## Computing Knowledge and Skills Year 6

By the end of Year 6 the children should be able to:

**Programming and Physical Computing**

- describe what impacts motors and what LEDs are. I can make a robot behave like a police car using motors and LEDs with limited assistance.
- describe what an infrared sensor is. I can make a robot follow a line using an infrared sensor with limited assistance.
- describe what an ultrasonic sensor is. I can make a robot respond to ultrasonic sensor input with limited assistance.
- describe what a radio signal is. I can make a robot respond to radio signal input with limited assistance.
- describe what a function is. I can make a robot draw using functions with limited assistance
- make a robot use a range of sensors, inputs, and outputs with limited assistance

**Multi-media Computing**

- describe what the words purpose and audience mean within a video context. I can give examples of video purposes and audiences with limited assistance.
- describe what a storyboard is used for and what it includes. I can create a storyboard to plan a video with limited assistance.
- use a camera to record video. I can describe different considerations when recording video such as camera angles and background noise.
- describe what cut and trim mean when editing video. I can edit videos by ordering clips, cutting, and trimming with limited assistance.
- describe what titles are in videos. I can add titles and music to a video with limited assistance.
- describe what video effects and transitions are. I can add effects and transitions to a video with limited assistance.

**Computer Systems and Networks**

- describe what a local area network and wide area network are. I can state advantages and disadvantages of having a device connected to a network
- describe what the Copyright Act is. I can gather digital media with consideration to copyright laws with limited assistance.
- describe what an image carousel and rollover buttons are. I can create a website with multiple pages and interactive features with limited assistance.
- describe what an external website link is and why we might use one. I can create a website with multiple pages and external links with limited assistance.
- describe what audience feedback is and gather it. I can improve my website based on audience feedback with limited assistance.
- describe what a website evaluation is. I can make evaluative comments on all areas of my website with limited assistance.

**Date Information and Modelling**

- describe what a macro is. I can create a business spreadsheet which uses macros with limited assistance.
- describe what conditional formatting is. I can analyse data in a spreadsheet using conditional formatting with limited assistance.
- describe what a VLOOKUP is. I can analyse data in a spreadsheet using VLOOKUP with limited assistance.
- describe what a Nested IF is. I can analyse data in a spreadsheet using a Nested IF with limited assistance.
- describe what goal seek is. I can analyse data in a spreadsheet using a wide range of methods.
- describe how data can be analysed within a spreadsheet. I can analyse data in a spreadsheet using a wide range of methods.

**Digital Citizenship**

- show understanding to meet the self-image and identity assessment statements of the "Education for a Connected World" framework here: https://assets.publishing.service.gov.uk/ media/5efa05b4e90e075c5492d58c/UKC

IS_Education_for_a_Connected_World_.p df . I can create a website including images and information about self-image and identity with limited assistance.

- show understanding to meet the online relationships assessment statements of the "Education for a Connected World" framework here: https://assets.publishing.service.gov.uk/ media/5efa05b4e90e075c5492d58c/UKC IS_Education_for_a_Connected_World_.p df . I can create a website including images and information about online relationships with limited assistance.

- show understanding to meet the online reputation and online bullying assessment statements of the "Education for a Connected World" framework here: https://assets.publishing.service.gov.uk/ media/5efa05b4e90e075c5492d58c/UKC IS_Education_for_a_Connected_World_.p df . I can create a website including images and information about online reputation and cyberbullying with limited assistance.

- show understanding to meet the privacy & security and managing online information assessment statements of the "Education for a Connected World" framework here: https://assets.publishing.service.gov.uk/ media/5efa05b4e90e075c5492d58c/UKC IS_Education_for_a_Connected_World_.p df . I can create a website including images and information about privacy & security and managing online with limited assistance.

- show understanding to meet the health, wellbeing & lifestyle and copyright & ownership assessment statements of the "Education for a Connected World" framework here: https://assets.publishing.service.gov.uk/ media/5efa05b4e90e075c5492d58c/UKC IS_Education_for_a_Connected_World_.p df . I can create a website including images and information about health, wellbeing & lifestyle and copyright & ownership with limited assistance.

- show understanding to meet the assessment statements of the "Education for a Connected World" framework here: https://assets.publishing.service.gov.uk/ media/5efa05b4e90e075c5492d58c/UKC IS_Education_for_a_Connected_World_.p df . I can create a website including images and information about digital citizenship with limited assistance.