Year 5 – Spring 2

Year 5 Creating and using spreadsheets as models to solve problems Knowledge Organiser

entrust Education Technologies

This will be the first unit on spreadsheets which the students will have encountered.

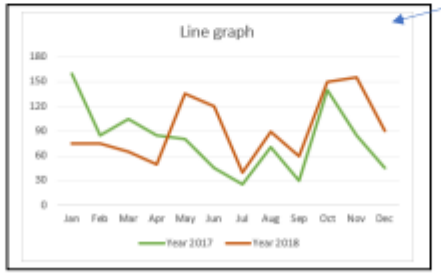
Key Learning	Self-Assessment		
	WT	A	WA
I know what a cell reference/cell address is			
I know how to generate lists of numbers using the autofill tool			
I can create simple formulae to perform calculations in a spreadsheet			
I can make my formulae more efficient through using the inbuilt formulae functions and cell references			
I can use column labels appropriately in a spreadsheet			
I can explain how formulae work in a spreadsheet			
I can use a spreadsheet to help solve problems			
I can use the editing tools to improve the legibility of a spreadsheet table and display decimal places			
I can present and interpret information in a graph			

Who uses skills like these?

- Accountants to keep track of profit and losses
- Shops to record sales
- Wedding planners to keep a track of costs and budgets
- Travel companies to keep track of mileage and cost of travel
- Banks to track interest rates and stock exchange

	A	B	C	D	E
1	Name	Popular	Salary $k	Bonus $k	Gross $k
2	Spider Man	No	138.0	Nil	138.0
3	Ben Ten	Yes	125.0	Nil	125.0
4	Bob Builder	No	79.0	Nil	79.0
5	Iggle Piggle	Yes	57.0	5.7	62.7
6	Bat Man	No	91.0	Nil	91.0
7	Bumble Bee	No	68.0	Nil	68.0
8	Makka Pakka	Yes	32.0	3.2	35.2
9	Mr Maker	Yes	49.0	4.9	53.9
10	Elmo	Yes	113.0	Nil	113.0
11	Cookie Monster	No	83.0	Nil	83.0
12	Jeff Wiggle	Yes	140.0	Nil	140.0
14	Total		975.0	13.8	988.8

=B2+B3+B4+B5+B6



New key words we will use in year 5 'Creating and using spreadsheets as models to solve problems'

Spreadsheet – displays data arranged in rows and columns of a grid. The data can be manipulated and used in calculations known as formulae

Cell address – the alphanumeric value used to identify a specific cell in a spreadsheet

Column – is a vertical series of cells in a spreadsheet

Row – is a horizontal series of cells in a spreadsheet

Autofil – a feature that allows you to create entire columns or rows of data which are based on the values from other cells

Formula – tells the computer what mathematical operation to perform upon a specific value

Labels – text within a cell, usually describing data in the rows or columns surrounding it

Decimal place – the position of a digit to the right of a decimal point

Line graph – is used to display information which changes over time. It is plotted on a graph as a series of points joined with straight line

=SUM – a formula that adds all the numbers in a range of cells

=AVERAGE – a formula used to find the average of the numbers in a range of cells

=MIN – a formula used to find the minimum value in a range of cells

=MAX – a formula used to find the largest value in a range of cells

Year 5 Computers for Communication and Collaboration Knowledge Organiser

entrust Education Technologies

Key words and prior learning from Year 4 What is Computer Technology? Part 1

Hardware – physical parts that make up a computer

Software – programs which tell a computer what to do

Input – allows information and data to be put into a computer through a device e.g. keyboard, microphone

Output – allows the computer to send information and data out to the user through a device e.g. screen, speakers

Central Processing Unit (CPU) – acts like the brain of the computer which receives the data and instructions and carries out what to do with the data it has been given

Random Access Memory (RAM) – is where the CPU's short-term data is stored. It stores the information the CPU is actively using so that it can be accessed quickly. Files cannot be stored here as the RAM is cleared every time you turn off the computer

BITS – The basic unit of everything in a computer's memory. Each is stored in a memory cell which switches between two states 0 and 1

Byte – Eight bits together are called a byte

Hard drive – is for long term storage and files. This data is kept even when the computer is turned off

Pixel – short for picture element. Images are broken down into tiny elements called pixels for a computer to store the image

Who uses skills like these?

- Journalist/news reporters
- Researcher
- Computer Scientist
- Everyone!

New key words we will use in Year 5 Computers for Communication and Collaboration

Email - asynchronous and does not require the receiver of the message to be online at the time the message is sent or received. Usually a longer-form, letter writing style

Instant/direct messaging - send a private text-based message to other people connected to the internet. They will see the message instantly on their screen and are able to reply in real time or reply later. The message is intended to mimic in-person conversations so should be short and informal

Social media - online communities to share information, ideas and personal messages

Wiki - website or database developed collaboratively by a community of users, allowing any user to add and edit content

Fake news – news and stories on the internet that are not true. There are two kinds of fake news: misinformation and disinformation

Misinformation - spreading around information that is wrong, but you don't know it is wrong

Disinformation - deliberately telling lies or passing on information that you know is not true

Key Learning	Self-Assessment		
	WT	A	WA
I know that the internet allows us to communicate with people all over the world through audio, text and video			
I can explain what some of the risks are when communicating online with others			
I know what email is and how to write an email			
I know what instant or direct messaging is			
I know that instant/direct messaging can be to one person or to many at the same time			
I know what a wiki is			
I know the difference between misinformation and disinformation			
I can suggest suitable strategies to help with spotting fake news when gathering information online			
I can work collaboratively online to create and present information			
I can use text boxes, images and hyperlinks to present information			
I can name some famous men and women that have been instrumental in the development of computers and technology			