

Larks Class – Computing Year Reception & Year one

| Title | Online Safety 1.1 |
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| Overview | The aim of this unit is to ensure that children have an understanding of how to use technology safely, including using individual logins and understanding why it is important to log out of programs once used. This unit also introduces children to using Purple Mash, beginning to have an understanding of having ownership of work online. |
| Knowledge acquisition | By the end of this unit, children will be able to understand what personal information is and the importance of keeping it private. They will be able to log in and out of Purple Mash safely while following e-safety rules. They will know how to reach adult to an adult if they see something worrying or unexpected online. They will understand the importance of being kind and polite online. |
| Vocabulary | Log in, log out, username, avatar, my work, tools, save, notification, topics, password |
| Key Learning Objectives | <ul style="list-style-type: none"> ➤ To understand the importance of keeping personal information private ➤ To understand what personal information is ➤ To be able to login and logout safely ➤ To follow e-safety rules ➤ To know to tell an adult if they see something unexpected or worrying online ➤ To know why it is important to be kind and polite |
| Suggested Learning Experiences | <ul style="list-style-type: none"> ➤ Use Hector's World videos to explore online safety ➤ Login to Purple Mash ➤ Create an avatar ➤ Save work and retrieve work ➤ Explore games section |

| Title | Grouping and Sorting 1.2 |
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| Overview | This short unit introduces children to sorting and grouping items physically, and the idea that this can be done using technology. |
| Knowledge Acquisition | Children will have benefited in sorting and grouping in their math's lessons so by the end of this unit they will be able to also sort and group using technology. |
| Vocabulary | Sort, group, criteria, technology, organize, retrieve |
| Key Learning Objectives | <ul style="list-style-type: none"> ➤ Use technology purposefully to create, organise, store, manipulate and retrieve digital content ➤ I can sort sound, pictures and text. ➤ I can name, save and find my work |
| Suggested Learning Experiences | <ul style="list-style-type: none"> ➤ Sort a range of physical items according to different criteria ➤ Sort items on a computer according to different criteria |

| Title | Pictograms 1.3 |
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| Overview | This unit aims that children will understand how data can be represented in picture form. Children will be involved in collecting class data and use this to create a pictogram. |
| Knowledge Acquisition | By the end of this unit children will understand that data can be represented in picture form. They will have collected class data and had experience of creating a pictogram. |
| Vocabulary | Pictogram, data, collate, collect, results |
| Key Learning Objectives | <ul style="list-style-type: none"> ➤ To understand that data can be represented by a picture ➤ To contribute to a class pictogram ➤ To use a pictogram to record results of an experiment ➤ I can change content on a file such as text, sound and images ➤ To discuss what a pictogram shows |
| Suggested Learning Experiences | <ul style="list-style-type: none"> ➤ Discuss and illustrate methods of travelling to school ➤ Use illustrations to create a class pictogram ➤ Roll a dice 20 times and record the results in a pictogram |

| Title | Lego Builders 1.4 |
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| Overview | This unit emphasises the importance of following instructions, considering how the order of instructions affects the result. Children will follow and create simple instructions on a computer. |
| Knowledge Acquisition | By the end of this unit children will understand the importance of following instructions. They will have completed various tasks such as painting a bird, making a sandwich, following the instructions correctly to create the end result accurately. |
| Vocabulary | Instruction, program, algorithm, debug, computer |
| Key Learning Objectives | <ul style="list-style-type: none"> ➤ To understand the importance of following instructions in order to achieve a desired result ➤ To know an algorithm is a precise, step-by-step set of instructions ➤ To follow and create simple instructions on a computer (and to know an algorithm written on a computer is called a program) ➤ To know that correcting errors on a program is called debugging |
| Suggested Learning Experiences | <ul style="list-style-type: none"> ➤ Follow instructions to build a simple Lego model ➤ Use BeeBots to follow and create simple instructions on a computer ➤ Organise instructions for a simple recipe and find out what happens if the precise order is not followed |

| Title | Maze explorers 1.5 |
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| Overview | This unit will allow children to use the functionality of direction keys by exploring mazes on a computer program. They will create and debug a set of instructions (algorithm) using direction keys. They will have the opportunity to set challenges for each other. |
| Knowledge Acquisition | By the end of this unit children will be more confident using the direction keys having explored mazes on a computer program. They will have had experience of creating and debugging a set of instructions using the direction keys. They will understand the term 'algorithm' as a set of instructions. |
| Vocabulary | Direction, challenge, arrow, undo, rewind, forward, backwards, left turn, right turn, debug, instruction, algorithm |
| Key Learning Objectives | <ul style="list-style-type: none"> ➤ To be able to use direction keys ➤ To understand how to create and debug a set of instructions (algorithm) ➤ To set challenges for others ➤ I can name, save and find my work |
| Suggested Learning Experiences | <ul style="list-style-type: none"> ➤ Use direction keys in 2Go to complete mazes ➤ Add units of measurement in 2Go Challenge 2 ➤ Change background images on their challenges ➤ Complete challenges set by others on 2Do |

| Title | Animated Story Books 1.6 |
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| Overview | This unit introduces children to e-books, they will explore the differences between e-books and traditional books. Children will have the opportunity to create their own story and learn how to save their work in order to add more features. They will then share their stories. |
| Knowledge Acquisition | By the end of this unit children will understand the difference between a traditional book and an e-book. They will have created their own e-book and learnt how to add animations and sound. |
| Vocabulary | e-book, save, animation, sound, voice recording, enhance, copy, paste |
| Key Learning Objectives | <ul style="list-style-type: none"> ➤ To be introduced to e-books. ➤ To create a story using 2Create. ➤ To add features to a story including animation and voice recordings. ➤ To be able to save their work, re-open and edit. ➤ I can add sound, pictures and text to a program such as 2Create a Story ➤ I can name, save and find my work |
| Suggested Learning Experiences | <ul style="list-style-type: none"> ➤ Create their own story using drawing tools to create a picture. ➤ Add animation to a picture. ➤ Add sound to a picture. ➤ Share their storybook with the class. |

| Title | Coding 1.7 |
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| Overview | This unit of work introduces children to coding and what that means in computing. Children will begin to understand that computers need clear precise instructions in order to make something happen. Children will have the opportunity to create a program using 2Code. They will then explore how they can add different characters, objects and backgrounds and how they can command the computer through using code to enable the characters to move. |
| Knowledge Acquisition | By the end of this unit children will start to understand what is meant by the word 'coding' in computing. They will know that in order for computers to make something happen they need clear precise instructions. Children will have experienced using the program 2code. They will have learnt how to add characters, objects and backgrounds and how to make the characters move. |
| Vocabulary | Instruction, coding, program, objects, characters, action, command, design |
| Key Learning Objectives | <ul style="list-style-type: none"> ➤ To understand what coding means in computing. ➤ To use 2Code to create a simple program. ➤ To use Design Mode to add and change backgrounds and characters. ➤ To use code blocks and play and stop key to make characters move. ➤ To use collision detection to make objects perform actions. ➤ I can explain that an algorithm is a set of instructions. ➤ I know that an algorithm written for a computer is called a program. ➤ I can work out what is wrong when the steps are out of order in instructions. |
| Suggested Learning Experiences | <ul style="list-style-type: none"> ● Practice following instructions, children can practice giving each other clear instructions and what happens if the instructions are not precise. ● Use design mode to add backgrounds and characters. ● Use 2Code to write a program to enable characters to move. ● Use collision detection to make characters interact. ● Program a sound to play when the characters collide. ● I can try and fix my code if it isn't working properly. |

| Title | Spreadsheets 1.8 |
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| Overview | Children will be introduced to spreadsheets and allowed time to investigate why we use spreadsheets. Children will learn how to enter data onto a spreadsheet and be taught key vocabulary such as column, row, cells. They will also have the opportunity to add images and count these. |
| Knowledge Acquisition | By the end of this unit children will have started to investigate using spreadsheets. They will begin to enter data onto a spreadsheet and know the vocabulary associated with spreadsheets such as column, row and cells. Children will be familiar with how to add images and count these. |
| Vocabulary | Spreadsheet, row, column, arrow key, backspace key, delete key, lock tool, cells, clipart, speak tool, count tool, move cell tool. |

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| Key Learning Objectives | <ul style="list-style-type: none"> ➤ To know what a spreadsheet looks like and why we use them. ➤ To enter data onto a spreadsheet. ➤ To add images to a spreadsheet. ➤ To use the 'speak' and 'count' tools in 2Calculate to count items. ➤ I can change content on a file such as text, sound and images |
| Suggested Learning Experiences | <ul style="list-style-type: none"> ➤ Create a spreadsheet for a class picnic and list all the things we need and how many of each. ➤ Create their own zoo by adding images to a spreadsheet. ➤ Use the 'speak' and 'count' tools to count the animals. ➤ I can name, save and find my work |

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| Title | Technology outside school 1.9 |
| Overview | This short unit allows children to explore what is meant by 'technology' and its uses within and outside of school. |
| Knowledge Acquisition | By the end of this unit children will understand the term 'technology' and its uses within and outside of school. |
| Vocabulary | Technology |
| Key Learning Objectives | <ul style="list-style-type: none"> ➤ To understand what 'technology' means. ➤ To find examples of technology used outside of school. ➤ To record examples of technology used outside of school. |
| Suggested Learning Experiences | <ul style="list-style-type: none"> ➤ Go on a walk around the local community and find examples of where technology is used outside of school. ➤ Record examples of technology used outside of school. |