

Y5 Medium Term Plan Autumn 2

	<u>Science</u>	<u>Humanities</u>	RE	Computing
Theme	Theme: Properties and changes of materials	Theme: Anglo saxons	Theme: Christianity	Unit 5.8 - Word processing using Microsoft word OR Google Docs
	Key skills:	Key skills	**key question: Is the Christmas Story true? **	
	 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 	 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. 	Key skillsInterpretationEmpathyInvestigationApplicationAnalysisEvaluationExpressionReflectionKey knowledgeTo understand that eye-witnessaccounts are subjective and eventhough we have all witnessed thesame event, we each see thingsthrough our own lens.To know, remember and recall asimple version of the Christmas Story.To understand that stories and eventshave meanings. And those meanings	 Key Skills: consider copyright and attributions when they use images created by others can insert tables and edit the properties can alter the look of the text and navigate around the document can resize and reposition objects using wrapping options can add images,text boxes and shapes to a word document, can use bullet points and numbering using paragraph formatting, page breaks, headers and footers to increase the usefulness and visual appeal of a document Key Knowledge Pupils know what a word processing tool is for and

	 Key knowledge: compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic demonstrate that dissolving, mixing and changes of state are reversible changes explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda 	Britain's settlement by Anglo-Saxons and Scots; The Viking and Anglo-Saxon struggle for the Kingdom of England	Incarnation of God on Earth. God gave Jesus to the Earth to show people how to lead good lives, forgive them for the things they do wrong and prove to them (through his resurrection) that there is life after death. Incarnation means: a person who embodies in the flesh a deity, spirit or quality. And resurrection means: the action or fact of resurrecting or being resurrected. Raising from the dead, restoration of life.	 know how to find icons for the appropriate functionality Pupils know that word processors have template documents that can be used to save time, improve visual aspects and support writing
Week 1	S.K.L.O: To investigate how the temperature of the water affects the rate in which sugar dissolves W.S.L.O: To take accurate measurements	LO: To chronologically order periods of time studied **use 7 time periods that the children have looked at over the course of their learning time at Kings Avenue. The children need to place these in chronological order.	**engagement lesson** L.O: To understand that people's view can vary **key question: Is the Christmas Story true? **	LO: To explore word processing program e.g. microsoft word or google docs Key Skills: • Pupils will be able to create a word processing document altering the look of the text

	Denin hu notting the set to de it with the		
**children can have 3 different	Begin by getting them to do it without dates being given to them. Then re	Key skills	and navigating around the document.
temperatures of water- from one	show the images with dates- how did	Ney Skills	document.
fridge, room temperature and near	we get on? Children to then re-	Interpretation- interpreting what they	Key Knowledge:
boiling water. Children then time how	arrange. Place on timeline by start	see on the silent news clip	 • To know what a word
long it takes for the sugar to dissolve	only. Highers could be extended to try		processing tool is for.
in each type of water. Could then	and show the whole time period of	Empathy- empathising with others	3
come up with an average from the	each so the overlap.	viewpoints- people may see	
groups data.**	Discuss AD and BC. at the end,	something different to them.	
	introduce the new topic of Anglo		
Key skills:	Saxons, just by looking at the clothing	Expression- expressing their own	
planning different types of scientific	and some images, where do they	thoughts about the news clip	
enquiries to answer questions,	think it goes within the timeline. (using		
including recognising and controlling	reasoning) and then show them the	Reflection- reflecting upon what other	
variables where necessary	time period. Children then place it on	people saw in the news clip, and could	
	the time line.**	this still be true.	
taking measurements, using a range			
of scientific equipment, with increasing	-		
accuracy and precision	Time periods covered are: Great fire of London (y2)	Key knowledge	
recording data and results of	The stone Age(y3)	To understand that eye-witness	
increasing complexity using scientific	Victorians (y1)	accounts are subjective and even	
diagrams and labels, classification	Ancient Rome (y3)	though we have all witnessed the	
keys, tables, and bar and line graphs	Windrush (y3)	same event, we each see things	
	Ancient Egypt (y4)	through our own lens.	
using test results to make predictions	WW2 (y4)		
to set up further comparative and fair		Know different types of truth e.g.	
tests	Key skills	historical, scientific, personal (beliefs).	
reporting and presenting findings from	Key Skills		
enquiries, including conclusions,	•Pupils should continue to develop a		
causal relationships and explanations	chronologically secure knowledge and		
of results, in oral and written forms	understanding of British, local and		
such as displays and other	world history, establishing clear		
presentations	narratives within and across the		
	periods they study.		
identifying scientific evidence that has			
been used to support or refute ideas	 Develop the appropriate use of 		
or arguments.	historical terms.		
Kayknawladaa			
Key knowledge:	Key knowledge		
https://www.youtube.com/watch?v=fwj	To know the time next of the time		
vwoFHTbg video explains WHY	To know the time periods that they		
sugar dissolves quicker in hotter water	have already studied and place upon		
eugal alcolitoo quickoi in nottoi watoi	a timeline.		
The sugar dissolves because the	Great fire of London - 1666		
water molecules were able to pull the	The stone Age- 2.6 million BC		
sugar molecules apart, layer by layer.	Victorians= 1837-1901		

