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| Science | |
| Breadth of Study | Working Scientifically |
| Milestone Indicators | Plan enquiries, including recognising and controlling variables where necessary.  • Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work.  • Take measurements, using a range of scientific equipment, with increasing accuracy and precision.  • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models.  • Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.  • Present findings in written form, displays and other presentations.  • Use test results to make predictions to set up further comparative and fair tests.  • Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments. |
| Breadth of Study | All Living Thing and their habitats. |
| Milestone Indicators | • Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.  • Describe the life process of reproduction in some plants and animals. |
| Breadth of Study | Animas inc Humans: old age and life cycle of human (SRE) |
| Milestone Indicators | Describe the changes as humans develop to old age. |
| Breadth of Study | Properties and changes in materials: grouping inc electrical and thermal |
| Milestone Indicators | Compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets.  • Understand how 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, oxidisation and the action of acid on bicarbonate of soda. |
| Breadth of Study | Earth and Space/ moon/ sun-Earth-moon are spherical  Day and night |
| Milestone Indicators | Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.  • Describe the movement of the Moon relative to the Earth.  • Describe the Sun, Earth and Moon as approximately spherical bodies.  • Use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky. |
| Breadth of Study | Forces: Gravity/ air resistance/ friction/.levers/pullies/gears |
| Milestone Indicators | **Forces**  • Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.  • Identify the effect of drag forces, such as air resistance, water resistance and friction that act between moving surfaces.  • Describe, in terms of drag forces, why moving objects that are not driven tend to slow down.  • Understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs.  • Understand that some mechanisms including levers, pulleys and gears, allow a smaller force to have a greater effect. |
| History | |
| Breadth of study | Ancient Greece: Life and influence of our world.  Mayans |
| Milestone Indicators | • Use appropriate historical vocabulary to communicate, including:      • dates      • time period      • era      • chronology      • continuity      • change      • century      • decade      • legacy.  • Use literacy, numeracy and computing skills to a exceptional standard in order to communicate information about the past.  • Use original ways to present information and ideas.  • Describe the main changes in a period of history (using terms such as: social, religious, political, technological and cultural).  • Identify periods of rapid change in history and contrast them with times of relatively little change.  • Understand the concepts of continuity and change over time, representing them, along with evidence, on a time line.  • Use dates and terms accurately in describing events.  • Identify continuity and change in the history of the locality of the school.  • Give a broad overview of life in Britain from medieval until the Tudor and Stuarts times.  • Compare some of the times studied with those of the other areas of interest around the world.  • Describe the social, ethnic, cultural or religious diversity of past society.  • Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children.  • Use sources of evidence to deduce information about the past.  • Select suitable sources of evidence, giving reasons for choices.  • Use sources of information to form testable hypotheses about the past.  • Seek out and analyse a wide range of evidence in order to justify claims about the past.  • Show an awareness of the concept of propaganda and how historians must understand the social context of evidence studied.  • Understand that no single source of evidence gives the full answer to questions about the past.  • Refine lines of enquiry as appropriate |
| Geography | |
| Breadth of study | On-going focus  1 locate the world’s countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities (decide on countries to learn)  7 use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world  Continents and oceans / Northern and southern hemisphere/ lines of longitude and latitude  Year 5 Foci:  4 understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, South America (Mayans and Greeks)  8 use fieldwork to observe, measure and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies – Mapping to camp |
| Milestone Indicators | Collect and analyse statistics and other information in order to draw clear conclusions about locations.  • Identify and describe how the physical features affect the human activity within a location.  • Use a range of geographical resources to give detailed descriptions and opinions of the characteristic features of a location.  • Use different types of fieldwork sampling (random and systematic) to observe, measure and record the human and physical features in the local area. Record the results in a range of ways.  • Analyse and give views on the effectiveness of different geographical representations of a location (such as aerial images compared with maps and topological maps - as in London’s Tube map).  • Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.  • Name and locate the countries of North and South America and identify their main physical and human characteristics  Identify and describe the geographical significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, and time zones (including day and night).  • Understand some of the reasons for geographical similarities and differences between countries.  • Describe how locations around the world are changing and explain some of the reasons for change.  • Describe geographical diversity across the world.  • Describe how countries and geographical regions are interconnected and interdependent  • Describe and understand key aspects of:  • physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes and the water cycle.  • human geography, including: settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies.  • Use the eight points of a compass, four-figure grid references, symbols and a key (that uses standard Ordnance Survey symbols) to communicate knowledge of the United Kingdom and the world.  • Create maps of locations identifying patterns (such as: land use, climate zones, population densities, height of land) |
| RE | |
| Breadth of study | Christianity: The Bible  Hinduism – see Cornwall Agreed Syllabus |
| Milestone Indicators | • Explain why different religious communities or individuals may have a different view of what is right and wrong.  • Show an awareness of morals and right and wrong beyond rules (i.e. wanting to act in a certain way despite rules).  • Express their own values and remain respectful of those with different values  Recognise and express feelings about their own identities. Relate these to religious beliefs or teachings.  • Explain their own ideas about the answers to ultimate questions.  • Explain why their own answers to ultimate questions may differ from those of others.  Explain some of the different ways that individuals show their belief  • Explain the practices and lifestyles involved in belonging to a faith community.  • Compare and contrast the lifestyles of different faith groups and give reasons why some within the same faith may adopt different lifestyles.  • Show an understanding of the role of a spiritual leader   Explain how some teachings and beliefs are shared between religions.  • Explain how religious beliefs shape the lives of individuals and communities |
| PE | |
| Breath of study | Core Skills: running/jumping /throwing in isolation and in combination  Team Games- competitive ( Decide upon: badminton/basketball/cricket/football/hockey/netball/rounders/tennis across KS2)  Athletics and gymnastics – flexibility/ strength/technique  Performance dance  OAA: Camp  Improvement of personal performance  Swimming:  Swim 25 m  Range of strokes  Self-rescue  (Refer to REAL PE for planning) |
| Milestone Indicators | • Select appropriate equipment for outdoor and adventurous activity.  • Identify Breadth of Studysible risks and ways to manage them, asking for and listening carefully to expert advice.  • Embrace both leadership and team roles and gain the commitment and respect of a team.  • Empathise with others and offer support without being asked. Seek support from the team and the experts if in any doubt.  • Remain Breadth of Studyitive even in the most challenging circumstances, rallying others if need be.  • Use a range of devices in order to orientate themselves.  • Quickly assess changing conditions and adapt plans to ensure safety comes first  Combine sprinting with low hurdles over 60 metres.  • Choose the best place for running over a variety of distances.  • Throw accurately and refine performance by analysing technique and body shape.  • Show control in take off and landings when jumping.  • Compete with others and keep track of personal best performances, setting targets for improvement  Swim over 100 metres unaided.  • Use breast stroke, front crawl and back stroke, ensuring that breathing is correct so as not to interrupt the pattern of swimming.  • Swim fluently with controlled strokes.  • Turn efficiently at the end of a length.  Create complex and well-executed sequences that include a full range of movements including:      • travelling      • balances      • swinging      • springing      • flight      • vaults      • inversions      • rotations      • bending, stretching and twisting      • gestures      • linking skills.  •Hold shapes that are strong, fluent and expressive.  • Include in a sequence set pieces, choosing the most appropriate linking elements.  • Vary speed, direction, level and body rotation during floor performances.  • Practise and refine the gymnastic techniques used in performances (listed above).  • Demonstrate good kinesthetic awareness (placement and alignment of body parts is usually good in well-rehearsed actions).  • Use equipment to vault and to swing (remaining upright)  ComBreadth of Studye creative and imaginative dance sequences.  • Perform expressively and hold a precise and strong body Breadth of Studyture.  • Perform and create complex sequences.  • Express an idea in original and imaginative ways.  • Plan to perform with high energy, slow grace or other themes and maintain this throughout a piece.  • Perform complex moves that combine strength and stamina gained through gymnastics activities (such as cartwheels or handstands   Choose and combine techniques in game situations (running, throwing, catching, passing, jumping and kicking, etc.).  • Work alone, or with team mates in order to gain points or Breadth of Studysession.  • Strike a bowled or volleyed ball with accuracy.  • Use forehand and backhand when playing racket games.  • Field, defend and attack tactically by anticipating the direction of play.  • Choose the most appropriate tactics for a game.  • Uphold the spirit of fair play and respect in all competitive situations.  • Lead others when called upon and act as a good role model within a team |
| Art | |
