

**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. |

1

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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. |

2