Subject: Computing & Business — Year 9 Curriculum Overview — 2018-2019

Half Term 1 Business	Subject Content / Knowledge	This is a sample unit for KS4 to allow year 9 pupils to experience Business as a subject. In this sample unit, pupils will find out what it takes to build a brand and what a business has to consider when planning brand development. They will investigate the importance of branding to a business, the types of branding that are available and why businesses need to review and update their brands.
	Skills	**All pupils will** explore the use of branding and the promotional mix in business. Develop their brand into a pitch and present it. **Most pupils will** Investigate branding and use real life examples to model their own brand on. Develop a confident pitch and present it. **Most able pupils will** evaluate other businesses and identify successful branding techniques. Develop a pitch which covers all aspects of their brand including justifications. The pitch is delivered with confidence.
	Assessment	Summative assessment of the brand pitches produced in the style of dragons den.
Half Term 2 ICT: Game Design	Subject Content / Knowledge	Pupils will create a game that is based on a given brief using specialist programming software. The Below areas will be covered in this unit: • Planning (through the use of mind maps) • Reviewing current games • Designing and creating storyboards • Using graphic editing software • Using game maker software • Organizing folder structures. • Evaluation.
	Skills	**All pupils will** be able to use and identify what planning and development is needed to create a game. Pupils will also have produces a game which meet a specified purpose and target audiences. **Most pupils will** be able to understand and describe the effect that their game had on a wider audience. Pupils will also have produces a set game that show some awareness of audiences and purpose as well as being able to review their progress. **Most able pupils will** show the ability to critically review and analyses how there games has affected the desired target audiences. Pupils will also have produces a game that show an astute awareness of audiences and purpose as well as being able to review their progress.
	Assessment	Formative assessment of algorithms and peer assessment of completed game
Half Term 3 & 4	Subject Content / Knowledge	Pupils use web technology and web design theory to design and create a website for a given scenario. Pupils will develop sufficient understanding of web theory and technology to create and evaluate an efficient and effective website.
	Skills	**All pupils will** create basic designs for their website and develop these into a fully working basic web page that includes some content such as text and images which is suited to the target audience and purpose.

ICT: Web Design		**Most pupils will** create designs which demonstrate how they have understood the needs of an audience and purpose of the site in relation to the brief. Pupils will create a multipage website that includes suitable content, graphics, hyperlinks and some HTML elements. **Most able pupils will** create detailed designs which are well labelled and clearly show good consideration for the users needs and site purpose. The pupil will use these designs to develop a multipage website that includes suitable content, graphics, hyperlinks and advance features. All content comes from a variety of sources which the pupil has carefully considered copyright boundaries, referencing where applicable. Pupils will be able to reflect critically in order to make improvements.
	Assessment	Formative assessment of the website project against the key criteria.
Half Term 5 CS: Data Analytics	**Subject Content / Knowledge**	Pupils will understand the characteristics of data and information and how they help organisations in decision making. They will use data manipulation methods to create a dashboard in Excel to present and draw conclusions from information.
	Skills	**All pupils will** identify data that is used across two different sectors to make decisions. Pupils will use data manipulation methods to carry out limited manipulation of data. They are likely to have used simple arithmetic functions (for example SUM, MIN, MAX). They will use their dashboard to identify trends. **Most pupils will** describe data that is used across two different sectors to make decisions and provide some examples. Pupils will select and use data manipulation methods.Pupils are likely to have used simple arithmetic functions (for example SUM, MIN, MAX) which are used correctly and with efficiency. Pupils will be able to describe how they have used their dashboard to make decisions **Most able pupils will** explain in some detail how data is used across two different sectors and identify specific information and explain how the sector uses that information to make decisions. They will also select and use some data manipulation methods. This includes the use of advanced functions (for example decision-making functions, count function). Pupils will use their dashboard to make some relevant conclusions in some detail.
	Assessment	Summative assessment of dashboard project
Half Term 6 CS: Intro to AI and Robotics	**Subject Content / Knowledge**	Pupils will explore the new world of Artificial Intelligence through web based research to identify what AI is, where it began, how AI is becoming more developed and what technical singularity is. By the end of the unit pupils will have built an understanding for the technical evolution of AI whilst improving their independence, research skills and extended writing. This unit concludes with investigative learning with the use of Edison Robots for a 4 week programming challenge.
	Skills	**All pupils will** be able to Identify examples of AI, where AI began (imitation game,Eliza), how AI is portrayed in fiction within a basic written essay with some errors in SPAG. **Most pupils will** be able to discuss how Eliza works, the concepts of AI, technical singularity and the use of CAPTCHA in an essay which is mostly accurate and has reasonably well used SPAG **More able pupils will** be able to evaluate how CAPTCHA works to disarm Turing's theories, how technical singularity can have an impact on our everyday lives through legal and ethical implications and possible future events where AI could be used for both good and bad. This will be in a well written essay with little or no mistakes in SPAG.
	Assessment	Formative assessment (Essay - peer assessed and teacher assessed) and Summative assessment (end of unit exam - self marking on google)