| Breadth of study | Use sketch books to record observations and review ideas  Improve art and design techniques including drawing/painting/sculpture  Learn about artists /architects/ designers  Van Gogh/ Aboriginal art/ TBC  TBC: Arts to study |

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| Milestone Indicators | Develop and imaginatively extend ideas from starting points throughout the curriculum. • Collect information, sketches and resources and present ideas imaginatively in a sketch book. • Use the qualities of materials to enhance ideas. • Spot the potential in unexpected results as work progresses. • Comment on artworks with a fluent grasp of visual language  Paint  • Sketch (lightly) before painting to combine line and colour. • Create a colour palette based upon colours observed in the natural or built world. • Use the qualities of watercolour and acrylic paints to create visually interesting pieces. • Combine colours, tones and tints to enhance the mood of a piece. • Use brush techniques and the qualities of paint to create texture. • Develop a personal style of painting, drawing upon ideas from other artists.  Collage  Mix textures (rough and smooth, plain and patterned). • Combine visual and tactile qualities. • Use ceramic mosaic materials and techniques  Sculpture:  Show life-like qualities and real-life proportions or, if more abstract, provoke different interpretations. • Use tools to carve and add shapes, texture and pattern. • Combine visual and tactile qualities. • Use frameworks (such as wire or moulds) to provide stability and form  Textiles  Show precision in techniques.  • Choose from a range of stitching techniques.  • Combine previously learned techniques to create pieces.  Digital  Enhance digital media by editing (including sound, video, animation, still images and installations  Artist Study  Give details (including own sketches) about the style of some notable artists, artisans and designers. • Show how the work of those studied was influential in both society and to other artists. • Create original pieces that show a range of influences and styles |

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| DT | |
| Breadth of study | Design criteria to inform the design of innovative, functional, appealing products that are fit for purBreadth of Studye, aimed at particular individuals or groups  generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design  Make select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately  select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities  Evaluate investigate and analyse a range of existing products  evaluate their ideas and products against their own design criteria and consider the views of others to improve their work  understand how key events and individuals in design and technology have helped shape the world  Technical knowledge  apply their understanding of how to strengthen, stiffen and reinforce more complex structures  understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]  understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]  apply their understanding of computing to program, monitor and control their products.  Cooking and Nutrition:  Healthy diet  Prepare and cook a variety of predominantly savoury dishes  Understand seasonality: know how ingredients are grown/caught/reared and processed.  DT Focus:  Health Granola bars  Catapults  ? |
| Milestone Indicators | Food  Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).  • Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.  • Demonstrate a range of baking and cooking techniques.  • Create and refine recipes, including ingredients, methods, cooking times and temperatures  Materials  • Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).  • Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper)  Construction  Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding  Mechanics   Convert rotary motion to linear using cams.  • Use innovative combinations of electronics (or computing) and mechanics in product designs  Design/Make/Evaluate  Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).  • Make products through stages of prototypes, making continual refinements.  • Ensure products have a high quality finish, using art skills where appropriate.  • Use prototypes, cross-sectional diagrams and computer aided designs to represent designs  Inspiration from History  Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.  • Create innovative designs that improve upon existing products.  • Evaluate the design of products so as to suggest improvements to the user experience |
| Music | |
| Breadth of Study | Play in solo and ensemble using voices and instruments (decide upon instruments)  Improve and comBreadth of Studye music  Listen with attention recall sounds with increasing aural memory  Use and understand musical notations  Appreciate live and recorded music from a variety of traditions and from great composers and musicians  Develop an understanding of a history of music – through music assemblies |