	The reason why the water, which was boiling, was able to dissolve the sugar more quickly is because the water molecules move faster meaning there are bigger gaps than in the cold water. Because of the bigger gaps, more sugar molecules can fit in between. know that some materials will dissolve in liquid to form a solution , and describe how to recover a substance from a solution	Ancient Rome= 27BC-476AD Windrush= 1930 Ancient Egypt= 3100BC WW2= 1939-1945 Anglo Saxon= 410AD-1066		
Week 2	 **will need to put some balloons of water in the freezer for this as you need an "ice man"** S.K.L.O: To investigate a materials conductivity of heat W.S.L.O: to control variables **each group to have an "ice man" (a frozen balloon of 300ml of water). The children get given a range of different materials and need to see who can keep the ice man ice for as long as possible. (which material is the best insulator). Children can just use one piece of material (all fabric needs to be the same size, but they could cut it up and make a hat too for example). At the end, cut the iceman open, and pour out any water that has melted. The least amount of water=best insulator** 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 	 LO: To understand who the Anglo-Saxons were and where they settled. **could start this lesson very open- ended with showing the children an array of images and sources, and asking them to brainstorm a description of the people from what they can see ** Key skills •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. Key knowledge Britain's settlement by Anglo-Saxons and Scots; The Viking and Anglo-Saxon struggle for the Kingdom of England The last Roman soldiers left Britain in 410. New people came in ships across the North Sea – the 	 **investigation lesson** L.O- To retell the Christmas story. **key question: Is the Christmas Story true? ** **in books, children have the traditional Christmas story written in bullet points through class discussion and own knowledge. Can go further to ask them which parts do they think are the most important, hold the most significance or meaning to start thinking deeper about the story** Key skills Analysis- analysing the christmas story's important or most meaningful sections Evaluation - evaluating what they feel is the most important part Expression- expressing their own views and opinions using their own ideas to link back to the Christmas story. Key knowledge To understand that stories and events 	 LO: To understand copyright Key Skills: To add and edit images to a word document. Pupils can edit images to reduce their file size. Key Knowledge: To know what copyright is (Copyright is one of the main types of intellectual property. It allows the copyright owner to protect against others copying or reproducing their work.) Pupils know how to add images to a word document. Pupils know the correct way to search for images that they are permitted to reuse. Pupils know how to attribute the original artist of an image.

	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. Key knowledge: compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets	Anglo-Saxons. The Anglo-Saxon age in Britain was from around AD410 to 1066. They were a mix of tribes from Germany, Denmark and the Netherlands. The three biggest were the Angles, the Saxons and the Jutes. The land they settled in was 'Angle-land', or England. If we use the modern names for the countries they came from, the Saxons were German- Dutch, the Angles were southern Danish, and the Jutes were northern Danish. Know that the Anglo Saxons came to Britain to To fight, To farm, To make new homes, They were invited	have meanings. And those meanings may be different to different people. To know, remember and recall the Christmas Story. - Those present (shepherds, kings, cattle) - Order of events	
Week 3	S.K.L.O: To investigate how the size of a jar affects a flame W.S.L.O: to use a table to record results **whole class experiment as there is fire involved. Below is a concept cartoon you can start with	 LO: To understand Anglo Saxon religion Key skills They should note connections, contrasts and trends over time Develop the appropriate use of historical terms. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. Key knowledge Britain's settlement by Anglo-Saxons and Scots; 	 **investigation lesson* L.O: To compare and reflect upon different versions of the Christmas story **From Luke Ch 1: 26-38 and Ch 2: 1-20 Matthew Ch 1: 18 - Ch 2: 12 What type of 'true' is this?** Qu to ask the children: Which account of the nativity do you think is more believable/true – Matthew or Luke? Why are there different versions of the same event? **key question: Is the Christmas Story true? ** Key skills 	LO: To edit in a word processor e.g microsoft word or google docs Key Skills: • Pupils can edit their images within Word to best present them alongside text. Key Knowledge: • To know how to use word wrap with images and text. •

Use tea light or 3 of the same candle. Light it, and then place the jar over the top. Time how long it takes for the candle to burn out. Research why this happens. Putting the jar over the candle keeps oxygen from outside the jar from getting in. The reaction can only use the oxygen that is already in the jar. So, when that oxygen is used up, the reaction can't keep going. Running out of oxygen makes the flame go out.**

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.

