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**Year 5 Route Map**

**2021-22**

***Creative Arts Route Map***

Adapted from National Society for Education in Art and Design and Gareth Webb, School Support Consultant resources

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| **GENERATING IDEAS**  |
| Engages in open ended research and exploration in the process of initiating and developing their own personal ideas. |
| Uses previous experience, observations and testing of material to generate ideas. |
| **DEVELOPING, PLANNING AND COMMUNICATING IDEAS** |
| Uses mind maps to record a range of ideas and selects the best with a clear purpose for their outcome. |
| Draws up a specification for their outcome. |
| Develops a clear plan for how to make a product including planning if first attempt fails. |
| Uses results of research and investigation when developing ideas. |
| **KNOWLEDGE AND UNDERSTANDING** |
| Researches and discusses the ideas and approaches of a various artists, craftspeople, designers and architects, taking account of their particular cultural context and intentions. |
| Describes the processes they are using and how they hope to achieve high quality outcomes. |
| **MAKING** |
| Confidently investigates and exploits the potential of new and unfamiliar materials. |
| Uses their acquired technical expertise to make work which effectively reflects their ideas and intentions. |
| **WORKING WITH EQUIPMENT AND MATERIALS**  |
| Selects appropriate materials, tools and techniques. |
| Measures and marks out accurately. |
| Uses tools and equipment safely and accurately. |
| Applies rules for hygiene / safety. |
| Creates a good-quality finish to the product. |
| Returns all equipment, cleaned, at the end of a session. |
| **EVALUATING** |
| Regularly analyses and reflects on their progress taking account of what they hoped to achieve. |

***Computing Route Map***

Adapted from Purple Mash resources

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| **DIGITAL CITIZENSHIP** |
| Is aware of online protocols to keep themselves safe |
| Knows what Childnet SMART CREW is |
| Knows who to report to if they are upset by something online |
| **ALGORTHIMS AND PROGRAMMING** |
| Explains what Object, Action, Output, Control and Events are |
| Explains what a variable is in programming |
| Sets / changes the variables appropriately |
| Creates a game which has a timer and score pad |
| Uses variables to control the objects in the game |
| Creates loops using the timer and if/else statements |
| **PRESENTING IDEAS** |
| Understands what is meant by concept maps, stage, nodes and connections |
| Creates a basic concept map |
| Presents concept map to an audience |
| **QUESTIONNING AND SEARCHING** |
| Searches a database in order to answer questions correctly |
| Creates their own database on a topic of their choice |
| Adds records to their database |
| Knows what a database field is and can correctly add field information |
| **SPREADHSEETS** |
| Creates a formula in a spreadsheet to convert m to cm |
| Uses a spreadsheet to calculate frequency of letters |
| Creates simple formulae that use different variables |
| Uses a spreadsheet to model a real-life situation |
| **CREATIVITY** |
| Reviews and analyses a computer game |
| Designs the setting for the game so that it fits with the selected theme |
| Uploads images or uses the drawing tool appropriately |
| Designs characters for the game |
| Makes their game more unique by selecting appropriate options |
| Writes informative instructions |
| Adapts models to alter the shape while maintaining form |
| Explores how to edit polygon 3D models to design a 3D model for a purpose |
| Prints a design as a 2D net to create a 3D model |

***English Route Map***

Adapted from Ros Wilson’s Standards for Reading and Writing Assessments and Cambridge University’s Oracy Skills Framework

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| **WRITING** |
| Uses informal and formal styles with confidence. |
| Produces well-structured and organised writing. |
| Is beginning to use dialect and colloquialism on purpose. |
| Concludes work appropriately across different genres. |
| Writing is neat, legible and joined. |
| Handwriting is sometimes adapted for effect. |
| All previous punctuation is used accurately. |
| Uses bullet points and parenthesis (hyphens and brackets). |
| Spells the large majority of Year 5 words accurately. |
| Uses the passive voice appropriately. |
| Varies sentence length and word order. |
| Uses literary features for effect (alliteration, onomatopoeia, figurative language, dialect, metaphor and simile). |
| Uses organisational devices to adapt to the reader (bullet points, sub-headings, underlining, contents). |
| Uses a wide range of conjunctions, adverbs and prepositions. |
| **READING** |
| Refers to the text to support predictions and opinions. |
| Identifies the points of view of some texts and how this impacts on the reader. |
| Explains a character’s motives throughout a story using evidence from the text to back up their opinion. |
| Explains structural devices used in a text. |
| Retrieves and collates key ideas and information from a range of sources. |
| Identify why a long-established novel may have retained its appeal. |
| Recognises which characters the writer wants the reader to like or dislike and what techniques they have used to achieve this. |
| **ORACY** |
| Uses tone and fluency of speech for emphasis. |
| Gives a well-structured and organised speech on a subject of their choice which may include reading from a script. |
| Attempts to use rhetoric and metaphor in speech. |
| Summarises the views and opinions of others. |