| Milestone Indicators | Perform  Sing or play from memory with confidence.  • Perform solos or as part of an ensemble.  • Sing or play expressively and in tune.  • Hold a part within a round.  • Sing a harmony part confidently and accurately.  • Sustain a drone or a melodic ostinato to accompany singing.  • Perform with controlled breathing (voice) and skillful playing (instrument)  Compose  Create songs with verses and a chorus.  • Create rhythmic patterns with an awareness of timbre and duration.  • Combine a variety of musical devices, including melody, rhythm and chords.  • Thoughtfully select elements for a piece in order to gain a defined effect.  • Use drones and melodic ostinati (based on the pentatonic scale).  • Convey the relationship between the lyrics and the melody.  • Use digital technologies to comBreadth of Studye, edit and refine pieces of music.  Transcribe  Use the standard musical notation of crotchet, minim and semibreve to indicate how many beats to play.  • Read and create notes on the musical stave.  • Understand the purBreadth of Studye of the treble and bass clefs and use them in transcribing comBreadth of Studyitions.  • Understand and use the # (sharp) and ♭ (flat) symbols.  • Use and understand simple time signatures.  Describe  Choose from a wide range of musical vocabulary to accurately describe and appraise music including:      • pitch      • dynamics      • tempo      • timbre      • texture      • lyrics and melody      • sense of occasion      • expressive      • solo      • rounds      • harmonies      • accompaniments      • drones      • cyclic patterns      • combination of musical elements      • cultural context.  • Describe how lyrics often reflect the cultural context of music and have social meaning |
| PSHE |  |
|  | On-line Safety  RSE  Families and people who care for me:  Caring Friends  Respectful Relationships  On-line safety/ online relationships/ Internet Safety and Harms  Physical health and fitness  Healthy eating  Drugs/Alcohol/Tobacco  Health and prevention  Basic first aid  Being Safe  Mental Wellbeing  SEE PSHE 2019 guidance for break-down |
| Computing |  |
| Breath o fStidy | Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.  • Use sequence, selections and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.  • Use logical reasoning to explain how a simple algorithm works, detect and correct errors in algorithms and programs.  • Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.  • Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.  • Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information. |
| Milestone Indicators | Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner.   Choose the most suitable applications and devices for the purposes of communication.  • Use many of the advanced features in order to create high quality, professional or efficient communications.  Collaborate with others online on sites approved and moderated by teachers.  • Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems.  • Understand and demonstrate knowledge that it is illegal to download copyrighted material, including music or games, without express written permission, from the copyright holder.  • Understand the effect of online comments and show responsibility and sensitivity when online.  • Understand how simple networks are set up and used.  • Use the Boolean operators  () < ()  () = ()  () > ()  ()and()  ()or()  Not()  to define conditions.  • Use the Reporter operators  () + ()  () - ()  () \* ()  () / ()  to perform calculations.  Pick Random () to ()  Join () ()  Letter () of ()  Length of ()  () Mod () This reports the remainder  after a division calculation  Round ()  () of ().  Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions.   Use IF THEN ELSE conditions to control events or objects.  Set events to control other events by ‘broadcasting’ information as a trigger.  Combine the use of pens with movement to create interesting effects.  Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.  Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.  Change the position of objects between screen layers (send to back, bring to front)   Set IF conditions for movements. Specify types of rotation giving the number of degrees   Design and write programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.  • Use sequence, selections and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.  • Use logical reasoning to explain how a simple algorithm works, detect and correct errors in algorithms and programs.  • Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.  • Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.  • Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information. |
| Foreign Languages | |
| Breadth of Study | In the chosen modern language:          • Speak        • Read        • Write    • Look at the culture of the countries where the language is spoken.  • If an ancient language is chosen, read, translate and explore the culture of the time. |
| Milestone Indicators | Read and understand the main points and some of the detail in short written texts.  • Use the context of a sentence or a translation dictionary to work out the meaning of unfamiliar words.  • Read and understand the main points and opinions in written texts from various contexts, including present, past or future events.  • Show confidence in reading aloud, and in using reference materials.  Write short texts on familiar topics.  • Use knowledge of grammar (or pitch in Mandarin)  to enhance or change the meaning of phrases.  • Use dictionaries or glossaries to check words.  • Refer to recent experiences or future plans, as well as to everyday activities.  • Include imaginative and adventurous word choices.  • Convey meaning (although there may be some mistakes, the meaning can be understood with little or no difficulty).  • Use dictionaries or glossaries to check words.  Understand the main points and opinions in spoken passages.  • Give a short prepared talk that includes opinions.  • Take part in conversations to seek and give information.  • Refer to recent experiences or future plans, everyday activities and interests.  • Vary language and produce extended responses.  • Be understood with little or no difficulty.  • Give detailed accounts of the customs, history and culture of the countries and communities where the language is spoken.  • Describe, with interesting detail, some similarities and differences between countries and communities where the language is spoken and this country. |