Y5 Term 2

English	Film reviews Setting description – either visual stimulus or linked to Pax	**Maths**	Multiplication, division and statistics
Science: Properties and Changes of Materials			

NC objectives from curriculum progression

Children will be taught to:

Scientific 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

*give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic

*identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

*use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating

*know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution

*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.

Scientific Enquiry Skills

*with support, answer questions with evidence from different types of scientific enquiry, e.g. comparing life cycles of plants using change over time, surveys and secondary sources.

*with prompting, identify and manage variables, e.g. when exploring the brightness of bulbs.

*following discussion of alternatives, select appropriate equipment, e.g. a thermometer.

*take measurements that are precise as well as accurate, e.g. the amount of sugar which can be dissolved in different temperatures of water.

*know how to process repeat readings, e.g. when investigating the behaviour of components in a circuit.

*start to use labelled diagrams to show more complex outcomes, e.g. demonstrating how we see objects.

*with prompting, use various ways to record complex evidence, e.g. the behaviour of particles in different states of matter and when changing between states.

*use a line graph to record basic data, e.g. length and mass of a baby as it grow.

*with support, display and present key findings from enquiries orally and in writing, e.g. suggesting reasons for similarities and differences between various animals.

*with support, indicate why some results may not be entirely trustworthy, e.g. in relating brightness of bulb to voltage supplied.

*with prompting, write a conclusion using evidence and identifying causal links, e.g. what makes a bulb shine more brightly.

* suggest further relevant comparative or fair tests, e.g. when testing materials for various properties to determine their suitability for an application.

*show how evidence supports a conclusion, e.g. researching gestation periods of various mammals and relating them to adult mass.

Notes and guidance (non-statutory)

Pupils should build a more systematic understanding of materials by exploring and comparing the properties of a broad range of materials, including relating these to what they learnt about magnetism in year 3 and about electricity in year 4. They should explore reversible changes, including evaporating, filtering, sieving, melting and dissolving, recognising that melting and dissolving are different processes. Pupils should explore changes that are difficult to reverse, for example, burning, rusting and other reactions, for example, vinegar with bicarbonate of soda. They should find out about how chemists create new materials, for example, Spencer Silver, who invented the glue for sticky notes or Ruth Benerito, who invented wrinkle-free cotton.

Note: pupils are not required to make quantitative measurements about conductivity and insulation at this stage. It is sufficient for them to observe that some conductors will produce a brighter bulb in a circuit than others and that some materials will feel hotter than others when a heat source is placed against them. Safety guidelines should be followed when burning materials.

Pupils might work scientifically by:

**carrying out tests to answer questions, for example, 'Which materials would be the most effective for making a warm jacket, for wrapping ice cream to stop it melting, or for making blackout curtains?'*

**They might compare materials in order to make a switch in a circuit.*

**They could observe and compare the changes that take place, for example, when burning different materials or baking bread or cakes.*

**They might research and discuss how chemical changes have an impact on our lives, for example, cooking, and discuss the creative use of new materials such as polymers, super-sticky and super-thin materials.*

History/Geography: Early Islamic Civilisation: What did they achieve?

NC objectives from the curriculum progressions

Children will be taught to:

Historical Knowledge

*learn about significant achievements in the Early Islamic Empire
*learn about the city of Baghdad as the centre of the Early Islamic Empire
*identify this period of history on a chronological timeline, comparing it to other ancient civilisations
*be taught historical vocabulary: civilisation, ancient, AD, BC, century, millennium, caliph, prophet, empire

Historical Concepts

*identify why the empire was able to expand so far and so rapidly
*explore this expansion as part of an overarching theme of imperialism, referring back to the Romans, Anglo-Saxons and Vikings
*evaluate the significance of Early Islamic achievements and their impact on modern life: mathematics, science, literature, philosophy, geography, astronomy, medicine
*make comparisons between life in the Early Islamic Empire and Anglo-Saxon Britain and identify reasons why life in Baghdad was more advanced

Historical Enquiry

*address and devise historically valid questions relating to cause, effect, change and significance
*construct informed responses to questions, involving thoughtful selection and organisation of evidence
*write a letter in role, describing life in Baghdad, prioritising and carefully selecting evidence to include
*describe why there is little evidence of early Baghdad left
*draw conclusions from evidence such as pictures, artefacts and writing

Geographical Knowledge

*locate the modern day countries of the early Islamic civilisation on a map
* identify the position and significance of the Equator; and the Southern and Northern Hemispheres; and the Arctic and Antarctic circles

Geographical Understanding

*identify the significance of Baghdad's location of to its wealth and growth (trade routes)
*describe and understand key aspects of physical geography including: climate zones, biomes and vegetation belts
*describe and understand key aspects of human geography, comparing population density/ settlements in Europe and the UK to the Middle East
*identify the relationship between the natural landscape and human settlement patterns

Geographical Enquiry

*use maps, atlases, globes and digital/computer mapping to locate countries of the Middle East
*use maps, atlases, globes and digital/computer mapping to identify physical and human features of the Middle East: landscape and settlements
*use the eight points of the compass, symbols and keys to build their knowledge of the wider world

English activities/links	Maths activities/links	Outdoor learning/ Visits/Visitors
Explanations	Temperature – measurement and negative numbers Plotting data on graphs – line graphs	Synagogue visit Hartsdown Food Tech Department – DT pizza making Inter-Film Festival, Vue Cinema

Art/DT: DT (Cooking and Nutrition)

Children will:

