**Year 2 Computing Curriculum – Autumn 1**

|  |
| --- |
| **Theme: IT Around Us** |
| **Curriculum objectives** | **Vocabulary** | **Links across the curriculum** |
| - 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 contact on the internet or other online technologies | **Keyword** | Definition | Barcode | Array of black lines used to identify an item in shops | **PSHE**Health, well-being, and lifestyle* I can [say how those rules / guides can help anyone accessing online technologies](https://projectevolve.co.uk/toolkit/resources/content/health-well-being-and-lifestyle/early-years-7/i-can-say-how-those-rules-guides-can-help-anyone-accessing-online-technologies/?from=years)

[**Maths**](https://assets.publishing.service.gov.uk/media/5a7da548ed915d2ac884cb07/PRIMARY_national_curriculum_-_Mathematics_220714.pdf)* add and subtract numbers using concrete objects, pictorial representations, and mentally (Lesson 4)
 |
| IT | Information Technology | Scanner | An object that scans |
| Computer | An electronic, programmable device |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **Prior Knowledge:**Year 1 – Technology Around Us | **Future Knowledge:**Year 3 – Connecting Computers; Year 4 – The Internet; Year 5 – Sharing Information; Year 6 - Communication |
| **Lesson Sequence** | **Key Knowledge** | **Key Skills** |
| 1 What is IT? | Learners will develop their understanding of what information technology (IT) is. They will identify devices that are computers and consider how IT can help them both at school and beyond. | To recognise the uses and features of information technology* I can identify examples of computers
* I can describe some uses of computers
* I can identify that a computer is a part of IT
 |
| 2 IT in school | Learners will consider common uses of information technology in a context that they are familiar with. They will identify examples of IT and be able to explain the purpose of different examples of IT in the school setting.   | To identify the uses of information technology in the school* I can identify examples of IT
* I can sort school IT by what it’s used for
* I can identify that some IT can be used in more than one way
 |
| 3 IT in the world | Learners will begin to explore IT in environments beyond school, including home and familiar places such as shops. They will talk about the uses of IT in these environments and be able to explain that IT is used in many workplaces. | To identify information technology beyond school* I can find examples of information technology
* I can sort IT by where it is found
* I can talk about uses of information technology
 |
| 4 The benefits of IT | Learners will explore the benefits of using IT in the wider world. They will focus on the use of IT in a shop and how devices can work together. Learners will sort activities based on whether they use IT or not and will be able to say why we use IT. | To explain how information technology helps us* I can recognise common types of technology
* I can demonstrate how IT devices work together
* I can say why we use IT
 |
| 5 Using IT safely | Learners will consider how they use different forms of information technology safely, in a range of different environments. They will list different uses of IT and talk about the different rules that might be associated with using them. Learners will then say how rules can help keep them safe when using IT. | To explain how to use information technology safely* I can list different uses of information technology
* I can talk about different rules for using IT
* I can say how rules can help keep me safe
 |
| 6 Using IT in different ways | Learners will think about the choices that are made when using information technology, and the responsibility associated with those choices. They will use IT in different types of activities and explain that sometimes they will need to use IT in different ways. | To recognise that choices are made when using information technology* I can identify the choices that I make when using IT
* I can use IT for different types of activities
* I can explain the need to use IT in different ways
 |
| **Themes and links** |
| **Computing themes** | **Where these are covered:** |
| **Technology around us** Autumn 1  | * The use of Robots in our 21st century world
 |
| **Digital painting** Autumn 2  | * To use robots for artwork
 |
| **Programming A** Spring 1  | * Programming and giving commands to the robots
 |
| **Data /information** Spring 2  | * Storing the Algorithms and understanding clear and precise instructions
 |
| **Creating media** Summer 1  | * Decomposition and Debugging of Algorithms
 |
| **Programming B** Summer 2  | * Variables in programming and what to do to debug
 |