Y6 Medium Term Plan Autumn 1

	Science	Humanities	RE	Computing
Theme	**Theme: Animals including Humans** **Key skills:** planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments	**Theme: Ancient Civilization of Benin** **Key skills: ·** Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time Develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources.	**TOPIC - Islam** **Beliefs and practices** **Key question- What is the best way for a Muslim to show commitment to God?** **Key skills:** - I can explain why one way of showing commitment may not be better than another. Interpretation Empathy Investigation Application Analysis Evaluation Express Reflection **Key knowledge:** I can describe how different practices enable Muslims to show their commitment to God and understand that some of these will be more significant to some Muslims than others (use knowledge of 5 pillars, prayer, Charity, Fasting, Haji)	**Unit 6.1 2Code** **Theme: Coding** <u>**Key skills:**</u> ● To design, write and debug programs ● To solve problems by rereading code and making changes ● To use sequencing, selecting and repetition in programs. ● To be able to give commands to a text based program. ● To compare and contrast text based sequencing and sequencing on programs such as Scratch. <u>**Key knowledge:**</u> ● To know the purpose of different types of games e.g. first person platform, puzzle, multiplayer ● To know how variables affect algorithms e.g. score, ● To know what QR codes are and able to use as a way of sharing projects ● To understand functions in a sequence.

	Key knowledge: identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function	**Key knowledge :** a non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300.		● To know how to use user input in their program ●
Week 1	**S.K.L.O:** To understand the impact diet has on our bodies **W.S.L.O:** To report and present findings within a table. **Key skills** recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations **Key knowledge**: Vitamins and Minerals- Boost your immune system Carbohydrates- slow release energy .They are sugars or starches that provide energy for all the cells and tissues in the body. Fats and Oils- insulation Fats provide the body with energy and help it carry out a range of functions. However, it is essential to consume healthful fats, such as	**LO:** To order events chronologically Events to order. Use topics they have already looked at to aid understanding here. **(at the end of the lesson, children to have a few sources of information about Ancient Benin and to begin making inferences about it, and thinking of questions they would like to find the answer to within the study) **Key skills** Develop the appropriate use of historical terms. Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should understand how our knowledge of the past is constructed from a range of sources. **Key knowledge** To know Ancient Benin was around from 900-1300AD	**Key question- What is the best way for a Muslim to show commitment to God?** **Engagement lesson** **LO:** To gain a deeper understanding of what commitment is. **Key skills** Interpretation- to be able to interpret what commitment means. **Key knowledge** To understand what commitment is. To explain that keeping a commitment is hard and there are factors that can contribute to making it difficult such as tiredness, other invitations arise.	**Lesson 1 and 2** **LO: To design and write a more complex program** **Key skills** ● To review good planning skills. ● To design programs using their choice of objects, attributing specific actions to each using their new programming knowledge. ● To use variables within a game to keep track of the properties of objects. **Key knowledge** ● Children know how to plan a program before coding to anticipate the variables that will be required to achieve the desired effect. ● Children know how to debug when things do not run as expected. ● Children know how to create a QR code to share projects.

	monounsaturated and polyunsaturated fats and limit or avoid saturated and trans fats. Protein- healthy bones and muscles. Healthy teeth, skin and hair To know that men need more kcals than women. To understand that certain lifestyles will need certain diet makeup- body builders, heavy on the protein and carbs Athletes- carbs Someone who is sedentary- less carbs.			
Week 2	**S.K.L.O:** To understand the impact exercise has on the body **W.S.L.O:** To plan a scientific enquiry and take accurate measurements **Excersice** **Key skills** planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including	**LO:** To use sources of evidence to analyse a person from the past. **compare an Oba from the past with a modern Oba** **Key skills** Develop the appropriate use of historical terms. (the Oba) They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources. **Key knowledge** To know the Benin civilization was ruled over by The Oba	**Key question- What is the best way for a Muslim to show commitment to God?** **investigation lesson** **LO:** To reflect upon why Muslims pray 5 times a day **Key skills** Empathy- empathise with whether they think it is important to pray 5 times a day or not to show commitment. Investigation- to investigate why and how Muslims pray 5 times a day. **Key knowledge** To know Muslims pray 5 times a day On a Friday- the Muslim Holy day- Muslims go to the mosque to pray. They face East when praying and use a pray mat.	

	conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments **Key knowledge**: To understand that exercise is important for the healthy development of a body To know that your heart rate increases the more strenuous the exercise is on your body To understand that everyone has a resting heart rate, and this is different for different people. The quicker it takes for you to get back to your resting heart rate, the healthier someone is.	To understand the Oba was looked up to like a god amongst men The kingdom of Benin began in the 900s when the Edo people settled in the rainforests of West Africa. By the 1400s they had created a wealthy kingdom with a powerful ruler, known as the Oba. The Obas lived in beautiful palaces decorated with shining brass. For 200 years Benin was very successful, but in the 1600s the Obas started to lose control of their people.		
Week 3	**S.K.L.O:** To explain the impact drugs have on your body. **W.S.L.O:** To use classify information. **Key skills** recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations	**LO:** To make informed opinions on what Benin was like during 900AD. **Key skills** They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources. **Key knowledge** To know that the Benin climate was warm and dry To know the Benin people lived in	**Key question- What is the best way for a Muslim to show commitment to God?** **investigation lesson** **LO:** To gain a deeper knowledge as to how Muslims help the less fortunate. **Key skills** Investigation- to investigate how Muslims help the less fortunate. Interpretation- to interpret the information gathered to create their own informed opinion Empathy- to empathise with a Muslim's belief on giving to the less fortunate.	**LO: To be able to introduce new functions to a program.** **Key skills** ● To use functions and understand why they are useful in 2Code. ● To debug a program and organise the code into tabs. ● To organise code into functions and Call functions to eliminate surplus code in the program. **Key knowledge** ● Children can explain the term 'function' *(A function is a block of code that you can access when you need it, so you don't have*

	identifying scientific evidence that has been used to support or refute ideas or arguments **Key knowledge**: To understand that there are legal and illegal drugs To know that some legal drugs are: caffeine, over the counter medicines, alcohol. To know that some illegal drugs are: cannabis, heroin, steroids, cocaine To understand that all drugs have side effects To understand that some drugs can have significant life long effects (tooth loss due to smoking heroin) To know that drugs have slang or street names as well as "official" names. To know that while alcohol here is legal, in Islamic countries they are not. And some medicines that we can not get over the counter here, you can get over the counter in other countries (such as tramadol). This shows that countries have different levelling systems for certain drugs; not all.	huts, and the share of wealth was not shared evenly. To know that the Benin people were a community. A safe community. They were skilled in sculptures. They shared food	**Key knowledge** To know that the third pillar of Islam is called Zakah Zakah means giving money to charity. Muslims think it is their duty to give to the less fortunate as everything they own belongs to Him.	*to rewrite the same block repeatedly*) and how they can be created and labelled in 2Code. ● Children can explain how to move code from one tab to another in 2Code. ● Children can explain how they organised code in a program into functions to make it easier to read.
Week 4	**S.K.L.O:** To explain how fats and proteins are transported around the body through the digestive system. **W.S.L.O:** To record findings using scientific diagrams and labels. **Key skills** recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs	**LO:** To research and compare Ancient Benin religion to modern religions of the world. **Key skills** They should note connections, contrasts and trends over time Develop the appropriate use of historical terms. They should regularly address and	**Key question- What is the best way for a Muslim to show commitment to God?** **investigation lesson** **LO:** To reflect upon whether upon the fourth pillar of Islam. **Key skills:** Interpretation- to interpret the information gathered of Sawn	**LO: To be able to use 'user input'** In a program **Key skills** ● To be able explore the options for getting text input from the user in 2Code. ● To be able to include interactivity in programming. **Key knowledge** ● Children know how to code

reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations **Key knowledge**: To know the main steps of the human digestive system (this part if a recap from year 4) To understand that proteins and fats are absorbed through the small intestine into the bloodstream The protein then becomes protease and gets taken to the muscles, cells and bones in the body. The fats become glucose and amino acids and this gets taken to every organ in the body (including the skin) to help insulate and create a layer around them.	sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. **Key knowledge** To know that they considered their Oba to be non-human. Yet in fact similar to 4 different animals- the python, the mudfish, the eagle and the crocodile. To know that the Benin people routinely carried out human sacrifice. They believed in reincarnation They believed in many gods.	Empathy- to be able to empathise with the views of Muslims Investigation- to investigate the third pillar of Islam. **Key knowledge** To know the fourth pillar of Islam is called Sawm During the month of Ramadan, Muslims do not eat or drink at all during the hours of daylight. Fasting is a way of showing that they are living in the way that God wants and remembering people who are hungry. They believe it shows that religion is the most important thing in their lives- far more important than that eating or drinking.	programs that take text input from the user and use this in the program. ● Children know what attribute variables to user input. ● Children are aware of the need to code for all possibilities when using user input.
Week 5	**S.K.L.O:** To understand the functions of the heart, blood vessels and veins. **W.S.L.O:** Identifying and collecting scientific evidence. **Key skills** using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations	**LO:** To use secondary sources of information to understand more about the Ancient Benin people. **Key skills** Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time Develop the appropriate use of historical terms.	**Key question- What is the best way for a Muslim to show commitment to God?** **evaluation** **LO:** To evaluate on how Muslims show their commitment to God **Key skills** Analysis- To analysis all information gathered in the past 3 lessons Evaluation- To use own opinions and information to evaluate against the key question Express- to express own ideas against the key question	**LO: To be able to create control simulations** **Key skills** ● To use flowcharts to test and debug a program. ● To create a simulation of a room in which devices can be controlled. **Key knowledge** ● Children know how to follow flowcharts to create and debug code. ● Children know how to create flowcharts for algorithms using 2Chart. ● Children know how to

	identifying scientific evidence that has been used to support or refute ideas or arguments

Key knowledge:

The heart's role is to pump oxygen-rich blood to every cell in the body.

The blood vessels — a network of interconnecting arteries, arterioles, capillaries, venules, and veins — provide the pathway in which blood travels.

Arteries are the passageways through which the blood is delivered, the largest of which is the aorta. The aorta branches off the heart and divides into many smaller arteries, which have muscular walls that adjust their diameter to increase or decrease blood flow to a particular body area.

The primary function of blood is to deliver oxygen and **nutrients** to, and remove wastes from, the body cells | They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance.

They should construct informed responses that involve thoughtful selection and organisation of relevant historical information.

They should understand how our knowledge of the past is constructed from a range of sources.

Key knowledge
To know that they carved Obas and influential people into brass and wooden structures.
The Oba would often be depicted as one of the four animals he is known to represent.
To gain more knowledge about how the Benin kingdom may have been destroyed.
To gain more information about where in Africa Benin was, and how this may have contributed to its fall from power. | **Key knowledge**

No new knowledge gained- all knowledge from the previous lessons will be brought together and evaluated against upon the key question. | creative with the way they code to generate novel visual effects. |
| Week 6 | **S.K.L.O** To understand the human circulatory system

W.S.L.O: To use a diagram

Human circulatory system

Key skills

recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs

reporting and presenting findings | **LO:** To create my own informed opinions and be able to express them clearly (in a debate)

Key skills
 They should note connections, contrasts and trends over time

 They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance.

They should construct informed | **Key question- What is the best way for a Muslim to show commitment to God?**

expression

LO: To reflect upon personal commitments in life.

Key skills
Express- express own ideas against those of others
Reflection- reflect your own ideas against those of others. | **LO: To be able to make a text-based adventure game**

Key skills
- • To explore how 2Code can be used to make a text-based adventure game.
- To be able to give commands to a text based program.

Key knowledge
- Children can follow through the code of how a text adventure can be |

	from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations **Key knowledge**: The right atrium receives oxygen-poor blood from the body and pumps it to the right ventricle through the tricuspid valve. The right ventricle pumps the oxygen-poor blood to the lungs through the pulmonary valve. The left atrium receives oxygen-rich blood from the lungs and pumps it to the left ventricle through the mitral valve. The left ventricle pumps the oxygen-rich blood through the aortic valve out to the rest of the body. The blood is then taken back to the heart to start this whole process again.	responses that involve thoughtful selection and organisation of relevant historical information **Key knowledge** To know that in the 1800s, the British expedition raided Benin and stole a lot of their art and expensive items. They were then distributed across Europe to different museums and homes. Children need to look at different pieces of information and evidence and decide whether the artefacts should be sent back to Benin or whether they should be kept where they are.	**Key knowledge** To understand what commitment is and what commitments each child has in their own life. To explain that keeping a commitment is hard and there are factors that can contribute to making it difficult such as tiredness, other invitations arise. To know what their own commitments are and their own factors that can hinder that commitment from not happening every week/day/month.	programmed in 2Code. ● Children can adapt an existing text adventure to make it unique to my requirements. ● To know and understand some of the syntax of a text-based programming language e.g. Print/for in i ●