## New Rush Hall School - Year 8: Spring 2.1

English	Maths	Science
In English this half term pupils will be studying the 'Whodunnit' unit. This unit will consist of organising information and ideas clearly in order to determine outcome. Tasks will range from pupils acting as detectives in order to solve mysteries to identify clues in text. The unit will conclude with pupils writing an information article on how they managed to solve the mystery. Pupils will be reading a variety of non-fiction and fiction texts such as: newspaper articles and relevant case studies. The focus will be on retrieval, inference and clarifying.	In Maths this half term pupils will draw, use and interpret conversion graphs. Conversion graphs will include <i>distance-time</i> graphs. Pupil will move on to drawing and interpreting line graphs and identify trends. Pupils then look at where decimals are positioned on number lines and then order decimals of any size, including positive and negative decimals. Pupils will round to two or three decimal places as well as solve multiplication and division problems involving large numbers. Finally, pupils will round numbers to a given number of significant figures as well as to an appropriate degree of accuracy.	In Science this half term learning will encompass changes observed during simple chemical reactions. In addition to this, pupils will test for hydrogen gas and carbon dioxide. Pupils will be introduced to the fire triangle and explain why oxygen is needed for burning and hence describe how oxides are made during burning. Through directed research, pupils will identify fossil fuels, define fuels and explaining how energy is released when fuels burn. Following this, pupils will explain that many common materials are mixtures and know that mixtures can be separated. Finally, the pupils will explain different methods for the separation of mixtures; distillation, filtration, chromatography and heating/evaporation.
PSHE PSHE	Art	PE
In PSHE this half term we will explore diversity, prejudice, and bullying, focusing on discrimination in all its forms, including: racism, religious discrimination, disability, sexism, homophobia, biphobia and transphobia. Pupils will explore influence, including group-think, learning skills to support managing influence around beliefs and persuasion. Pupils will then focus on racism, gender identity, sexuality, and religious discrimination, learning how to challenge such behaviours through improved understanding of self-worth and skills of empathy and assertion.	In Art this half term pupils will be studying 'Mexican Day of The Dead'. Pupils will learn about the Mexican festival and explore personal beliefs pupils hold around life after death. They will research Sugar Skulls, with this knowledge they will develop their own design intended to make out of clay. They will develop their hand building skills when working with clay and will construct their own hand-built vessel that will later be embellished with patterns inspired Mexican Day of The Dead artwork. Pupils will conclude this half term by firing and painting their pots.	In PE this half term pupils will develop their Football skills the Football unit looks to underpin all of the fundamental skills for invasion games. Pupils will gain a solid understanding of the principles of invasion games including attacking, defending, and other relevant tactical strategies. The unit teaches pupils a variety of transferable practical and tactical skills that they are able to use across a variety of sports and other units that they will cover throughout the academic year. Pupil's experiences of football and PE in general at Key Stage 2 varies considerably and this unit allows all pupils to develop the fundamental skills required for the sport and then challenges them to apply them in more advanced scenarios and settings
Geography	History	Spanish
In Geography this half term pupils will be studying the topic 'One World, Many People: How Are Populations Changing?' They will define what population means and explore how it is measured. Pupils will explore population distribution and identify where the world's biggest populations are found. Pupils will analyse population patterns and understand how the population of a country changes as it develops. They will interpret population data to predict change and investigate how countries attempt population control. Finally, pupils will explore what is meant by migration.	In History this half term, pupils will be studying 'The Industrial Revolution'. Pupils will begin by exploring what Britain was like in the mid-eighteenth century. Following this, pupils will examine how and why machines changed the way goods were made in Britain forever. This knowledge will then be used to explain how factories caused the population of towns to increase. Pupils will investigate what it was like to work in some of Britain's first factories. Finally, pupils will explain why coal was called 'black gold'.	In Spanish this half term pupils will begin by re-capping all work done the previous year, focusing on the formation and use of the present tense of regular verbs, right word order in Spanish, adjectives and nouns endings. Following this, pupils will form the present tense of the most used irregular verbs such as 'tener' and 'ser'. Pupils will then will explore the use of 'si' and 'cuando' constructions to write longer sentences. This knowledge will then be used to complete a writing activity using these conjunctions. Finally, they will investigate some Spanish Festivals such as 'Fallas, San Fermines, Tomatina or Castellers'.
Computer Science	Enrichment	
In Computer Science this half term pupils will look at how to use Python to program games. Python is a text-based programming language that pupils are introduced to in year 7. Pupils will demonstrate how arithmetic operators, if statements, and loops, are used within programs and declares and assigns variables. Following this, pupils will use logical reasoning to predict the behaviour of programs. Finally, pupils will know Python can be used to create text-based games and will build programs that implement algorithms to achieve given goals.	As part of the Enrichment Programme, pupils will be given the opportunity to experience:  Rowing: In this half term, as part of the school's Rowing Programme pupils will return to the Royal Docks Rowing Centre where-by they work with an experienced team of Rowers to improve their understanding of what is required to successfully row in open water. This would include learning about co-ordination and rhythm on different types of boats.  Swimming: In this half term pupils will be taught based on their swimming ability. More experienced swimmers will work on developing their Front Crawl, Head surface dives, backstroke, pre diving skills and butterfly. Lessons will take place in 25 x 12.5-meter pool. Less experienced swimmers	