Year 6 - Summer - Computing Knowledge Organiser

What I already know...

- How to format and present information
- How to enter and edit text and numbers into a Microsoft Office software

Excel

What I will learn...

- How to design their own spreadsheet for a specific purpose
- That cells are labelled by rows and columns
- How to construct a formula in an Excel spreadsheet.
- To know how to apply a formula to multiple cells.
- To know that changing input data changes output data.
- To know how to create tables, bar charts, line graphs, pie charts
- To know how to use tables and charts to answer a specific question.

- That you can work in 3 dimensions on a computer.
- How to add, view and move 3D shapes to a project
- How to resize, lift/lower and recolour 3D objects.
- How to rotate objects in 3D.
- How to construct a 3D model based on a design.

Key Vocabulary

CAD	Computer-Aided Design is the use of computer systems to aid in the creation, of a design. Using CAD is often faster than drafting by hand, and it also allows you to easily export files, such as for 3D printing.
Cell	A box formed by the intersection of a row and column in a worksheet or a table, in which you enter information.
Dimensions	A measurable extent of some kind, such as length, width, or height. In its simplest form: a line describes one dimension, a plane describes two dimensions, and a cube describes three dimensions.
Formula	A sequence of values, cell references, names, functions, or operators in a cell that together produce a new value. A formula always begins with an equal sign (=).
Handle	The little squares that appear on the shape when you select it that allow you to resize it by pulling and pushing them.
Workplane	The large, blue grid where you create your designs.
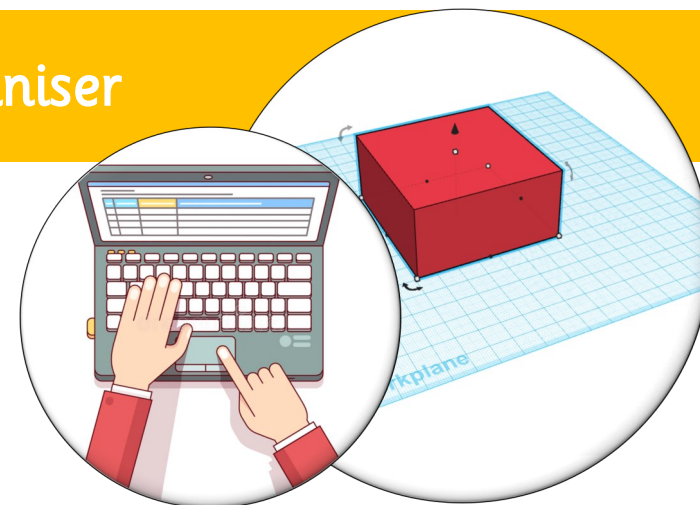
Making a difference

As children prepare for secondary school, they will focus on becoming equipped with the life skills required for them to become young adults and lifelong learners. Children will concentrate on how to use Excel effectively to present their ideas and data as graphs and charts. Cross-curricular opportunities will be provided.

Children will also make links between their geometry learning and developing their knowledge of creating media via computing platforms, creating 2D webs to produce 3D models of food packaging for their theme park.

Being a computer scientist

This term, the children will be learning how to set up and use their own spreadsheets which contain formulae to investigate mathematical models. In their 3D modelling unit of work, the children will learn the skills of a computer scientist by constructing a 3D model based on a design. The children will also learn to recognise that structures in 3D shapes can be broken down into 2D shapes.