

**Our children are receptive, inquisitive learners who, through our Gospel values, have a unique sense of the world**

**The Computing Curriculum K&S at St. Teresa’s Catholic Academy – Key Stage 1**

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| NC objective  Pupils should be taught to:    | Year 1   | Year 2   |
| Skills  | Knowledge  | Skills  | Knowledge  |
| **Computer science**  Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions  | Explain that an algorithm is a set of instructions. Follow given instructions.  | Know that an algorithm is a set of instructions used to solve a problem or achieve an objective. Know that an algorithm written for a computer is called a programme.  | Explain that an algorithm is a set of instructions. Design a simple programme using precise algorithms.  | Know the importance of precision when writing algorithms.  |
| **Computer science**  Create and debug simple programs  | Work out what is wrong with a simple algorithm when the steps are out of order and make logical attempts to fix the code.  | Know that an unexpected outcome is due to code error. Know how to fix code logically.  | Create a simple programme that achieves a specific purpose and identify and correct some errors.  | To know how to use logical, programmable steps when creating a simple programme.  |

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| **Computer science**  Use logical reasoning to predict the behaviour of simple programs  | Read code and attempt to interpret what will happen in a simple program.  | Know how to read code and envisage the bigger picture of the overall effect of the program.  | Identity something that has an action or effect (does something).  | Know the parts of a program that responds to specific events and initiates specific action.  |
| **Information technology**  Use technology purposefully to create, organise, store, manipulate and retrieve digital content  | Sort, collate, edit and store simple digital content, such as name, save and retrieve work.  | Know how to use technology purposefully to manage digital content.  | Organise data and find data using a specific search. Organise information, such as using binary trees. Edit digital data. Name, save and find own work. Include photos, text and sound in creations.  | Know how to organise data, for example in a database. Know how to edit more complex digital data. Understand how to use a range of media in own digital content.  |
| **Digital Literacy**  Recognise common uses of information technology beyond school  | Identify technology in and out of school.  | Understand what is meant by technology and know objects that use modern technology (e.g. a microwave vs a chair).  | Can find information using a search engine. Identify where technology is used around the school, e.g. the office. Recognise that programs the children use require similar skills to those used by adults.  | Know how to effectively use a search engine. Understand links between technology in their lives and that of adults.  |
| **Digital Literacy**  Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.  | Keeping passwords private and saving work in own spaces.  | Know the importance of keeping information private.  | Search safely online. Share work and communicate electronically. Report any unkind or upsetting behaviour.  | Know the implications of inappropriate online searches and begin to understand how things are shared electronically. Know how to send emails safely and how to report inappropriate behaviours and content.  |

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