Design

*explore pizza recipes and examples of pizzas (different types of bases and toppings); where and when they originate from
*generate innovative ideas through discussion and identify a purpose for their dish
*investigate potential ingredients, considering their nutritional value; whether they are grown (grains/pusles/fruit/veg), reared (meat/poultry)or caught (fish); and where they are produced (the UK, Europe or the wider world)

*investigate how seasons may affect the food available and how food is processed into ingredients that can be eaten or used in cooking
* consider how to adapt a recipe to change the appearance, taste, texture or aroma
* carry out research, using surveys, interviews, questionnaires and web-based resources
* identify the needs, wants, preferences and values of particular individuals and groups that their dish will be cooked for
*draw up a specification for their design, indicating the features that will appeal to intended users and how particular parts work (Bake Off examples)
*through discussion, explore, develop and communicate design proposals by modelling ideas, using ICT where appropriate
• make design decisions, taking account of constraints such as time, resources and cost

Make

*develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail (write a recipe)
*select appropriate utensils/equipment and techniques, including kneading and proving dough, explaining choices
*select ingredients, using scientific knowledge about the properties of materials to inform their choice
*use skills in using different tools and equipment safely and accurately
*weigh and measure accurately (time, dry ingredients, liquids)
*apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens
*use finishing techniques such as glazing the crust, serving with garnishes

Evaluate

Start of the unit
* evaluate existing examples of pizzas
- how well products have been designed - how well products have been made - why materials have been chosen - what methods of construction have been used
- how well products work - how well products achieve their purposes - how well products meet user needs and wants - who designed and made the products
- where products were designed and made - when products were designed and made - whether products can be recycled or reused - how much products cost to make
- how innovative products are -how sustainable the materials in products are -what impact products have beyond their intended purpose
*identify criteria that can be used for their own designs

During the unit
*critically evaluate the quality of the design, preparation, cooking and fitness for purpose of their pizza as they design and make

End of the unit
*evaluate their pizza against the original design specification, carrying out appropriate tests (taste pizza and evaluate taste, texture, appearance)

ICT: We are internet researchers and evaluators: research and evaluate information → produce an Ancient Islamic Civilisation Google Slides presentation

Children will be taught:

Computer Science

*how data packets, including web pages, are routed from one computer to another on a separate network, which is also connected to the internet.

Digital Literacy

*about the importance of encrypted (HTTPS) connections when browsing the web and of using strong passwords to protect their identity online.
*about the likely or possible consequences of particular behaviours when using digital technology to search for information, such as using cryptography and passwords.
*to report inappropriate behaviour when using technology in school to their teacher, the network manager or another trusted adult, and that they can discuss any concerns they have with their teacher or other trusted adults in school.
*that they can also report inappropriate behaviour to those running websites which they regularly use, and to ChildLine, CEOP or to the police.
*to evaluate whether particular content, such as a web page, is reliable and whether it has been written from a neutral point of view, without bias.

Information Technology

*to evaluate the quality of information located (text, audio, images and video), looking for bias or questioning assumptions that have been made. BBC Bitesize – Should I trust everything I read on the web?
*to use a common search engine effectively, to search for particular information on the web.
*to use built-in search tools to filter their results, such as by time, location or reading level.
*to use the above skills to be discerning in their selection of information for the content and format of their Ancient Egypt presentation
*how to use features of Google Slides

E-safety - Online Relationships (Project Evolve)

PSHE: Getting On and Falling Out (Anti-bullying and conflict resolution)

Children will be taught:
R12. to develop strategies to resolve disputes and conflict through negotiation and appropriate compromise and to give rich and constructive feedback and support to benefit others as well as themselves
R14. to realise the nature and consequences of discrimination, teasing, bullying and aggressive behaviours (including cyber bullying, use of prejudice-based language, 'trolling', how to respond and ask for help)
R15. to recognise and manage 'dares'
R16. to recognise and challenge stereotypes

French: What is the Date?

Children will be taught how to:
*repeat and recognise the months of the year in French.
*ask when somebody has a birthday and say when they have their birthday.
*say the date in French.
*create a French calendar.
*recognise key dates in the French calendar.

PE

Indoor PE
Gymnastics/Dance (Multi-Ability Focus: Creative)
Outdoor PE
Invasion Games (Netball/Basketball) and Outdoor/Adventurous (Multi-Ability Focus: Physical)

Music

Music Express: Exploring rhythm and pulse, cyclic patterns
Learning to play the violin: Abracadabra

RE: Why do some people think God exists? If God is everywhere, why go to a place of worship?

This unit will enable children to:
*outline clearly a Christian understanding of what God is like, using examples and evidence (A2).
*make connections between how believers feel about places of worship in different traditions (A3).
*outline how and why places of worship fulfil special functions in the lives of believers (A3).
*define the terms theist, atheist and agnostic and give examples of statements that reflect these beliefs (B1).
*express thoughtful ideas about the impact of believing or not believing in God on someone's life (B1).
*give examples of ways in which believing in God is valuable in the lives of Christians, and ways in which it can be challenging (B2).
*select and describe the most important functions of a place of worship for the community (B3).
*give examples of how places of worship support believers in difficult times, explaining why this matters to believers (B2).
*comment thoughtfully on the value and purpose of places of worship in religious communities (B1).
*present different views on why people believe in God or not, including their own ideas (C1).
*enquire into what some atheists, agnostics and theists say about God, expressing their own ideas and arguments, using evidence and examples (C1).
*present ideas about the importance of people in a place of worship, rather than the place itself (C1).
*find out about what believers say about their places of worship (C2).