Computing Knowledge and Skills Year 1

By the end of Year 1 the children should be able to:

Programming and Physical Computing

- make a floor robot move with button inputs with limited assistance.
- state what a command card is and predict a robot's movement based on a command card algorithm with limited assistance.
- plan an algorithm to make a robot interact with another object with limited assistance.
- plan an accurate algorithm to make my robot move with precision with limited assistance.
- spot an error in an algorithm and debug it with limited assistance.
- plan an algorithm and make a floor robot move with precision to achieve a goal with limited assistance.

Multi-media Computing

- describe how a trackpad/mouse works. I can use a mouse to move the pointer around the computer screen.
- use a trackpad/mouse to click and drag things on my laptop screen.
- state what the shape tool and fill tool do. I can click and drag shapes and add colour to recreate the work of an artist.
- recognise words on a screen as text. I can use a keyboard to type text from the home row of a keyboard.
- explain size, colour, and font. I
- create a poster using paint and text tools with limited assistance.

Computer Systems and Networks

- create their own digital animation with limited assistance.
-create a digital animation using an onion skin with limited assistance and explain what an onion skin is.
- create an animation using frames with limited assistance.
- explain which keys to use to screen record my work to save and retrieve it with limited assistance

- create an animation using at least 2 sprites with limited assistance.
- create an animation with assistance and talk about it using key terminology. I can create, record, retrieve and share an animation with limited assistance.

Date Information and Modelling

-recognise and explain parts of a computer with limited assistance.
-explain what a digital device and its purpose are with limited assistance.
-explain what the internet is and access it with limited assistance for a specific purpose.
-explain what a QR code is and scan them to find information with limited assistance.
-explain how Bluetooth devices connect with limited assistance.
-explain what apps are and recognise a range of different apps with limited assistance.

Digital Citizenship

- recognise that there may be people online who could make me feel sad, embarrassed or upset. If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust. I can describe and demonstrate how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable worried or frightened. I can create an animation showing TAG with limited assistance.
- explain why it is important to be considerate and kind to people online. I can describe how to behave online in ways that do not upset others and can give examples. I can type and edit kind and considerate words about someone online with limited assistance.
- recognise more detailed examples of information that is personal to me (e.g. where I live, my family's names, where I go to school). I can explain why I should always ask a trusted adult before I share any information about myself online. I can describe what information I should not put online without asking a trusted adult first. I can create an online safety poster with limited assistance. I can create an online safety poster with limited assistance.
- explain how passwords can be used to protect information and devices. I can create a strong password with limited assistance.
- use the internet with adult support to communicate with people I know. I can explain rules to keep us safe when we are using technology both in and beyond the home, and I can give examples of some of these rules. I can recognise that information can stay online and could be copied. I can type and edit rules for using technology with limited assistance.

- explain why the work I create using technology belongs to me. I can say why it belongs to me (e.g. 'it is my idea' or 'I designed it'). I can save my work so that others know it belongs to me (e.g. filename, name on content). I can create work and save it with limited assistance.