



Computing Skills and knowledge

Expected by the End of Year 3

Computer Systems and Networks	Data and Information
<p>know that digital devices accept inputs know that digital devices produce outputs follow a process classify input and output devices describe a simple process design a digital device know how I use digital devices for different activities recognise similarities between using digital devices and non-digital tools suggest differences between using digital devices and non-digital tools" discuss why we need a network switch know how messages are passed through multiple connections recognise different connections" demonstrate how information can be passed between devices know the role of a switch, server, and wireless access point in a network recognise that a computer network is made up of a number of devices" know how devices in a network are connected together identify networked devices around me identify the benefits of computer network</p>	<p>create two groups of objects separated by one attribute investigate questions with yes/no answers make up a yes/no question about a collection of objects" arrange objects into a tree structure create a group of objects within an existing group select an attribute to separate objects into groups" group objects using my own yes/no questions prove my branching database works select objects to arrange in a branching database" compare two branching database structures create yes/no questions using given attributes know that questions need to be ordered carefully to split objects into similarly sized groups" create questions and apply them to a tree structure select a theme and choose a variety of objects use my branching database to answer questions compare two ways of presenting information know how to use a branching database tells me know what a pictogram tells me</p>
Creating Media	Programming A and B
<p>create an effective flip book—style animation draw a sequence of pictures know how an animation/flip book works create an effective stop-frame animation know why little changes are needed for each frame predict what an animation will look like break down a story into settings, characters and events create a storyboard describe an animation that is achievable on screen" evaluate the quality of my animation review a sequence of frames to check my work use onion skinning to help me make small changes between frames" evaluate another learner's animation know ways to make my animation better improve my animation based on feedback add other media to my animation evaluate my final film explain why I added other media to my animation know the difference between text and images identify the advantages and disadvantages of using text and images recognise that text and images can communicate messages clearly" change font style, size, and colours for a given purpose</p>	<p>know that objects in Scratch have attributes (linked to) identify the objects in a Scratch project (sprites, backdrops) recognise that commands in Scratch are represented as blocks choose a word which describes an on-screen action for my plan create a program following a design identify that each sprite is controlled by the commands I choose create a sequence of connected commands know that the objects in my project will respond exactly to the code start a program in different ways combine sound commands know what a sequence is order notes into a sequence build a sequence of commands decide the actions for each sprite in a program make design choices for my artwork identify and name the objects I will need for a project implement my algorithm as code relate a task description to a design choose which keys to use for actions and know my choices know the relationship between an event and an action identify a way to improve a program choose a character for my project</p>



Warren Wood



<p>edit text</p> <p>know that text can be changed to communicate more clearly</p> <p>create a template for a particular purpose</p> <p>define the term 'page orientation'</p> <p>recognise placeholders and say why they are important</p> <p>choose the best locations for my content</p> <p>make changes to content after I've added it</p> <p>paste text and images to create a magazine cover"</p> <p>choose a suitable layout for a given purpose</p> <p>identify different layouts</p> <p>match a layout to a purpose"</p> <p>compare work made on desktop publishing to work created by hand</p> <p>identify the uses of desktop publishing in the real world</p> <p>know why desktop publishing might be helpful"</p>	<p>choose a suitable size for a character in a maze</p> <p>program movement"</p> <p>choose blocks to set up my program</p> <p>consider the real world when making design choices</p> <p>use a programming extension"</p> <p>build more sequences of commands to make my design work</p> <p>choose suitable keys to turn on additional features</p> <p>identify additional features (from a given set of blocks)"</p> <p>match a piece of code to an outcome</p> <p>modify a program using a design</p> <p>test a program against a given design"</p> <p>evaluate my project</p> <p>implement my design</p> <p>make design choices and justify them"</p>
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