



Learning Ladders



Year 5/6	Areas of Study-
<u>Computer Science</u> Algorithms, debugging and programming	Independently create sequences of commands to control devices in response to sensing (i.e. use inputs as well as outputs). Design, build, test, evaluate and modify the system; ensuring that it is fit for purpose.
<u>Information Technology</u> Create, organise, store, manipulate and retrieve digital content	- Multimedia work shows restrained use of effects that help to convey meaning rather than impress. - Use images that they have sourced / captured / manipulated as part of a bigger project (eg presentation or document). - Create and share more sophisticated podcasts and consider the effect that their podcasts will have on the audience. - Independently solve a problem by planning and carrying out data collection, by organising and analysing data involving complex searches using a database, and by drawing conclusions and presenting findings. - The need for accuracy is demonstrated and strategies for spotting implausible data are evident. - Children should be able to talk about issues relating to data protection and the need for data security in the world at large (eg health, police databases). - Set up and use their own spreadsheet, which contains formulae to investigate mathematical models. Ask 'what if ...' questions and change variable in their model. - Understand the need for accuracy when creating formulae and check regularly for mistakes, by questioning results. - Relate their use of spreadsheets to model situations to the wider world.

<u>Digital Literacy</u> Use of ICT beyond school	■ Evaluate the tools available to them including any that are unfamiliar or new and use them to solve problems. ■ Demonstrate an awareness of the appropriateness of outcomes depending on choices regarding tools and devices. ■ Show an understanding of how filtering and monitoring tools affect their use of the school network and Internet and compare this with their experience of access outside school. ■ Use collaborative tools and e-mail showing a sensitivity for this type of remote collaboration and communication
<u>Online Safety</u>	■ Independently and with due regard for safety, search the internet using a variety of techniques to find a range of information and resources on a specific topic. ■ Use appropriate methods to validate information and check for bias and accuracy. ■ Repurpose and make appropriate use of selected resources for a given audiences, acknowledging material used where appropriate. ■ Abide by school rules for e-safety.
Use search technologies effectively	■ Show an awareness of the need for accuracy in spelling and syntax to search effectively.