***Humanities Route Map***

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| **HISTORY**  |
| **CHRONOLOGY** |
| Places current period of study on a timeline in relation to other eras studied |
| Knows and sequences key events of time studied |
| Relates current work to previous work |
| Makes comparisons between different times in history |
| **RANGE AND DEPTH OF KNOWLEDGE** |
| Studies the difference between how life was different for people due to class or gender |
| Examines causes and results of great events and references their impact on people |
| Compares life in the early part of the time studied with the latter |
| **INTERPRETATION** |
| Compares accounts of the same event from different sources |
| Offers some reasons for different versions of events |
| **ENQUIRY** |
| Is beginning to know the difference between primary and secondary sources |
| Selects relevant sections of information  |
| Builds information to create a fuller picture of time being studied |
| **GEOGRAPHY** |
| **LOCATIONAL KNOWLEDGE** |
| Locates and names the 7 kingdoms in Anglo Saxon England |
| Compares take-off and landing sites around the world |
| Locates and names the main countries and cities in Europe |
| Compares land use from the past with the present |
| **PLACE KNOWLEDGE** |
| Compares regions looking for the similarities and differences through the study of human and physical geography of a forest in the UK , in Europe and in Asia. |
| **UNDERSTANDING** |
| Understands the types of settlement in the UK |
| Understand how trade links are formed |
| References coasts, rivers, climate zones etc. in their work |
| **SKILLS** |
| Uses four-figure grid references on OS maps and the Key |

PLEASE SEE KNOWLEDGE ORGANSIERS FOR KEY FACTS TO LEARN

***Languages Route Map***

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| **FRENCH** |
| **KNOWS** |
| The days and months of the year |
| Christmas traditions |
| The Alphabet |
| The names for different pets |
| Easter traditions |
| The names of countries |
| **CAN** |
| Say hello and greet people |
| Say their name, age and date of birth |
| Name and use appropriate colours |
| Name the different members of their family |
| Say what they like and dislike  |
| Describe their physical appearance and personality. |

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| **SPANISH** |
| **KNOWS** |
| Some countries in the world that speak Spanish  |
| About the Mexican festival ‘Cinco de mayo’ |
| How to respond to classroom instructions  |
| Numbers 1-31 and up to 100 in tens |
| The days of the week |
| What happens at Christmas in Spain |
| **CAN** |
| Introduce themselves and say how old they are |
| Join in with the Spanish alphabet |
| Introduce a family member including their names & age |
| Say what musical instrument they play |
| Give simple opinions about different music genres |
| Describe the physical appearance of others |
| Say what they have for breakfast and at what time |
| Order snacks in a café including a range of ice cream flavours |
| Ask the cost of something in a café |
| Talk about sports and their free time activities |
| Write a short text about their free time activities  |

***Maths Route Map***

Adapted from White Rose Maths Resources

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| **KNOW** |
| Place value headings up to millions |
| Recall prime numbers to 19 |
| The first 12 square numbers |
| Percentage and decimal equivalents for ½, ¼, 1/5, 2/5, 4/5 |
| Rough imperial to metric conversions |
| Roman numerals up to 1000 |
| Angles are measured in degrees |
| Angles in one whole turn total 360$°$, in half a turn total 180$°$ |
| Area of a rectangle = length x width |
| **DO** |
| Identify multiples and factors of a number |
| Count forwards and backwards through zero |
| Read, write, order and compare numbers to at least 1,000,000 |
| Round any number to the nearest million, hundred thousand, ten thousand, thousand, hundred, ten. |
| Use rounding to estimate and check calculations |
| Solve multi-step addition, subtraction, division and multiplication problems |
| Use column addition and subtraction with numbers of any size |
| Multiply a three- or four-digit number by a two digit number using long multiplication |
| Divide numbers of up to four-digits by a single-digit using short division and interpret the remainder appropriately |
| Multiply and divide whole numbers and decimals by 10, 100 and 1000. |
| Identify, name and write equivalent fractions |
| Recognise mixed numbers and improper fractions |
| Compare and order fractions whose denominators that are multiples of the same number |
| Add and subtract fractions with the same denominator and denominators that are multiples of the same number |
| Multiply proper fractions and mixed numbers by whole numbers |
| Write decimals as fractions  |
| Round decimal numbers with two decimal places to the nearest whole number and to one decimal place |
| Read, write, order and compare numbers with up to three decimal places |
| Understand that per cent relates to number of parts per hundred |
| Convert between adjacent metric units of measure for length, capacity and mass |
| Solve problems converting between units of time |
| Measure and calculate the perimeter of composite rectilinear shapes in cm and m |
| Measure and draw angles |
| Calculate and compare the area of rectangles using standard units |
| Estimate volume |
| Use the properties of rectangles to find missing lengths and angles |
| Identify 3D shapes from 2D representations |
| Draw given angles and measure them |
| Identify, describe and represent the position of a shape following a reflection or translation |
| Complete, read, interpret and represent information in tables and graphs including timetables and line graphs |

***Music Route Map***

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| **KNOWLEDGE** |
| Musical cultures differ around the world. |
| Major and minor chords |
| Metre – simple and compound time signatures and the upbeat. |
| Compositional devices (ostinato, pedal, inversion). |
| **SKILLS** |
| Plays instruments appropriate to the musical cultures studied. |
| Reads and writes music in styles of the cultures studied using compositional devices learnt. |
| Uses our singing names and signs to invent new phrases and songs. |
| Plays a range of singing games and rhymes to reinforce understanding. |
| Sings a range of increasingly complex songs from memory and from notation. |
| Sings a range of two part songs from memory and from notation. |

***PE Route Map***

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| **PHYSICAL ME** |
| Uses a combination of skills confidently in sport specific contexts. Performs a range of skills fluently and accurately in practice situations.Is beginning to effectively transfer skills and movements across a variety of activities and sports. Performs a variety of skills consistently and effectively in challenging or competitive situations. |
| **Games** | **Gymnastics** |
| Travels with a ball showing changes of speed and directions using either foot or hand. | Performs a range of rolls including backwards roll consistently. Performs a range of actions and agilities with consistency, fluency and clari­ty of movement. |
| Uses a range of techniques when passing, *e.g. high, low, bounced, fast, slow.* | Makes similar or contrasting shapes on the floor and apparatus, working with a partner combine actions and maintains the quality of performance when performing at the same time as a partner. |
| Keeps a game going using a range of different ways of throwing. | Develops a longer and more varied movement sequence demonstrating smooth transitions between action and combines them to make a sequence. |
| Strikes a ball with intent and throws it more accurately when bowling and/or fielding. |  |
| **Dance** | **Athletics** |
| Responds to a variety of stimuli showing range of actions performed with control and fluency. | Sustains and maintains running speed, improve on personal target, organises and manages an athletic event well. |
| Experiments with a wide range of actions, varying and combining spatial patterns, speed, tension and continuity when working on their own, with a partner and in a group. | Chooses a pace for running, plans and carries through an event. |
| Uses different compositional ideas to create motifs incorporating unison, canon, action and reaction, question and answer. |  |
| **PERSONAL ME** |
| Views all new challenges as opportunities to learn and develop. Recognises strengths and areas of improvement. |
| Creates a personal learning plan and adapts when necessary. Accepts critical feedback and makes improvements. |
| Remembers, practises and combines longer, more complex dance phrases. |
| **SOCIAL ME** |
| Gives and receives sensitive feedback to improve myself and others. Negotiates and collaborates appropriately. |
| Involves others and motivate others in a group. Seeks advice from a variety of sources. |
| Plays effectively a competitive net/wall game keep and use rules they are given. |
| **COGNITIVE ME** |
| Has a clear idea of how to develop their own and others work. Recognises and suggests patterns of play which will increase chance of success and develops methods to outwit opponents. |
| Reviews, analyses and evaluates my own and others strength and areas of improvement. Reads and reacts to different game situations as they develop. |
| Tries to make things difficult for their opponent by directing the ball to space, at different speeds and heights. |
| Judges how far to run to score points in throwing and jumping events. |
| **CREATIVE ME** |
| Responds imaginatively to different situations, adapting and adjusting skills and movements. |
| Is beginning to effectively disguise actions to bring about success. Uses variety and creativity to engage an audience. |
| Creates and performs dances using a range of movement patterns in response to a range of stimuli and thinks about character and narrative ideas created by the stimulus, and responds through movement. |
| **HEALTHY ME** |
| Self- selects and performs appropriate warm up and cool down activities. Identifies possible dangers when planning activities. |
| Explains how individuals need different types and levels of fitness to be more effective in their role. Plans and follows a basic fitness programme. |

