Christ the King Catholic Primary



Computing Progression Map



**Computing Vocabulary**

| **EYFS** | **Y1** | **Y2** | **Y3** | **Y4** | **Y5** | **Y6** |
| --- | --- | --- | --- | --- | --- | --- |
| backwards  button  create  forwards  friends  instruction  information  Internet  iPad  keypad  moving  programme safe/safety  search  share  sound  technology  website | All from previous year plus:  communicate  data  debug  document  instructions  internet  keyboard(associated keys)  media  mouse online  online community  password  personal  secure  strong/weak  text  tab | All from previous year plus:  block coding  code  citizen  cyber bullying  design  device  digital footprint  image  landscape  online trail  permanent  portrait  private  project  respect  sequencing  screen time  social media  textbox | All from previous year plus:  algorithm  alignment  centre  citizenship  communication  copy  digitally manipulate  edit  email  files  font  hardware  identity (theft)  input  interaction  network  output  program  relationship  repetition  paste  permission  publish  search engine  software  timeline  transition  upload  VR | All from previous year plus:  cell  column  contrast  clickbait  crop  download  enhance  evaluation  fake news  generate  green screen  links  media  phishing  podcast  popularity  privacy  propaganda  publish  row  satire  scam/scammer  searching  self-esteem  self-image  SPAM  spreadsheet  upload | All from previous year plus:  bystander  command  consequences  cutaway  emojis  empathy  hyperlinks  location settings  masking  messaging  mental health  privacy settings  profile  security  selection  split screen  up-stander | All from previous year plus:  URL  WWW  ISP  HTML  tag  viruses  hard drive  USB  formulae  function  index  reliability |

**E-Safety Overview**

| **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| --- | --- | --- | --- | --- | --- |
| **Passwords (KS1)** | **Time Online (KS1)** | **Friends** | **Things aren’t always what they seem** | **Privacy Settings** | **Self Image (Upper KS2)** |
| **Friends (KS1)** | **Positive communication (KS1)** | **Time Online (Lower KS2)** | **Self Image (Lower KS2)** | **Passwords (Upper KS2)** | **Digital Footprint (Upper KS2)** |
|  | **Private Information (KS1)** | **Passwords (Lower KS2)** | **Digital Footprint (Lower KS2)** | **Time Online (Upper KS2)** | **Fake News (Upper KS2)** |
|  | **Digital Footprint (KS1)** | **Photos** | **Fake News (Lower KS2)** | **Cyber bullying (Upper KS2)** | **Phishing (Upper KS2)** |
|  |  | **Cyber Bullying (Lower KS2)** | **Phishing (Lower KS2)** | **Gaming** | **Naked images (Upper KS2)** |
|  |  |  |  | **Tik Tok** | **Whats App** |

**E-safety through eAware Progression (Autumn 2 2022)**

|  | **National Curriculum Objectives** | **Knowledge and Skills** | **Outcome** |
| --- | --- | --- | --- |
| **Year 1** | use technology safely, respectfully and responsibly, keeping personal information private; recognise acceptable/unacceptable behaviour identify  where to go for help and support when they have concerns about content or contact on  the internet or other online technologies | * I can explain what a password is (P) * I can explain why we need passwords (P) * I can create a good password by following rules (P) * I know there are different way to communicate online (F) * I understand what an online community is and who should be in mine. (F) | eAware – Passwords (P) and Friends KS1 (F)lessons (See Overview) |
| **Year 2** | * I know how much time I should spend online each day (TO) * I understand the I should take part in a variety of activities every day to help me stay healthy (TO) * I know how to treat people with respect online and in real life (PC) * I understand that my actions have consequences (PC) * I know what to do if someone is unkind online (PC) * I know what private information means (PI) * I can name some types of private information (PI) * I know what information I should not share online (PI) * I can describe what a digital footprint is (DF) * I understand that everything I do online contributes to my digital footprint (DF) | eAware – Time Online KS1 (TO), Positive Communication (PC), Private Information (PI) and Digital Footprint KS1 (DF) lessons (See Overview) |
| **Year 3** | * I know the difference between my real friends and my online friends (F) * I know how to keep myself safe when communicating online (F) * I know how spending too much time online can affect my health (TO) * I understand the health benefits of a balanced lifestyle (TO) * I am starting to understand how to plan my time effectively (TO) * I can teach others about the importance of passwords (P) * I understand what a strong password is and the effect of this (P) * I understand that anything I upload to the internet us there forever (PHO) * I understand that I should ask for permission when uploading a photo (PHO) * I can explain what cyberbullying is (CB) * I know what to do if myself or someone I know is being bullied online (CB) * I know how to behave responsibly online (TO, P, PHO, CB) | eAware – Friends LKS2 (F), Time Online LKS2 (TO), Passwords LKS2 (P), Photos (PHO), Cyberbullying (CB) |
| **Year 4** | * I understand that not everything online is as it seems (FN) * I understand it is much easier for people to lie online (FN) * I will try not to judge myself by what I see online (FN) * I understand the term ‘fake news’ (FN) * I am starting to understand how to recognise ‘fake news’ (FN) * I will celebrate all the good things about me (SI) * I understand the term digital footprint (DF) * I know what an email is (PHI) * I understand the term ‘phishing’ (PHI) * I understand that some email contain information which is not true (PHI) | eAware - Fake News + Things aren’t always what they seem (FN)  Self Image (SI), Digital Footprint (DF), Phishing - (PHI) |
| **Year 5** | * I know what social media is (PS) * I understand what is meant by privacy settings (PS) * I know how to keep my private information safe (PS) * I can use different techniques to create strong passwords (P) * I can give opinions on, and justify the health benefits of limited screen time online (TO, G) * I can empathise with people who may have been victims of bullying both in person and online (CB, G) * I can talk about ways of preventing cyber bullying. (CB) | eAware - Privacy Settings (PS), Passwords (P), Time Online (TO), Cyber Bullying (CB), Gaming (G) and Tik Tok (TT) |
| **Year 6** | * I can develop strategies to help us to build our emotional resilience. (SI) * I understand how my digital footprint affects myself and others in the future (DF) * I understand how our digital footprint can affect our future (DF) * I can develop strategies to help recognise when a news story might be fake. (FN) * I can understand why certain people or groups create fake news. (FN) * I understand what to do if a phishing email is identified. (PHI) * I understand the laws relating to sending naked images. (NI) * I understand what to do if I feel pressured into sending images. (NI) * I understand the consequences of sending naked images. (NI) | eAware - Self Image (SI), Digital Footprint (DF), Fake News (FN), Phishing (PHI), Naked Images (NI), Whats App (WA) |

**Software Presentation Progression**

|  | **National Curriculum Objectives** | **Knowledge and Skills** | **Project outcome** |
| --- | --- | --- | --- |
| **Year 1** | 2.6 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. | * Capital letters using ‘Caps Lock’ * Full stop, ‘Enter’ and ‘Space Bar’ * Numbers and location of keys. | Independently navigating SeeSaw  Hot and Cold Places SeeSaw fact sheet (Spring?)  Fact sheet on Eastham Woods (Summer?) |
| **Year 2** | * Keyboard typing skills on an iPads (short cuts) Shift key for capital letters. * Underlining titles and sub headings.(SeeSaw/Microsoft Powerpoint) * Bullet points(SeeSaw/Microsoft Powerpoint) * Text boxes (SeeSaw/Microsoft Powerpoint) | Great Fire of London/Titanic  Title fact page on Microsoft Powerpoint about Australia. |
| **Year 3** | * I know how to use font sizes appropriately for audience and purpose * I know how to use shift for a capital letter. * I know how to centre and underline text (Microsoft Word/Powerpoint) * I know how to edit the style and effect of my text and images to make my document more engaging and eye-catching. For example, borders and shadows. * I know how to use cut, copy and paste to quickly duplicate and organise text and add images to create a presentation. | Research and Information Text on Paris/Megacities  Reconciliation leaflet using Publisher |
| **Year 5** | * I know how to apply other useful effects to my documents such as hyperlinks.I know how to import sounds to accompany and enhance the text in my document. * I know how to organise and reorganise text on screen to suit a purpose | Hyperlinked PowerPoint about Ancient Greeks with voice clip/sound  Keynote on Ancient Greeks/Port Sunlight? |
| **Year 6** | * I know how to confidently choose the best application to demonstrate my learning. * I know how to format text to suit a purpose and audience. * I know how to publish my documents safely online with appropriate contents for its purpose and audience. | E.g. Multimedia presentation that combines two applications |

**Data Handling Progression**

|  | **National Curriculum Objectives** | **Knowledge and Skills** | **Project outcome** |
| --- | --- | --- | --- |
| **Year 1** | 2.6 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. | * Grouping data on SeeSaw * I can discuss similarities, differences between given shapes, objects or images, and be able to group these. | Teaching Computing (Linking to Maths) |
| **Year 2** | * Pictograms * I understand how to collect data. * I know how to create my own sorting diagram and complete a data handling activity with it using images and text. | Link to Mathematics |
| **Year 4** | * I know how to start to input simple data into a spreadsheet. * I know how to input data into a spreadsheet and export the data in a variety of ways: charts, bar charts, pie charts. | link to residential |
| **Year 6** | * I know how to create and publish my own online questionnaire and analyse the results. * I know how to use simple formulae to solve calculations including =sum and other statistical functions * I know how to edit and format difference cells in a spreadsheet. * I know how to write spreadsheet formula to solve more challenging maths problems. | End of year party budget or Enterprise link |

**Animation Progression**

|  | **National Curriculum Objectives** | **Knowledge and Skills** | **Project outcome** |
| --- | --- | --- | --- |
| **Year 4** | KS2 (2.6) 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. | * I know how a green screen works * I know how to import an image so it appears on a Green Screen * I know how to film in front of a Green Screen | Multimedia News Report – Volcano eruption (iMovie) |
| **Year 5** | * I know how to add green screen effects to an existing video * I know how to collaborate a grHEReen screen video using another app * I know how to evaluate and improve my filming technique in front of a Green Screen | 1)  **Video Editing** (building skills in preparation for part 2) – Teach Computing  2)  **Video Editing** – Do Ink Green Screen e.g. Day in the life of an Ancient Greek individual |

**Photography, Digital Art and AR and VR Progression**

|  | **National Curriculum Objectives** | **Knowledge and Skills** | **Project outcome** |
| --- | --- | --- | --- |
| **Year 2** | KS2 (2.6) 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. | * I know the difference between portrait and landscape images * I can consider lighting whilst taking photographs * I know what makes a good photograph and how to hold a device | Teach Computing |
| **Year 3** | * I know how to confidently take and manipulate photos * I know how to create a digital image using a range of tools, pens, brushes and effects * I know how to create transparent images with Instant Alpha * I know how to create my own digital 360 image and explore it in VR * I know how to create my own images and bring it into my surroundings | Mr P – Creating a 360 image |
| **Year 4** | * I know how to enhance digital images and photographs using crop, brightness, contrast & resize * I know how to change images for different uses * I can deduce fake images and explain what effects they can have | (PSHE link)  Teach Computing / Pic Collage |
| **Year 5** | * I can name filming techniques * I can plan and create a video * I can edit and import a video * I can create a video storyboard * I know how to create an AR experience using objects I have created to explain a concept. | Teach Computing (first half term for skills)  iMovie |

**Coding and Programming Progression**

|  | **National Curriculum Objectives** | **Knowledge and Skills** | **Project outcome** |
| --- | --- | --- | --- |
| **Year 1** | 2.1 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts  2.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output  2.3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs  2.4 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 | * I can follow simple instructions * I can debug simple instructions * I can recognise useful language such as forwards, backwards, left, right | Unplugged activity e.g. treasure map. Use beebots, coding games (eg coding caterpillar) for practise |
| **Year 2** | * I can use block coding * I can debug a series of code * I can incorporate quarter, half and full turns | Code.org |
| **Year 3** | * I know how to design a program * I know how to create a program using a design * I know how to work with a variety of inputs and outputs * I know how to use repetition in programs * I know how to evaluate my program | Code.org |
| **Year 5** | * I know how to use simple selection in programs * I know how to use logical reasoning to systematically detect and correct errors in programs * I know how to use a variety of selection commands in programs * I know how to create programs that control or simulate physical systems * I know how to evaluate my work and identify errors | Scratch |
| **Year 6** | * I know how to use a range of sequence, selection and repetition commands to implement my design * I know how to identify the need for, and work with, variables * I know how to create procedures to hide complexity in programs * I know how to critically evaluate my work and suggest improvements | Game creation (Teach Comp Y6 using Scratch) |

**Video Creation Progression**

|  | **National Curriculum Objectives** | **Knowledge and Skills** | **Project Outcome** |
| --- | --- | --- | --- |
| **Year 4** | KS2 (2.6) 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. | * I know how to add music and sound effects to my films * I know how to independently create a green screen clip. * I know how to add animated titles and transitions * I know how to add simple subtitles to a video clip. * I know how to use confidently use green screen adding animated backgrounds. | Multimedia News report – Do Ink Green Screen |
| **Year 5** | * I know how to use cutaway and split screen tools in iMovie. * I know how to evaluate and improve the best video tools to best explain my understanding. * I know how to further improve green screen clips using crop and resize and explore more creative ways to use the tool - wearing green clothes and the masking tool. | Video Editing – Teach Computing |

**Computer Networks Progression**

|  | **National Curriculum Objectives** | **Knowledge and Skills** | **Project Outcome** |
| --- | --- | --- | --- |
| **Year 3** | 2.4 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  2.5 Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content | * I understand that the computers in a school are connected together in a network * I understand why computers are networked * I can save and open files from the network * I understand that servers on the Internet are located across the planet * I understand the difference between the Internet and WWW * I understand how web pages are viewed across the internet | Teach Computing unit |
| **Year 6** | * I know how to use search technologies effectively * I understand that web spiders index the web for search engines * I appreciate how pages are ranked in a search engine * I understand what HTML is and recognize HTML tags * I know a range of HTML tags and can remix a web page * I know how to create a webpage using HTML | Teach Computing unit |

**Sound Progression**

|  | **National Curriculum Objectives** | **Knowledge and Skills** | **Project outcome** |
| --- | --- | --- | --- |
| **Year 2** | KS2 (2.6) 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. | * I can explain how music can be used across different media. * I can recognise and make patterns and sequences using instruments and digital tools. * I can recognise notes and tempo | Teach Computing – Making Music (Google |
| **Year 4** | * I know what a digital recording is. * I know how to record sounds using digital devices. * I can create a simple podcast * I can edit audio recordings * I can combine audio recordings. * I can evaluate my podcast and suggest improvements. | Teach Computing – Audio Editing |
| **Year 5** | * I can use chords to create music compositions. * I know how to create a four chord song * I know how to create a remix of a popular song. * I can evaluate my four-chord song and suggest improvements. | Digital Music Composition – (Mr P Project)  Using Garageband. |