# West Tyne Church Schools Federation
## Computing Long Term Plan

| Reception | Year 1/2 Cycle A | Year 1/2 Cycle B | Year 3/4 Cycle A | Year 3/4 Cycle B | Year 5/6 Cycle A | Year 5/6 Cycle B |
|---|---|---|---|---|---|---|
| **Understanding the World: Technology** | PS and Logical thinking | Networks and the Internet | PS and Logical thinking | Networks and the Internet | PS and Logical thinking | Networks and the Internet |
| Completes a simple program on a computer. | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers |
| Interacts with age-appropriate software. | | | | | | |
| **ELG** | Creative Content | Using ICT | Creative Content | Using ICT | Creative Content | Using ICT |
| | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers |
| Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. | | | | | | |
| | Making things happen | Digital Literacy | Making things happen | Digital Literacy | Making things happen | Digital Literacy |
| | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers | Brief Overview and Link to our drivers |

# West Tyne Church Schools Federation
## ESafety Long Term Plan

| Reception | Year 1/2 Cycle A | Year 1/2 Cycle B | Year 3/4 Cycle A | Year 3/4 Cycle B | Year 5/6 Cycle A | Year 5/6 Cycle B |
|---|---|---|---|---|---|---|
| | Know that personal information should not be shared online<br><br>Act if they find something they are unsure of (including identifying people who can help) | Know and describe the SMART rules for keeping safe online.<br><br>Give advice to others for a variety of online problems. | Recognise that cyber bullying is unacceptable and will be sanctioned accordingly<br><br>Understand the need or caution when using an internet search<br><br>Understand the school's AUP. | Know and describe the SMART rules for keeping safe online.<br><br>Give advice to others for a variety of online problems. | Independently, , select and use appropriate communication tools to solve problems<br><br>Understand they shouldn't publish other people's pictures or tag them without permission | Understand how social media can be used effectively and what to do if it is used in a harmful way.<br><br>Understand that some malicious adults may use techniques to make contact/ elicit personal information |
| | Recognise advertising on websites and learn to ignore it<br><br>Begin to evaluate websites and know that everything on the internet is not true | Know that personal information should not be shared online<br><br>Understand that online competitions and emails from those we don't know could have harmful content. | Recognise the difference between the work of others which has been copied (plagiarism)<br><br>Know what to do if they find an unsuitable image | Understand the term 'fake news' and the consequence of this.<br><br>Appreciate how individuals and firms can collect information about you for their own financial gain. | Know that content put online is extremely difficult to remove and can have consequences.<br><br>Understand what consequences using social media and messaging can have on self and others | Understand that some material on the internet is copyrighted and may not be copied/downloaded<br><br>Know the risks of using internet tools and understand how to minimise those risks (scams and phishing) |

# West Tyne Church Schools Federation
## Computing Long Term Plan

## Key Stage 2 National Curriculum

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

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

## Problem Solving and Logical Thinking

- Explore 'What is' questions by playing adventure or quest games

- Plan a solution to a problem using decomposition (developing a computer game)

- Explain how an algorithm works

- Detect errors in a program and correct them

## Creative Content

- Listen, download, produce and upload a variety of broadcast media (e.g. live streaming, podcast)

- Work on simple film editing and present a film for a specific audience and then adapt same film for a different audience

- Use a range of presentation applications?

- Make a home page for a website that contains links to other pages

- Prepare and then present a simple film? (e.g. Storyboarding and then filming/editing).

## Making Things Happen

- Adapt and modify programs and add refinements

- Use simulations to explore patterns and relationships

- Make predictions about what might happen in a game program

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## Networks and the Internet

- Conduct a safe internet search and refine it for both speed and accuracy

- Know how to distinguish between good and bad information found on the internet

- Rank information found on the internet in order of importance and relevance

- Extrapolate the best information and summarise it using ICT

- Make a home page for a website

## Using ICT

- Capture sound, still and video images using a range of hardware

- Save documents and images into different formats for different purposes

## Digital Literacy

- Download a document and save it to the computer

- Decide which sections are appropriate to copy and paste from at least two web pages

- Confidently choose the correct page set up option when creating a document

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Select, use & combine a variety of software on a range of digital devices to design and create a range of programs, systems and content to accomplish given goals

## Problem Solving and Logical Thinking

- Recognise ICT around them (All Year)

- Explore information from various ICT sources (All Year)

- Use repeat instructions to draw regular shapes on screen, using commands

## Creative Content

- Use editing software to manipulate media (e.g. crop, add effects, manipulate audio)

- Combine text and images and show awareness of audience

- Capture images using a range of devices (e.g. webcams, screen capture, scanning, visualiser and internet)

- Copy graphics from a range of sources and paste into a desktop publishing program

- Insert media into a presentation (image, video, audio).

## Making Things Happen

- Understand the importance of clear and precise instructions

- Create and debug simple programs

- Debug programs when they go wrong

Use algorithms to control movement?

Design and write simple programs?

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## Networks and the Internet

- Understand different ways to send a message

- Recognise an email address

- Use @ in emails   Use a search program and understand how to rank information

- Send an email and reply to one

- Navigate a website by clicking on links

## Using ICT

- Recognise the importance of ICT in the real world              Use ICT across a range of subjects?

- Use ICT to organise and present their work                     Present information using a range of software

- Create and position text, alter font and align text            Use word count, bullets, numbering

- Order and organise text using a word processing program        Fill in a data collection sheet

## Digital Literacy

- Find relevant information by browsing                           Use the automatic spell checker to edit spellings

- Use a search engine to find a specific website

- Save files (e.g. word doc, pictures) to an appropriate folder

- Know how to manipulate text (e.g. underline text, centre text, change font and size)

# West Tyne Church Schools Federation
## Computing Long Term Plan

## Key Stage 1 National Curriculum

Understand what algorithms are; how they are implemented as programs on digital devices; that programs execute by following precise, unambiguous instructions
Create and debug simple programs
Use logical reasoning to predict the behaviour of simple programs
Use technology purposefully to create, organise, store, manipulate and retrieve digital content
Recognise common uses of information technology beyond school
Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or

## Problem solving and Logical Thinking

- Create a simple series of instructions - left and right, forward, back

- Record their routes

- Understand forwards, backwards, up and down

- Put two instructions together to control a programmable device

- Begin to plan and test their instructions

- Predict the outcomes of a set of instructions

## Creative Content

- Create original content using digital technology

- Use digital technology to store and retrieve content

- Find information on a website

- Use a web page as a resource

## Making Things Happen

- Play computer games, using controls effectively
- Repeat a series of actions for a purpose
- Give a single instruction to make something happen

- Move objects around on a screen
- Understand how to make something move

**West Tyne Church Schools Federation**
**Computing Long Term Plan**

## Key Stage 1 National Curriculum

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

Use technology purposefully to create, organise, store, manipulate and retrieve digital content

Recognise common uses of information technology beyond school

Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or

## Networks and the Internet

- Recognise ICT around them (All Year)

- Can they explore information from various ICT sources? (All Year)

## Using ICT

- Use names for ICT components – e.g. mouse (All Year )

- Understand the importance of ICT (All year)

- Record their own voice and that of others

- Use a simple art program

- Recognise different ways of using ICT and decide which to use

## Digital Literacy

- Recognise the different forms of digital communication (e.g. emails address, twitter handle etc.)

- Understand the appropriate vocabulary according to equipment available

- Develop awareness and use of keyboard layout and use navigation skills appropriately (e.g. backspace, enter, spacebar, mouse)