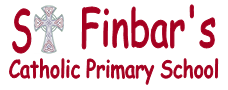
Core Skills Progression Map - Computing

2016-2017

**The Music curriculum at St Finbar’s**

* Our computing curriculum is for all children.
* Our curriculum is a skills-based one; using knowledge and understanding of other subjects to develop their computing skills and ability to stay safe whne online.
* Our curriculum is progressive; building on previous years’ knowledge, understanding and skills.
* Our curriculum is organised into broad areas of learning and core skills; following the National Curriculum (2014)
* Digital literacy
* Information technology
* Computer science
* Online safety

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| Core skills | Year-group End-of-Year Epectations | | | | | | | |
| N | R | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 |
| Digital literacy (DL) |  |  | Can show an awareness of how IT is used for communication beyond school.  Can mention some of the ways in  which IT is used to communicate beyond school. E.g. They might know that some  people use social media such as Facebook,  email, video calls or online greetings to say  happy birthday to their friends. | Can show an awareness of how IT is used for a range of purposes beyond school.  To name a number of purposes for which IT is used  beyond school.  To know that adults can share work and discuss ideas in online communities; that photos can be taken, edited and shared easily using digital technology.  To know the web is made up of information shared by people.  To understand people use email for a range of purposes and in a variety of contexts. | To decide whether a web page is relevant for a given  purpose or question.  Form a judgement about whether a web page is appropriate for finding out the answer to a question they have or for  a given purpose.  To use email and videoconferencing in class.  When working as part of the class, the child can use email  effectively and participate in a whole-class videoconference. | Can decide whether digital content is relevant for a given purpose or question.  Can form a judgement about whether a web  page, such as a Wikipedia article, or other digital content is appropriate for finding out the answer to a  question they have or for a given purpose.  To work collaboratively with classmates on a shared wiki.  To work collaboratively with their peers on a shared project, such as a class wiki, making useful  contributions and providing feedback to others. | Can decide whether digital content is reliable and unbiased.  Can discuss whether particular content (such as a web page,  other children's pages or blog posts) is reliable and whether it has been  written from a neutral point of view.  Be able to spot some examples of bias in digital content.  To work collaboratively with classmates on a class website or blog.  Can work productively and positively with others when  developing a shared website or contributing to a class blog. | Can form an opinion about the effectiveness of digital content.  Taking into account the intended audience and purpose of the content.  Can form a judgement as to, and provide reasons for, the extent to which they consider digital content to be effective. The content might  be an app, media resources or marketing materials.  Can use online tools to plan and carry out a  collaborative project.  To make use of an online tool to plan and carry out a  collaborative project (such as developing an app). |
| Information technology (IT) |  |  | Use technology purposefully to  create digital content.  Use technology purposefully to store digital content.  Use technology purposefully to  retrieve digital content. | Use technology purposefully to  organise digital content.  Use technology purposefully to  manipulate digital content | Use search technologies effectively.  Use a variety of software to  accomplish given goals.  Collect information  Design and create content.  Present information | Select a variety of software to  accomplish given goals.  Select, use and combine internet  Services.  Analyse information.  Evaluate information.  Collect data and  present data. | Combine a variety of software to  accomplish given goals.  Select use and combine software on  a range of digital devices.  Analyse data.  Evaluate data.  Design and create systems | Undertake creative projects with  challenging goals.  Use multiple applications  [Work with] applications across a  range of devices.  Collect data. |
| Computer science (CS) |  |  | Understand what algorithms are.  Create simple programs. | Understand that algorithms are  implemented as programs on digital  devices.  Understand that programs execute  by following precise and  unambiguous instructions.  Debug simple programs.  Use logical reasoning to predict the  behaviour of simple programs. | Write programs that accomplish  specific goals.  Use sequence in programs.  Work with various forms of input.  Work with various forms of output. | Design programs that accomplish  specific goals.  Design and create program.  Debug programs that accomplish  specific goals.  Use repetition in programs.  Control or simulate physical systems.  Use logical reasoning to detect and  correct errors in programs.  Understand how computer networks  can provide multiple services, such as the world wide web.  Appreciate how search results are selected. | Solve problems by decomposing  them into smaller parts.  Use selection in programs.  Work with variables.  Use logical reasoning to explain how some simple algorithms work.  Use logical reasoning to detect and correct errors in algorithms.  Understand computer networks  including the internet.  Appreciate how search results are ranked. | Use computational abstractions.  Model state of real world problems.  Use a programming language to  solve computational problems.  Understand simple Boolean logic.  Understand how numbers can be  represented in binary.  Understand the hardware  components that make up computer systems.  Understand how text can be  represented digitally in the form of binary digits.  Understand how pictures can be  represented digitally in the form of binary digits. |
| Online safety (OS) |  |  | Use technology safely.  Keep personal information private.  Recognise common uses of  information technology beyond school. | Use technology respectfully.  Identify where to go for help and  support when they have concerns about content or contact on the  internet or other online technologies. | Use technology responsibly.  Identify a range of ways to report  concerns about contact. | Understand the opportunities  computer networks offer for  communication.  Identify a range of ways to report  concerns about content.  Recognize acceptable / unacceptable  Behaviour online. | Understand the opportunities  computer networks offer for  collaboration.  Be discerning in evaluating digital  Content. | Understand a range of ways to use  technology respectfully.  Recognise inappropriate content.  Recognise inappropriate contact.  Recognise inappropriate conduct.  Know how to report concerns.  Reuse digital artefacts for a given audience.  Attend to usability of digital artefacts.  Understand a range of ways to use technology safely. |