



# Computing Skill Progression

Year 4
<b>Computer Systems and Networks – The Internet</b>
<p>Describe the internet as a network of networks.</p> <p>Demonstrate how information is shared across the internet.</p> <p>Explain how the internet allows us to view the world wide web.</p> <p>Describe the different networked devices and how they connect.</p> <p>Recognise that the world wide web is the part of the internet that contains websites and web pages.</p> <p>Recognise that i can add content to the www.</p> <p>Suggest who owns the content on websites.</p> <p>Explain that there are rules to protect content.</p> <p>Explain why some information i find online may not be honest, accurate, or legal.</p>
<b>Creating Media – Audio Editing</b>
<p>Identify digital devices that can record sound and play it back</p> <p>Identify the inputs and outputs required to play audio or record sound.</p> <p>Use a device to record audio and play back sound.</p> <p>Discuss why it is useful to be able to save digital recordings.</p> <p>Save a digital recording as a file.</p> <p>Open a digital recording from a file.</p> <p>Edit sections of an audio recording.</p> <p>Use editing tools to arrange sections of audio.</p> <p>Explain that digital recordings need to be exported to share them.</p>
<b>Creating Media – Photo Editing</b>
<p>Identify changes that we can make to an image.</p> <p>Explain the effect that editing can have on an image.</p> <p>Explain what has changed in an edited image.</p> <p>Change the composition of an image by selecting parts of it.</p> <p>Choose effects to make my image fit a scenario.</p> <p>Give examples of positive and negative effects that retouching can have on an image.</p> <p>Sort images into 'fake' or 'real' and explain my choices.</p> <p>Combine parts of images to create new images.</p> <p>Consider the effect of adding other elements to my work.</p>
<b>Data and information – Data Logging</b>
<p>Suggest questions that can be answered using a given data set.</p> <p>Identify data that can be gathered over time.</p> <p>Explain that sensors are input devices.</p> <p>Use data from a sensor to answer a given question.</p> <p>Identify a suitable place to collect data.</p> <p>Import a data set.</p> <p>Use a computer to view data in different ways.</p> <p>Propose a question that can be answered using logged data.</p> <p>Plan how to collect data using a data logger.</p> <p>Interpret data that has been collected using a data logger.</p> <p>Draw conclusions from the data that I have collected.</p>
<b>Programming A – Repetition in Shapes</b>
<p>Program a computer by typing commands.</p> <p>Use a template to create a design for my program.</p> <p>Write an algorithm to produce a given outcome.</p> <p>Use a count-controlled loop to produce a given outcome.</p> <p>Predict the outcome of a program containing a count-controlled loop.</p> <p>Use a procedure in a program.</p> <p>Design a program that includes count-controlled loops.</p> <p>Develop my program by debugging it.</p>
<b>Programming B – Repetition in Games</b>
<p>Predict the outcome of a snippet of code.</p>



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- Choose when to use a count-controlled and an infinite loop.
- Choose which action will be repeated for each object.
- Evaluate the effectiveness of the repeated sequences used in my program.
- Identify which parts of a loop can be changed.
- Re-use existing code snippets on new sprites.
- Evaluate the use of repetition in a project.
- Select key parts of a given project to use in my own design.
- Refine the algorithm in my design.
- Build a program that follows my design.