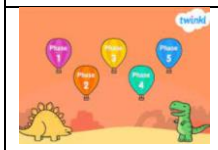
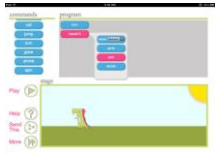
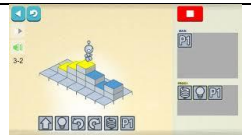
Computing app progression

EYFS/KS1 – App progression mapping

	Nursery	Reception	Year 1	Year 2
Computer Science	• Increasingly follow rules, understanding why they are important. • Match their developing physical skills to tasks and activities in the setting. • Explore how things work.	• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • Explain the reasons for rules, know right from wrong and try to behave accordingly. • Develop their small motor skills so that they can use a range of tools competently, safely and confidently. • Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time'	• Understand what algorithms are • Create simple programmes • Show resilience and perseverance in the face of a challenge.	• 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 programmes
	 Story time apps like busy things or Twinkl lite for tracing handwriting letters.	 Busy things apps/ Twinkl lite – choosing a programme	 Kodable/BeeBot- sequencing instructions	 Daisy the dinosaur- sequencing instructions- simple loops

Computing app progression

LKS2/UKS2 – App progression mapping

	Year 3	Year 4	Year 5	Year 6
Computer Science	• Write programmes that accomplish specific goals • Use sequence in programmes •	• Design programmes that accomplish specific goals • Debug programmes 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	• Solve problems by decomposing the into smaller parts • Use selection in programmes • Work with variables • Use logical reasoning to explain how some simple algorithms work • Use logical reasoning to detect and correct errors in algorithms	• Solve problems by decomposing them into smaller parts • Use selection in programmes • Work with variables • Use logical reasoning to explain how some simple algorithms work • Use logical reasoning to detect and correct error in algorithms
	 Alex- complex sequencing of directional instructions (Extension- design your own maze and get a friend to test your instructions)	 Lego- Fix the Factory- Extension of Alex with more challenging sequencing	 Light Bot- sequencing instructions- loops and procedures. (Extension challenge levels)	 Cargo bot- Sequencing instructions- procedures and developing efficiency. (extension-challenging activity)