

Act justly, Love mercy, Walk humbly

QPS Vision Statement

With **JESUS** at our side,
We **ACT** with a sense of right and wrong.
We show **LOVE** by being kind to everyone.
We **WALK** through each day with modesty in all we do.

Curriculum Intent for...

Technology is an intrinsic part of our everyday lives that is constantly evolving. The intent for our curriculum is to ensure pupils acquire and develop the essential digital skills they will need for the future alongside learning about how to keep themselves safe on the online world and beyond. They will gain knowledge and skills in the three key areas of the computing curriculum: computer science (programming and understanding how digital systems work), information technology (using computer systems to store, retrieve and send information) and digital literacy (evaluating digital content and using technology safely and respectfully).

Autumn

Spring

Summer

Computing
Planning Objectives

Queniborough C.E Primary School | 2

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| Understanding the World | <p>30-50m * knows that information can be retrieved from computers</p> <p>40-60+m * interacts with age-appropriate computer software</p> <p>ELG * children select and use technology for a range of purposes</p> | <p>(PSHE link – see PSHE Curriculum Plan) (Link with Safer Internet Day – Feb)</p> <p>ELG * children recognise that a range of technology is used in places such as homes and schools</p> | <p>30-50m *knows how to operate simple equipment e.g. turns on CD player and uses remote control *shows an interest in technological toys with knobs or pulleys, or real objects</p> <p>40-60+m * completes a simple program on a computer * interacts with age-appropriate computer software</p> <p>ELG * children recognise that a range of technology is used in places such as homes and schools * children select and use technology for a range of purposes</p> |
| | EYFS | <p>Digital Skills and Media Creation * start to type simple words on a device * understand the basics of taking a photo with a camera app / camera * use a device to produce simple drawings * use a device to record sounds</p> | <p>E-Safety * know who to talk to if something online makes them unhappy or worried</p> |
| NC KS1 | <p>* use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> | <p>* 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 (PSHE link – see PSHE Curriculum Plan) (Link with Safer Internet Day – Feb)</p> | <p>* understand what algorithms are; how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions * create and debug simple programs * use logical reasoning to predict the behaviour of simple programs * recognise common uses of information technology outside of school</p> |
| | Year 1 | <p>Digital Skills and Media Creation * use apps/web apps/programs to present simple information using text/sound(voice)/images * use a camera/camera app to record videos and take photos * be able to manipulate and edit images e.g. crop or apply an effect * be able to save an image from the internet and retrieve it for use in an app/program</p> | <p>E-Safety * explain what personal information is and how to keep it private * know who they can tell if they find anything on the internet that worries/concerns them * be able to search for an image online safely</p> |

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| Year 2 | <p>Digital Skills and Media Creation</p> <ul style="list-style-type: none"> * use formatting of text (B, U, font style and colour) * create short presentations with text/images/sound including voice * familiarise themselves with the keyboard and the special keys e.g. shift to use punctuation/capital letters * consider shot types/framing when using a camera/camera app * be able to edit images * print from a range of devices and choose when this is or isn't appropriate | <p>E-Safety</p> <ul style="list-style-type: none"> * recognise strategies to stay safe online * explain the meaning of being a good digital citizen * search for specific images and pick the most appropriate for a task * understand the importance of strong passwords and why we need to keep these private and safe | <p>Computing</p> <ul style="list-style-type: none"> * use graphical programming blocks to code * explain that problems can occur and that they can be debugged * write a simple algorithm (set of instructions) to control a physical device/person (unplugged coding) * understand that programs follow multiple algorithms to make them work |
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Ongoing for all year groups – development and application of basic keyboard skills; use of internet for research; using technology within other areas of the curriculum

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| NC KS2 | <ul style="list-style-type: none"> * use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content * select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information | <ul style="list-style-type: none"> * use technology safely, respectfully and responsibly * recognise acceptable and unacceptable behaviour * identify a range of ways to report concerns about content and contact (PSHE link – see PSHE Curriculum Plan) (Link with Safer Internet Day – Feb) | <ul style="list-style-type: none"> * design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts * use sequence, selection and repetition in programs; work with variables and various forms of input and output * use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs * understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration |
| Year 3 | <p>Digital Skills and Media Creation</p> <ul style="list-style-type: none"> * understand the spell check tool * use formatting tools for a purpose when presenting information * use spreadsheets to enter information and carry out basic formatting to present simple data * understand simple touch typing techniques e.g. home row keys (middle row) and using two hands * use basic keyboard shortcuts e.g. ctrl+c for copy * import captured video and photos * be able to carry out more advanced image manipulation * carry out simple video editing e.g. cut/split and add transitions | <p>E-Safety</p> <ul style="list-style-type: none"> * know how to use YouTube and online gaming safely * list strategies on how to be a safe and responsible digital citizen * recognise the use of key search terms when searching and how this affects search results | <p>Computing</p> <ul style="list-style-type: none"> * use simple coding blocks e.g. motion, looks and control * use loops/repeat (e.g. for, until, forever) based commands to complete repetitive tasks * understand different inputs can be used to make code run * write an algorithm for an on-screen/physical object/device. |

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| Year 4 | <p>Digital Skills and Media Creation</p> <ul style="list-style-type: none"> * create and modify documents that include elements from elsewhere (images, graphs etc) * use tables, paragraphing, column and text box tools * create multi-page presentations with transitions, animations, text, sound, images and videos * be able to create a simple graph in a spreadsheet * locate all keys when typing with two hands/touch typing * charge, open, log in to, shut down and navigate all school devices * combine captured video clips and piece into one video, making use of video editing tools e.g. speed, sound levels, picture in picture and green screen | <p>E-Safety</p> <ul style="list-style-type: none"> * safely communicate online and explain how to do this * understand online protection & responsibility including external agencies they can report to like CEOP / Childline * continue the use of key search terms and understand how the use of questioning can help us find information | <p>Computing</p> <ul style="list-style-type: none"> * use simple coding blocks (e.g. motion, looks, control) to complete a given task * use IF, THEN, ELSE based commands to carry out simple tests in programs * write a precise algorithm to control an onscreen/physical object/device |
| Year 5 | <p>Digital Skills and Media Creation</p> <ul style="list-style-type: none"> * apply grammar and spell check tools carefully, knowing when to ignore * use their digital/media creation skills to create high quality documents/presentations in a variety of ways and using a range of devices for a purpose * produce spreadsheets including formulas, graphs & modelling to achieve a specified outcome * continue typing with two hands/touch typing * create videos using stop motion or other forms of animation * understand how files are stored digitally and be able to move/organise them in different storage locations including creating new folders | <p>E-Safety</p> <ul style="list-style-type: none"> * define different E-Safety terms such as cyberbullying, digital citizenship, reporting, click-bait, fake news etc * know how to evaluate and scrutinise information on the internet including checking the source * explain plagiarism and copyright. | <p>Computing</p> <ul style="list-style-type: none"> * understand that code can be created separately, then combined and ran as required during a program * recognise that objects can interact with each other and ask for certain code to run * understand that variables can be used to store data in a range of ways and this can be accessed when a program is running * create an on-screen simulation for a real-life device/object * control a physical device to complete a given task with simple inputs and outputs * explain how computer networks work, including the internet |
| Year 6 | <p>Digital Skills and Media Creation</p> <ul style="list-style-type: none"> * select the appropriate tools/apps/programs and use their digital/media creation skills independently to create high quality documents/presentations in a variety of ways and using a range of devices for a purpose * use spreadsheets to model financial and other data in complex ways and use these in presentations * type at speed with two hands * independently show and demonstrate the skills learned in their previous school years | <p>E-Safety</p> <ul style="list-style-type: none"> * explain the main ways to keep safe online, drawing from knowledge gained in previous school years * understand that their digital footprint can remain forever and how it can be controlled | <p>Computing</p> <ul style="list-style-type: none"> * explain game design ideas like user interface, input and output * design and create a game or online environment from block code that achieves a specific outcome * design and create a program which controls a physical device which uses sensors to either collect data or make decisions * recognise the importance of encryption when using the internet |

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