***PSHCE Route Map***

*Adapted from PSHE Association*

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| **HEALTH AND WELLBEING** |
| Positive and negative habits and choices that can effect lifestyle and what might influence these |
| The impact of regular exercise on mental health |
| Good hygiene habits are important for everyone and can limit the spread of infection |
| How medicines, used responsibly, contribute to health |
| The benefits and risks of sun exposure and keeping safe from sun damage |
| The importance of balancing time online with other activities |
| That feelings can change over time and intensify |
| That talking about feelings and mental health is part of taking care of yourself |
| Identifies personal strengths and achievements as well as managing setback and perceived failures |
| Identifies the internal reproductive organs and how the process of puberty links to human reproduction |
| The physical and emotional changes that take place during puberty including menstruation and wet dreams |
| How increasing independence brings opportunities and responsibility |
| Why age restrictions exist and how they are important |
| Why it is important to take medicines correctly |
| The importance of keeping personal information private including online and how to react if worried |
| Recognise that there are laws surrounding the use of legal drugs and some drugs are illegal to own |
| **RELATIONSHIPS** |
| Know that attraction can take many forms – emotional, romantic, sexual |
| Know how marriage or civil partnership is a legal declaration of commitment but that people can love and care for each other and live apart |
| Know that forcing anyone to marry against their will is a crime |
| Know what a positive healthy friendship is and recognise if a friendship is making them feel unsafe or uncomfortable |
| Discuss strategies for recognising and managing peer influence  |
| Strategies to respond to hurtful behaviour experienced or witnessed |
| Think about privacy and personal boundaries recognising these may be different for different people |
| Recognise appropriate physical contact and how to respond safely |
| Recognise that personal behaviour can impact on others |
| Listen and respond respectfully to a wide range of people |
| **LIVING IN THE WIDER WORLD** |
| Recognise that human rights are there to protect everyone |
| Think about the shared responsibility of protecting the environment |
| Value different contributions people make to the community |
| Know what a stereotype is and how they can negatively influence behaviour |
| How information on the internet is ranked, selected and targeted |
| How text and images in the media can be manipulated |
| Recognise that people have different attitudes towards spending and saving |
| Know that people’s spending choices can impact others |
| Know about ways of keeping money safe and that it can come with some risks |
| Think about what might influence people’s decisions about a career |
| Know that some jobs are paid more than others which may have an impact on choice |

***Religious Education Route Map***

Standards for Primary Religious Education as recommended by Nottingham Roman Catholic Diocese

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| **KNOWLEDGE AND UNDERSTANDING**  |
| Makes links between most religious stories and people they have shared/learnt about and beliefs, and begin to describe them to show understanding. |
| Uses a developing religious vocabulary to give reasons for most religious actions and symbols, within different liturgies. |
| Gives religious reasons for most actions by believers and begin to show how they shape believers lives. |
| **LIVING FAITH** |
| Makes many links to show how feelings & beliefs affect their behaviour & that of others and begin to show how own and others’ decision are informed by beliefs and values. |
| Compares most of their own & other people’s ideas about questions that are difficult to answer. |
| Begins to engages in discussion about questions of life, in light of religious teaching. |
| **SKILLS** |
| Expresses a point of view and gives many reasons for it. |
| Makes a link to many sources that support a point of view. |
| Begins to arrive at judgements. |

***Science Route Map***

Adapted from ISEB resources

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| **PLANNING AND PREDICTING** |
| Recognises that scientific ideas are based on evidence and creative thinking. |
| Makes predictions based on their own scientific knowledge. |
| Suggests methods of testing including a fair test. |
| Suggests how to collect evidence. |
| Selects suitable equipment. |
| **INVESTIGATING AND OBSERVING**  |
| Carries out a fair test. |
| Explains why it is fair. |
| Shows understanding of why observations and measurements need to be repeated. |
| Selects information from provided sources. |
| **RECORDING, ANALYSING AND EVALUATING** |
| Communicates findings in a variety of ways. |
| Communicates findings in tables, bar charts and line graphs. |
| Uses ICT to communicate findings where appropriate.  |
| Identifies simple trends and patterns. |
| Offers explanation for trends and patterns. |
| Draws conclusions and communicates them in appropriate scientific language. |
| Suggests improvements in their work giving reasons . |
| **KNOWLEDGE** |
| Knows the differences in life cycles between a mammal, an amphibian, an insect and a bird |
| Knows the life process of reproduction in some plants and animals |
| Knows about the main stages of the human life cycle |
| Knows ways in which frictional forces, including air resistance, affect motion (e.g. streamlining cars, friction between tyre and road) |
| Knows that the unit of force is the newton and that forces can be measured using a force meter (newton meter) |
| Knows that when objects (e.g. a spring, a table) are pushed or pulled, an opposing pull or push can be felt |
| