|  |  |  |
| --- | --- | --- |
| **Newlyn School Curriculum** **Vision Statement:**  Newlyn School is a caring place where the individuality, gifts and talents of all children and adults are nurtured. In partnership with the whole school community, we seek to provide an education of the highest quality, promoting respect for each other and the wider world. We aim to foster aspiration, resilience and independence in our young people so that they are fully equipped to take on life’s challenges. The children’s happiness is at the heart of all we do as we strive to ensure all children meet their full potential. We work together with the aim that everyone can be the best that they can be in everything they do. | | |
| **Intent:**  Newlyn has a holistic philosophy of education.  Our broad and balanced curriculum builds on the skills, knowledge and understanding of all children, providing them with life skills and aspirations to become good citizens of the future. | **Implementation:**  Our curriculum incorporates the statutory requirements of the National Curriculum 2014 and other experiences and opportunities which best meet the learning and developmental needs of the pupils in our school. The curriculum supports them with their academic, social and personal development. | **Impact:**  Children are provided with engaging experiences and develop skills that prepare them for the future and there is full coverage of the National Curriculum. |
| **Newlyn School Computing Curriculum**  **‘I have not failed, I’ve just found 1,000 ways it won’t work’** | | |
| **INTENT**  What we intend to achieve through our curriculum | **IMPLEMENTATION**  How we will deliver our curriculum | **IMPACT**  How we will measure the effectiveness of our curriculum |
| At Newlyn School, we understand that computing is a significant part of everyone’s daily life. We want our pupils to be able to operate in the 21st century workplace. We believe that children should be given every opportunity to develop the life-skills that will enable them to embrace and use new technology in a responsible and safe way. We intend for our pupils to become independent users of computing technologies, with increasing confidence and enjoyment. We aim to use technology to support learning across the whole curriculum, and through our computing framework we want our pupils to develop creativity, resilience, problem-solving and critical thinking skills. | We follow a skills based curriculum which ensures progression and coverage of :   * Computer Science – problem solving, programming, logical thinking and wider understanding. * Information Technology – creating content and net searching * Digital Literacy – E-safety * Digital Literacy – using IT beyond school | Our computing curriculum is planned to demonstrate progression. We measure the impact of our curriculum through the following methods:     * A reflection on standards achieved against the planned outcomes * Children can understand and apply the fundamental principles and concepts of computer science, including logic, algorithms and data representation; * Children can analyse problems and have repeated practical experience of writing computer programs * Children are responsible, competent, confident and creative users of information and communication technology. * Evidence of computing used, recorded in books across the curriculum * Pupil discussions about their learning. |

Newlyn School Computing Planning Overview - Note: following Rising Stars scheme of work

Equivalent Kapow and Target Tracker categories:

Rising Stars DLE (Digital Literacy/ E-safety) = E-safety – Target Tracker

DLU (Digital Literacy/ Using beyond school) = Computers

IT (Information Technology) = Using Computer, Networks, Net Searching

CS (Computer Science) = Coding

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Term | Autumn | | Spring | | Summer | |
| Foundation | Despite computing not being explicitly mentioned within the [Early Years Foundation Stage (EYFS) statutory framework](https://www.gov.uk/government/publications/early-years-foundation-stage-framework--2), which focuses on the learning and development of children from birth to age five, there are many opportunities for young children to use technology to solve problems and produce creative outcomes. In particular, many areas of the framework provide opportunities for pupils to develop their ability to use computational thinking effectively, such as through undertaking projects involving the concepts and approaches suggested by Computing at School’s (CAS) [Barefoot Computing](http://www.barefootcomputing.org/) resources.  Barefoot Computing have a section dedicated to the Early years, full of ideas on how you can incorporate their resources into your classroom. You can also book a free CPD workshop. All the resources are free to download: [Barefoot Computing early years.](http://www.barefootcomputing.org/earlyyears)  As young children take part in a variety of tasks with digital devices, such as moving a [Bee Bot](http://www.tts-group.co.uk/Hero-BeeBot.html) around a classroom, they will already be familiar with the device before being asked to undertake tasks related to the key stage one (KS1 - ages 5 - 7 years) [computing curriculum](https://www.gov.uk/government/publications/national-curriculum-in-england-computing-programmes-of-study), such as writing and testing a simple program. Not only will children be keen to again use a device they had previously enjoyed using, their [cognitive load will also be reduced](http://code-it.co.uk/a-review-of-cognitive-load-theory-lessons-of-teaching-computing/), meaning they are more likely to succeed when undertaking activities linked to the next stage in their learning.  Within the revised EYFS statutory framework, the Technology strand within Understanding the World has been removed. However, there are opportunities within each area of the framework to enable practitioners to effectively prepare children for studying the computing curriculum. | | | | | |
| Foundation | Selection 1-24 of EYFS individual units –refer to EYFS Units overview to select units relating to area of learning and development - Suggest 8 units per full term – Changes to…see below: | | Selection 1-24 of EYFS individual units –refer to EYFS Units overview to select units relating to area of learning and development - Suggest 8 units per full term – changes to…see below | | Selection 1-24 of EYFS individual units –refer to EYFS Units overview to select units relating to area of learning and development - Suggest 8 units per full term – changes to….see below | |
| Foundation | DLE: Using the iPad and accessing educational games. Understanding safety online. | | CS: Simple Programming / Computational Thinking  WHOLE SCHOOL: INTERNET Safety Internet Day 07/02/23 - Theme "Together for a better internet" | | IT & CS: Creating simple algorithms / Learning to Type | |
| Year 1 | Computing Skill: CS  Unit 1.1: We are treasure hunters – solving problems using programmable toys | Computing Skill: CS  Unit: 1.2 We are TV chefs - filming the steps of recipe | Computing Skill: DLE  Unit: 1.4 We are publishers – Creating a multimedia eBook about our achievements  WHOLE SCHOOL: INTERNET Safety Internet Day 07/02/23 - Theme "Together for a better internet" | Computing Skill: IT  Unit: 1.3 We are digital artists - creating work inspired by great artists | Computing Skill: IT  Unit: 1.5 We are rhythmic – Creating sound patterns in Scratch Jr & Garageband | Computing Skill: IT    Unit: 1.6We are detectives – Using data to solve clues |
| Year 2 | Computing Skill: CS  Unit: 2.1 We are astronauts - Programming on screen in ScatchJr | Computing Skill: CS  Unit: 2.2 We are games testers – Working out the rules for games | Computing Skill: DLE  Unit: 2.4 We are safe researchers – Researching a topic  WHOLE SCHOOL: INTERNET Safety Internet Day 07/02/23 - Theme "Together for a better internet" | Computing Skill: IT  Unit: 2.3We are photographers – selecting and editing digital images | Computing Skill: IT  Unit: 2.5 We are animators – Creating a stop-motion animation | Computing Skill: IT  Unit: 2.6 We are zoologists – Collecting data about bugs |
| Year 3 | Computing Skill: CS – Coding  Unit:3.1 We are programmers – programming an animation | Computing Skill: CS – Computational thinking  Unit:3.2 We are bug fixers – finding and correcting bugs | Computing Skill: DLE – Online safety  Unit: 3.4We are who we are – Creating presentations about ourselves OR an element of your current topic  WHOLE SCHOOL: INTERNET Safety Internet Day 07/02/23 - Theme "Together for a better internet" | Computing Skill: IT – Data  Unit: 3.6 We are opinion pollsters – Collecting and analysing data | Computing Skill: IT – Media  Unit: 3.5 – We are Co-authors – Producing a wiki | Computing Skill: IT – Media  Unit: 3.3We are presenters – Videoing a presentation against a green screen |
| Year 4 | Computing Skill:  IT – Data  Unit: 4.3 We are musicians – Creating a piece of music in Table Top | Computing Skill: IT  Unit: 4.6 We are meteorologists – recording and presenting the weather | Computing Skill: CS- coding  Unit 4.1: we are software developers – developing a simple educational game  WHOLE SCHOOL: INTERNET Safety Internet Day 07/02/23 - Theme "Together for a better internet" | Computing Skill: CS - Coding  Unit: 4.2 We are makers – Coding for Crumble | Computing Skill: DLE – Digital Literacy  Unit 4.4: we are bloggers – sharing experiences and opinions using Seesaw blogging feature | Computing Skill: DLU- Digital Literacy  Unit 4.5: we are artists – fusing geometry and art |
| Year 5 | Computing Skill: CS – Coding  Unit: 5.1 we are game developers – developing an interactive game | Computing Skill: CS – Coding  Unit: 5.2 We are cryptographers -cracking codes using Morse code and semaphore | Computing Skill: DLU – Digital Literacy  Unit: 5.3 We are architects – creating a virtual gallery using Trimble SketchUp  WHOLE SCHOOL: INTERNET Safety Internet Day 07/02/23 - Theme "Together for a better internet" | Computing Skill: IT – Information Technology  Unit: 5.4 We are web developers – making sense of the Internet and building a website | Computing Skill: IT – Information Technology  Unit 5.5 We are adventure gamers – creating an interactive adventure using presentation software (Google Slides/ PowerPoint) | Computing Skill: IT  Unit: 5.6 We are VR designers – experimenting with virtual and augmented reality |
| Year 6 | Computing Skill: CS – Coding  Unit: 5.1 we are game developers – developing an interactive game | Computing Skill: CS – Coding  Unit: 5.2 We are cryptographers -cracking codes using Morse code and semaphore | Computing Skill: DLE -Digital Literacy  Unit: 5.3 We are architects – creating a virtual gallery using Trimble SketchUp  WHOLE SCHOOL: INTERNET Safety Internet Day 07/02/23 - Theme "Together for a better internet" | Computing Skill: IT  Unit: 5.4 We are web developers – making sense of the Internet and building a website | Computing Skill: IT  Unit: 6.5 We are advertisers – Creating a short television advert | Computing Skill: DLE  Unit: 6.3 We are publishers Creating a Yearbook |