Key knowledge:

explain that some changes result in the formation of new materials, and

The Viking and Anglo-Saxon struggle for the Kingdom of England

Pagans worshipped lots of different gods.

Each pagan God controlled a particular part of everyday life: the family, growing crops, love, healing, wisdom, metalworking, the weather, war, day & night and so on. Religion was a means of ensuring success in material things. For example, you might pray to a particular goddess for a successful harvest, or for victory in battle.

To know that different gods were in charge of different things:

GOD	GOD OF WHAT?	
Balder	God of Immortality	
Eostre	Goddess of birth	
Frigg	Goddess of love	
Hel	Goddess of death	
Loki	God of cunning	
Saxnot	God of the family	
Thunor	God of thunder	
Tiw	God of war	
Wade	God the sea	
Wayland	God of metalworking	
Woden	Chief God	
Moon	Monday	
Tiw	Tuesday	
Woden	Wednesday	
Thor	Thursday	
Frigg	Friday	
Saturn	Saturday	
Sun	Sunday	

Interpretation- interpreting the version of the Christmas story that they have

Investigation- investigating other viewpoints

Analysis- analysing the story that they have

Expression- expressing and retelling the main points of their version to a partner

Key knowledge

Compare and contrast Luke and Matthew's account of the Christmas story

To understand that eye-witness accounts are subjective and even though we have all witnessed the same event, we each see things through our own lens.

	that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda Putting the jar over the candle keeps oxygen from outside the jar from getting in. The reaction can only use the oxygen that is already in the jar. So, when that oxygen is used up, the reaction can't keep going. Running out of oxygen makes the flame go out.			
Week 4	S.K.L.O: To investigate the effects of dissolving. W.S.L.O: To make observations over time ** <u>https://www.stem.org.uk/resource</u> <u>s/elibrary/resource/31669/growing-</u> <u>crystals</u> ** has information on how to make the crystals, and what will be needed. DO not tell them you are making crystals. Maybe say you poured salt in the water by accident, and want to see how long it'll take for it to be separated, and then they will be in for a surprise when they see it forma crystal! (food dye in the water will create different coloured crystals) Set this up in this lesson. It will take a week for the crystals to form. Children can make observational notes throughout the week in their science books as to how the solution is "unmixing" and how the salt is being attracted to the magnet in clumps. ** Key skills: planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary recording data and results of	 LO: To gain a deeper understanding of Anglo Saxons through a range of sources **have secondary and primary sources. Children could even use tertiary sources (the internet, or books) to answer any independent questions that they have from looking at the p and s sources** Key skills They should note connections, contrasts and trends over time Develop the appropriate use of historical terms. 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 Britain's settlement by Anglo-Saxons and Scots; The Viking and Anglo-Saxon struggle for the Kingdom of England 	 **investigation lesson** L.O: To reflect upon the meaning of the Christmas Story **key question: Is the Christmas Story true? ** ** watch the clip on the sheet to begin the lesson, invite children and adults to share their view on the meaning of the Christmas Story. Teach the direct teaching. Do children agree that the Christmas story (all or any versions) show this? Why and how? Does a story have to be true for meaning to come out of it? Link back to the key question- even if it isn't true, does it matter?** Key skills Interpretation- interpreting what the Christmas story means to them Empathy- people will have different views and beliefs, and that this is ok Application- applying own knowledge to their thoughts and opinions Reflection- reflecting upon the direct teaching and using this to help them think deeper about the Christmas 	 LO: To edit text Key Skills: To change the look of text within a document. To use a style set in Word. To use bullet points and numbering. Key Knowledge: To know and identify the icons/tabs that edit text

	increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs Key knowledge: know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating demonstrate that dissolving, mixing and changes of state are reversible changes		Story meanings that we have Key knowledge Know Christians believe: -Jesus is the Incarnation of God on Earth -God gave Jesus to the Earth to show people how to lead good lives -forgive them for the things they do wrong and prove to them (through his resurrection) that there is life after death. Incarnation means: a person who embodies in the flesh a deity, spirit or quality. And resurrection means: the action or fact of resurrecting or being resurrected. Raising from the dead, restoration of life.	
Week 5	 S.K.L.O: To compare and group group materials based on their properties W.S.L.O: To present findings in an appropriate way **this can be done in 1 hour, so you can use the first hour to conclude last week's investigation with the crystals. Give each table a range of materials (do not have to be the same). Tell the children to sort them. Then discuss how they sorted them- begin a discussion on could they sort any other types of ways. Bring up conductivity, transparency etc from the knowledge below. Let children group the items into scientific groupings as they see fit. Have some magnets to hand if they want to group by this. Children can use a range of ways to display their findings, a venn diagram, a scale of hardness, a scale of transparency, a carroll diagram 	LO: To understand what life was like in an Anglo-Saxon village **If possible, show the children just written accounts of Anglo Saxon villages. Can they then draw what one might look like from the sources of information they have. Try and get positive and negative recounts of the village and village life. Which ones are more reliable? Why? Then show children images of the villages and compare them to their own drawings. Were they close? Was there anything they got wrong due to language or historical terms being used? ** OR do it the other way round- just show images of Anglo Saxon villages- map to show locations near rivers etc and get them to deduce what they can tell about the Anglo Saxon people and way of life from the images.	P4C LESSON L.O: To share own ideas linked to key question **before children write their own responses in week 6 about the key question, it would be good for them to have some time to discuss and share ideas around two themes: Do stories have to be true for them to be meaningful? What does it mean that something is 'true'? Teacher can scribe ideas throughout the session which could then be brought back out next lesson to help children construct their answers** **key question: Is the Christmas Story true? ** Key skills	 LO: To add features to a document to enhance its look and usability. Key Skills: Pupils can add text boxes and shapes. Pupils can consider paragraph formatting such as line spacing, drop capitals. Pupils can use page breaks, headers and footers. Pupils can add hyperlinks to places in the document and to an external website. Pupils can add an automated contents page. Key Knowledge: To know that the word doc can be edited for a purpose To know thow to undo/redo

etc** Key skills: 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 Key knowledge: Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets	 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 construct informed responses that involve thoughtful selection and organisation of relevant historical information. Key knowledge Some Anglo-Saxons built their houses inside the walls of Roman towns. Others cleared spaces in the forest to build villages and make new fields. Many villages were built near rivers because the Anglo-Saxons were good sailors. A high wooden fence would be built around a village to protect it from wild animals like: wolves, foxes and boars. Anglo-Saxon houses were rectangular huts made of wood with roofs thatched with straw. Each family house had one room, with a hearth with a fire for: cooking, heating and light. The houses were built facing the sun to get as much heat and light as possible. The biggest house in the village was the hall where the chief lived with his warriors. Other huts were used as workshops for things like weaving or pottery. Each village would have an area of common land for everyone to use to graze their cattle. 	Empathy- people will have different views and beliefs, and that this is ok Application- applying own knowledge to their thoughts and opinions Reflection- reflecting upon the direct teaching and using this to help them think deeper about the Christmas Story meanings that we have Know different types of truth e.g. historical, scientific, personal (beliefs). Is one of these more important? Which type of truth can be applied to the Christmas story? Could do a simple experiment to discuss scientific truth.	

Week 6	 S.K.L.O: To use my knowledge to decide how mixtures might be seperated W.S.L.O: To plan my own scientific enquiry **go through different ways you could separate mixtures - recap on sieving, filtering, dissolving, magnetism and evaporation. Introduce decanting (could show with oil and vinegar, or oil and water). Give children a range of different mixtures. They need to use their own knowledge learnt to decide how best to separate the mixtures from each other. Flour and magnets Rice and paper Sand and water. 	 LO: To create an informed opinion using evidence from a range of sources **keystage history lesson looking at the mystery of who is buried at Sutton Hoo- lesson slides are back on the google drive in the 19/20 anglo saxon folder for you** Key skills They should note connections, contrasts and trends over time Develop the appropriate use of historical terms. They should regularly address and 	 **evaluation lesson** L.O: To share my own thoughts linked to the key question **key question: Is the Christmas Story true? ** Potential questions used could be the two from the P4C and use of notes from that session too to help remind children of their thoughts. Key skills Application- applying the knowledge learnt through this topic 	After this lesson there are 2 lessons that can be done cross curricular, see lessons 7 and 8 of this unit on purple mash. LO: To present information using tables Key Skills: • To use tables within MS Word to present information. • Pupils can edit properties of tables including borders, colours, merging cells, adding and removing rows and columns. • Pupils can add word art for a heading.
	go through different ways you could separate mixtures - recap on sieving, filtering, dissolving, magnetism and evaporation. Introduce decanting (could show with oil and vinegar, or oil and water). Give children a range of different mixtures. They need to use their own knowledge learnt to decide how best to separate the mixtures from each other. Flour and magnets	 Hoo- lesson slides are back on the google drive in the 19/20 anglo saxon folder for you Key skills They should note connections, contrasts and trends over time Develop the appropriate use of 	Christmas Story true? ** Potential questions used could be the two from the P4C and use of notes from that session too to help remind children of their thoughts. Key skills Application- applying the knowledge	 tables Key Skills: To use tables within MS Word to present information. Pupils can edit properties of tables including borders, colours, merging cells, adding and removing rows and columns. Pupils can add word art for a

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.		
Key knowledge:		
compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets		
know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution		
use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating		
demonstrate that dissolving, mixing and changes of state are reversible changes		
explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda		