## Computing at Escrick - Spring 2023



## These are the three key areas we teach at Escrick, in line with the National Curriculum:

Computer science – this includes designing and programming. We explore how systems work and what is a computer is.

Information technology – this involves applying key skills to communicate and present. For example, animations, graphs, spreadsheets, word processing.

Digital literacy – is about learning how to behave responsibly and safely online with an awareness of the risks - fake news, online footprints etc.

## We use a scheme called Teach Computing to support planning and much of the digital literacy is taught through our PSHE Jigsaw curriculum.

Brief overview Digital painting Moving a robot Digital writing Technology around us Grouping data Programming animations (1.1)\* (1.2)(1.3)(1.4) (1.5) (1.6) Digital photography Digital music Information technology Robot algorithms Pictograms Programming quizzes around us (2.1)(2.2)(2.3)(2.4)(2.5)(2.6)

|        | Computing systems<br>and networks     | Creating media                   | Programming A                         | Data and information                     | Creating media                              | Programming B                              |
|--------|---------------------------------------|----------------------------------|---------------------------------------|--|---|--|
| Year 3 | Connecting<br>computers<br>(3.1)      | Stop-frame<br>animation<br>(3.2) | Sequencing<br>sounds<br>(3.3)         | Branching<br>databases<br>(3.4)          | Desktop<br>publishing<br>(3.5)              | Events and actions<br>in programs<br>(3.6) |
| Year 4 | The<br>internet<br>(4.1)              | Audio<br>production<br>(4.2)     | Repetition<br>in shapes<br>(4.3)      | Data<br>logging<br>(4.4)                 | Photo<br>editing<br>(4.5)                   | Repetition<br>in games<br>(4.6)            |
| Year 5 | Systems and<br>searching<br>(5.1)     | Video<br>production<br>(5.2)     | Selection in physical computing (5.3) | Flat-file<br>databases<br>(5.4)          | Introduction to<br>vector graphics<br>(5.5) | Selection<br>in quizzes<br>(5.6)           |
| Year 6 | Communication and collaboration (6.1) | Webpage<br>creation<br>(6.2)     | Variables<br>in games<br>(6.3)        | Introduction to<br>spreadsheets<br>(6.4) | 3D<br>modelling<br>(6.5)                    | Sensing movement<br>(6.6)                  |

In EYFS, pupils are readied for the above units through planned opportunities for all three key areas to play, use and explore. More information can be found on the computing page of our website.

The PTA have kindly bought use some new beebots recently which will be a valuable resource in the lower school. Beebots are small, programmable robots. They are used to teach basic programming concepts such as sequencing, loops, and conditionals.

We are borrowing in some micro bit equipment in the summer term so the older children can utilise some kit they haven't experienced before.

Our curriculum contains lots of 'unplugged' lessons which involves grasping concepts before using and applying on a device; when the children are online or using devices in school, these tend to be i pads or chrome books and all devices in school are censored and protected by security software.

## Online Safety at Home

Attached with this letter, is a Jigsaw Online Safety article which outlines when and how frequently online safety is taught through our PSHE curriculum in school. It also contains some statistics and further information about the risks of being online, which you may find interesting.

Further information can be found following the links below:

Keeping children safe online | NSPCC

Homepage - UK Safer Internet Centre

Please see below the current advice on recommended ages for use of various apps:



Computing games/websites for your child to explore at home:

<u>Code Club (raspberrypi.org)</u> Follow the projects link, and easy instructions are given to code without needing a log in.

<u>Scratch - Imagine, Program, Share (mit.edu)</u> Pupils can make their own log ins to save progress on here; this program is taught in school in KS2.