**Chesterton Computing Long Term and key concepts**

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|  | **Autumn 1**  | **Autumn 2**  | **Spring 1**  | **Spring 2**  | **Summer 1** | **Summer 2**  |
| **EYFS** | Things covered in EYFS Computing as part of continuous provision:Instructional scavenger hunt, Beebots, taking photos with iPad, games on interactive whiteboard, sorting, exploring mechanical technology (typewriter, camera, rotary phone etc.), using Apps, scratch  |
| **Year 1** | Technology around us | Digital painting | Moving a robot | Grouping data | Digital writing  | Programming animations  |
| NC link & Key concepts | Computing systemsAlgorithms | Effective use of toolsCreating Media | Algorithms Programming | Data and informationAlgorithms  | Effective use of toolsCreating Media | Programming Design and development |
|  | Autumn 1  | Autumn 2  | Spring 1  | Spring 2  | Summer 1 | Summer 2  |
| Year 2  | IT around us | Digital photography | Robot algorithm  | Pictograms | Making music | Programming quizzes |
| NC link & Key concepts | Networks Computing systems | Effective use of toolsCreating Media | Algorithms Programming | Data and information Effective use of tools | Design and development Creating media  | Programming Design and development |
|  | Autumn 1  | Autumn 2  | Spring 1  | Spring 2  | Summer 1 | Summer 2  |
| **Year 3** | Connecting Computers | Stop frame animation | Sequencing Sound | Branching Databases | Desktop publishing | Events and Actions in Programming |
| NC link & Key concepts | Networks Computer systems  | Effective use of toolsCreating media | Programming Design and development | Data and informationEffective use of tools | Creating media | Programming Design and development |
|  | Autumn 1  | Autumn 2  | Spring 1  | Spring 2  | Summer 1 | Summer 2  |
| **Year 4**  | The Internet | Audio production | Repetition in ShapesData Logging  | Data Logging | Photo Editing | Repetition in Games |
| NC link & Key concepts | Networks Safety and security  | Creating media | Programming Design and development | Computer systemsData and information | Effective use of toolsCreating media | Programming |
|  | Autumn 1  | Autumn 2  | Spring 1  | Spring 2  | Summer 1 | Summer 2  |
| **Year 5** | Systems and searching | Video Production | Selection in physical computing | Flat File Databases | Vector Drawings | Selection in quizzes |
| NC link & Key concepts | Networks Effective use of tools | Creating mediaDesign and development | Programming Computer systems | Data and informationEffective use of tools | Effective use of toolsCreating media  | Programming Algorithms  |
|  | **Autumn 1**  | **Autumn 2**  | **Spring 1**  | **Spring 2**  | **Summer 1** | **Summer 2**  |
| **Year 6**  | Internet communication  | Webpage creation | Variables in games  | Spreadsheets | 3D modelling | Sensing  |
| NC link & Key concepts | Networks Effective use of tools | Creating mediaDesign and development | Programming Design and development | Effective use of toolsData and information | Effective use of toolsCreating media | Programming Computer systems  |