  *Session 7 “Is being kind online different from offline?”*  Identify when attachments may not be safe.  Use cc and bcc.  Send work to the class teacher.  *Purple Mash* | **Data retrieving and organising**  Explain what a spreadsheet is.  Use terms colon, cells, rows and columns.  Enter data to create a graph.  *Purple Mash –Unit 4.3* | **Algorithms and Programs**  Design/write a program to achieve a specific goal.  Create variables and If/Else statements.  Debug a program.  Make a control simulation.  To understand decomposition and abstraction.  *Purple Mash –Unit 4.1 Coding*  Explore some simulations and evaluate them.  *Lego WeDo –goal kicker and Goal**keeper* | | **Communicating and Presentation**  Create a presentation using powerpoint.  Adding transitions.  Insert sound recordings.  Choose and insert images.  *Powerpoint* | | | **Communicating and Presentation**  Animation frames.  Onion skin tool.  Add backgrounds and sounds.  Stop Motion animation.  *Purple Mash –Unit 4.6 Animation*  Create an extended piece of music using a pre-recorded sample for a specific audience and evaluate.  *Garage band app* |
| **E Safety – revisit and reinforce at the start of each term.** | | | | | | | |
| **Using technology – reinforce across the curriculum.**  Do they know what a browser is and use it to navigate a variety of programs?  Use tabbed browsing to open 2 or more web pages at the same time.  Can they open a variety of links and use them?  Can they use a range of digital devices and combine a variety of software?  Can they use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content? | | | | | | | |
| **Year 5** | **E Safety**  Understand privacy settings on social media sites.  Dangers of communicating on devices such as x-box, PSP, phones.  Can they verify information they have researched using more than one site.  Discuss positive and negative impacts of using IT.  Understand they should not publish other people’s pictures or tag them on the internet.  Do they know content put online is extremely difficult to remove?  Create a strong password and realise they need to be regularly updated.  Know where they can access support regarding online incidents.  *Azoome – Search it up-My Pop Star Disaster*  *Fakebook*  [*https://www.classtools.net/FB/home-page*](https://www.classtools.net/FB/home-page)  *Azoome – You’re Not Laughing Cat*  *Newsround – Caught in the web –Internet Safety* | **Spreadsheets**  Use a spreadsheet to:  Convert unit of measurements; model a real life problem; plan a cake sale; use the count tool to answer hypotheses; create simple formulae.  *Purple Mash –Unit 5.3 Spreadsheets* | **Algorithms and Programs**  Design/write a program to achieve a specific goal.  Simulate a physical system.  Introduce variables.  Create and improve a game.  *Purple Mash – Unit 5.1 Coding* | **3d Modelling**  Design a building for a purpose.  Print a design as a 2D net.  Explore possibilities of 3D printing.  *Purple Mash –Unit 5.6 Modelling*  *(link with DT)* | **Algorithms and Programs**  Plan a game.  Create a game environment and quest.  Evaluate own and others' games.  *Purple Mash – Unit 5.5 Game creator*  Design a program which interacts with external controllers.  *Lego WeDo –Dancing birds and drumming monkey* | | | **Communicating and Presentation**  Plan a storyboard for a video or animation.  Create, edit and refine.  Incorporate filming techniques, sound effects, music.  *Create a film for school website on a topical subject.* |
| **E Safety – revisit and reinforce at the start of each term.** | | | | | | | |
| **Using technology – reinforce across the curriculum.**  Download a document and save it to a computer or given device.  Decide which sections are appropriate to copy and paste from a variety of web pages. | | | | | | | |
| **Year 6** | **E-Safety**  Use and amend own privacy settings to keep themselves safe**.**  *Revisit Fakebook (Year 5).*  Can they understand that some malicious adults may use various techniques to make contact and elicit personal information?  Understand dangers of chatting/meeting up with online 'friend’.  Can they understand the term peer pressure and how powerful the emotion of ‘feeling left out’ can be?  Can they explain why people may publish content on the internet that is not accurate?  Can they identify and recognise the potential risks of scamming and phishing?  *Google Be Internet Legends - Be Internet Sharp — Think Before You Share – Lesson 4 Pages 65-67*  Do they understand the *concept of being a good digital citizen?*  *Twinkl – E-safety – Year 6 – Lesson 3 – People Online*  Can they access support surrounding incidents online?  *Revisit:*  *Azoome Search it up clips.*  *Purple Mash – Unit 6.2 Online safety*  Google Be Internet Legends - Be Internet Sharp — Think Before You Share – Lesson 3 Pages 62 –  *Twinkl – E-safety – Year 6 – Lesson 1 – Cyberbullying*  64 | **Data retrieving and organising**  Use spreadsheets in a real life situation to investigate probability, calculate discounts/final e.g. prices in a sale, plan how to spend pocket money, plan a school charity day.  *Purple Mash – Unit 6.3 Spreadsheets/Excel* | **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  Design and write a more complex program.  Introduce functions.  Introduce variables.  Use flow charts to test and debug a program.  Create and improve a game.  *Purple Mash – Unit 6.1 Coding*  *Espresso*  *Lego WeDo* | | **Communicating / Presentation**  Create a non- linear presentation.  Make quizzes with different question types.  Make a quiz that requires a player to search a database.  *Purple Mash 6.7 – Quizzing.*  *(Quiz/who wants to be a millionaire?)* | **Communicating / Presentation** Create a multimedia presentation.  Confidently use text formatting tools.  Explore menu bar and experiment with images.  Presentation to include:  Sound, animation, video, buttons to navigate.  Consider design principles, make independent choices about the best media to use considering needs of the audience and the impact the presentation will have. | | |
| **E Safety – revisit and reinforce at the start of each term.** | | | | | | | |
| **Using technology – reinforce across the curriculum.**  Use tabs to make a comparison of a website. | | | | | | | |