

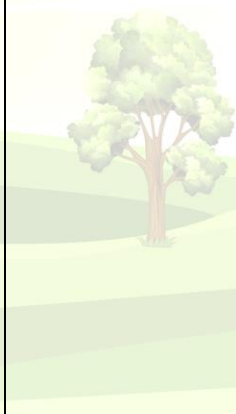

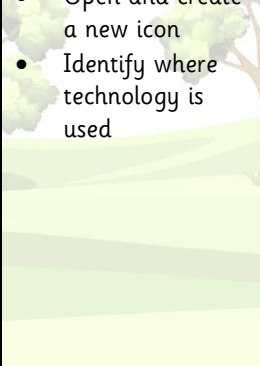
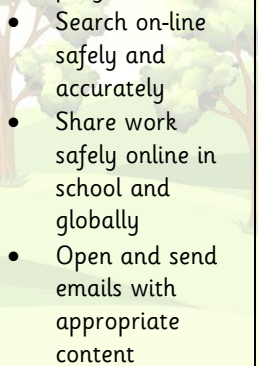
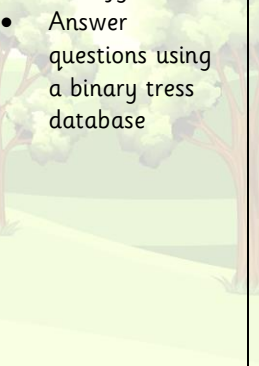



COMPUTING TREES OF KNOWLEDGE AND SKILLS PROGRESSION

| | EYFS | | Year 1 | | | Year 2 | | |
|-----------|--|--|--|---|--|---|---|--|
| | Nursery | Reception | Autumn Term Who am I? Around the World | Spring Term To the Rescue | Summer Term Wonderful Westacre Animal Allsorts | Autumn term London's Calling The Great Fire of London | Spring term Famous Explorers Victorians | Summer term India Out and About |
| Knowledge | <ul style="list-style-type: none"> Knowing that if different buttons are pressed on a toy, it will cause a different reaction. EG, lights, sounds, movement Understand that if the interactive whiteboard is touched it will cause something to change or move | <ul style="list-style-type: none"> Know that holding the left button on the mousepad allows you to draw in a paint programme Knowing how to scroll and hold using the mousepad Understand how to use Mini Mash on an interactive whiteboard | <ul style="list-style-type: none"> Know what is meant by "Technology" Understand the importance of keeping 'user names' and 'passwords' private Know how to log in to their Purple Mash account Know that their own on-line work is saved in their "My Work" folder on Purple Mash and know how to save and restore this work Know how to open, retrieve, save and print work | <ul style="list-style-type: none"> Know that the order of instructions affects the result Know what the direction keys do Know what an 'algorithm' is (a set of instructions used to solve a problem or achieve an objective) Know that an algorithm written for a computer is called an 'programme' Know how to create/debug an algorithm | <ul style="list-style-type: none"> Know what 'coding' means Know how coding is used in a computer programme Know how to create a story with animations and sound using a computer programme Know that you can access design mode to add characters and make a character move in a coding programme Understand that collision detection allows you to avoid collisions in a coding programme Understand that there are different types of technology that | <ul style="list-style-type: none"> Revisit knowledge of what an 'algorithm' is Know that algorithms can be successfully converted into code Know that is important to search online safely and how to do this Know that is important to share work online safely and how to do this Know how to open and send emails Know that information put online leaves a digital footprint or trail Know the steps that can be taken to keep personal data | <ul style="list-style-type: none"> Know what a 'spreadsheet' is and how to use the tools within it Know what a 'binary tree database' is and how to use one Know that copy and paste is easier than rewriting something Know that you can collect data and use it to create a graph on a computer | <ul style="list-style-type: none"> Revisit knowledge that is important to search online safely and how to do this Know the functions of the 2Paint a Picture tools Know that a story can be presented in different ways Know how to create an interactive quiz Know how to create a fact file |

| | | | | | are used outside of school | and hardware secure | | |
|--------|---|---|---|--|--|---|---|---|
| Skills | <ul style="list-style-type: none"> Make a toy move, make a sound or light up by pressing the correct buttons. Use an interactive whiteboard for simple activities.  | <ul style="list-style-type: none"> Use a mousepad on a laptop to create a picture in a paint programme. Use a mouse pad correctly. Use Mini Mash programme on the Interactive Whiteboard to create pictures and play games.  | <ul style="list-style-type: none"> Identify different types of technology used in and out of school Log in and out safely Add pictures and text to work  | <ul style="list-style-type: none"> Follow and create simple instructions on the computer Use the direction keys Create and extend a set of instructions (algorithm) Make logical attempt to fix a code Read code one line at a time and attempt to envisage the bigger picture of the overall effect of the programme  | <ul style="list-style-type: none"> Add an animation to a story Add sound to a story, including voice recording. Add backgrounds Copy and paste pages Use design mode to set up a scene Add characters and make them move Use collision detection Save and share work Print work Open and create a new icon Identify where technology is used  | <ul style="list-style-type: none"> Explain what an 'algorithm' is (a set of instructions to complete a task) Create a simple programme that achieves a specific purpose Design algorithms and code them Compare different object types in a coding programme. Use the repeat and timer command De-bug programmes Search on-line safely and accurately Share work safely online in school and globally Open and send emails with appropriate content  | <ul style="list-style-type: none"> Within a spreadsheet, use the tools: image, lock, move, cell, speak, totalling, equals and count Copy and paste work within a spreadsheet Create money calculations on a spreadsheet Collect data and produce a graph Use yes/no questions to separate information Construct a binary tree to identify items Answer questions using a binary tree database  | <ul style="list-style-type: none"> Search on-line safely Re-create different styles of Art, using the 2 Paint a Picture programme (impressionist, Pointillist, lines and patterns template) Make a present a story Make a present a quiz about a story or class topic Make a present a fact file on a non-fiction topic  |