

# Stone Hill Computing Curriculum

- The computing curriculum equips pupils with the skills to understand and apply principles of computer science. Children learn how digital systems work and how to put this knowledge to use through programming. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

# Computing curriculum

- The computing curriculum can be split into 5 areas
  - **Multimedia:** creating and sharing content in a range of formats
  - **Programming:** using sequences of actions to control devices and events
  - **Online:** using email and the Internet safely and effectively
  - **E-safety:** understanding the risks of working online and communicating with others using different devices and social media
  - **Data:** presenting information for a specific purpose in a range of formats

# Links to KS1 curriculum content

Content to be covered	How to meet it
understand what algorithms are;	Logo, Bee Bots, Scratch
create and debug simple programs	iPad apps like Hopscotch, Daisy Dinosaur
use technology purposefully to create, organise, store, manipulate and retrieve digital content	What we currently do in ICT!!
use logical reasoning to predict the behaviour of simple programs	Scratch, Purple Mash
recognise common uses of information technology beyond school	How is IT used outside of school – filming a recipe, photography, personal devices
use technology safely and respectfully – E-safety	CEOP Resources

# Links to KS2 curriculum content

Content to be covered	How to meet it
design, write and debug programs that accomplish specific goals	Lego Mindstorms, simulation (Flowol), Robotics,
use sequence, selection, and repetition in programs; work with variables and various forms of input and output	Scratch, Flowol, Kodu
Logical Reasoning to explain some simple algorithms	Getting students to explain predefined codes and how they work.
Understand computer networks	Make webpages, <a href="#">blogging</a>
Use search technologies effectively and be discerning in evaluating digital content	Hackasaurus to create spoof pages
E-safety – how to get help	CEOP website

# KS3

No. of Wks	Year 7	Year 8	Year 9
7 weeks	Developing WP skills Create a leaflet	Creating a video	Web design
HALF TERM			
6 weeks	Internet Research	E-Safety Y8 Unit	E-Safety Y9 Unit
CHRISTMAS HOLIDAY			
6 weeks	Purple Mash: Coding and Debugging (1)	Introduction to blogging	E-mail
HALF TERM			
5 weeks	E-Safety Y7 Unit	Explore computer simulations	Podcasting
EASTER HOLIDAY			
6 weeks	Introduction to spread sheets	Managing Data	Presenting Data
HALF TERM			
6 weeks	Graphics	Purple Mash: Coding and Debugging (2)	Purple Mash (game design)

# KS4

No. of Wks	Year 10	Year 11
7 weeks	E-safety/Poster task	Functional Skills/E-safety (email)
HALF TERM		
6 weeks	Animation	Functional Skills Practice Tasks
CHRISTMAS HOLIDAY		
6 weeks	Internet Research (validity and bias)	Functional Skills Assessment
HALF TERM		
5 weeks	Understanding Databases	Functional Skills Assessment
EASTER HOLIDAY		
6 weeks	Planning the creation of a mobile App	Functional Skills Assessment/Programming with Scratch
HALF TERM		
6 weeks	Game Design with Scratch	Coding (game design)