Linton Infants Computing Progression Document

Information Technology I
Pupils learn:
Using software
EYFS: Using a simple online paint tool to create digital art.
Y1: t. Using a basic range of tools within graphic editing software. Taking and editing photographs. Mouse control through dragging, clicking and resizing of images to create different effects. Understanding of different software tools.
Y2: Word processing skills, including altering text, copying and pasting and using keyboard shortcuts. Word processing software to type and reformat text. Using software (and unplugged means) to create story animations. Creating and labelling images.
Using email and internet searches
Y1: Recognising internet- connected devices. Understanding that we are connected to others when using the internet.
Y2: Searching for appropriate images to use in a document.

Computing systems and networks
Pupils learn:
EYFS: About computer keyboards: letters and numbers. Functions of a mouse Loging in and out. Technology at home and in school. Taking photographs with a camera or iPad.
Y1: "log in and log out" means to begin and end a connection with a computer. Using a mouse to click, drag, fill and select and also add backgrounds, text, layers, shapes and clip art. Password security. Saving a document. To know some of the simple graphic design features of a piece of online software.
Y2: Desktop and laptop differences. To know that people control technology. To know that buttons are a form of input that give a computer an instruction about what to do (output). To know that computers often work together

Information Technology II
Pupils learn:
Using data:
EYFS: Representing data through categorising objects in unplugged scenarios. Exploring branch databases through physical games.
Y2: Inputting data into a spreadsheet. Interpreting data from a spreadsheet.
Wider use of technology
Y1: Recognising common uses of information technology, including beyond school. Understanding some of the ways we can use the internet.
Y2: Learning how computers are used in the wider world.

Digital Literacy
Pupils learn:
EYFS: Recognising that a range of technology is used for different purposes. Learning to log in and log out.
Y1: Logging in and out and saving work on their own account. What to do if they come across something online that worries them or makes them feel uncomfortable. Safe online interaction. What a digital footprint is and how to be careful about what we post.
Y2: Importance of a strong password. Staying safe when talking to people online and what to do if they see or hear something online that makes them feel upset or uncomfortable. Identifying whether information is safe or unsafe to be shared online. Learning strategies for checking if something they read online is true.

Computer Science
Pupils learn:
EYFS: To operate a camera. How to explore and tinker with hardware to develop familiarity and introduce relevant vocabulary. Recognising and identifying familiar letters and numbers on a keyboard. Developing basic mouse skills such as moving and clicking.
Y1: To operate a camera or tablet to take photos/ videos. Learning how to explore and tinker with hardware to find out how it works. Learning where keys are located on the keyboard.
Y2: About a computer & its components. Button recognition and that technology follows instructions. Learning how we know that technology is doing what we want it to do via its output. Developing confidence with the keyboard and the basics of touch typing.

Creating Media:
Pupils learn:
Y1: To understand that holding the camera still and considering angles and light are important to take good pictures. To know that you can edit, crop and filter photographs. To know how to search safely for images online

Data Handling:
Pupils learn:
Y2 To understand that you can enter simple data into a spreadsheet. To understand what steps you need to take to create an algorithm. To know what data to use to answer certain questions. To know that computers can be used to monitor supplies.

Online Safety
Pupils learn:
Y1: The internet is many devices connected to one another. What to do if you feel unsafe online. To know that people you do not know on the internet (online) are strangers and are not always who they say they are. Keeping personal information safe. To know that 'sharing online means giving something specific to someone else via the internet and 'posting' online means placing information on the internet.
Y2: The difference between online and offline. To understand what information I should not post online. The techniques are for creating a strong password. To know that you should ask permission from others before sharing about them online and that they have the right to say 'no.' To understand that not everything I see or read online is true.

Programming:
Pupils learn:
EYFS: To follow and give simple computer instructions in a correct order. To understand why a set of instructions may have gone wrong.
Y1: An algorithm is when instructions are put in an exact order. To understand that decomposition means breaking a problem into manageable chunks. To know that we call errors in an algorithm 'bugs' and fixing these 'debugging'. Basic functions of a Bee-Bot. Using a camera/tablet to make simple videos. To know that algorithms move a bee-bot to a chosen destination.
Y2: Machine learning and how that enables computers to make predictions. Abstraction is the removing of unnecessary detail to help solve a problem. Coding is writing in a special language so that the computer understands what to do. To understand that the character in ScratchJr is controlled by the programming blocks.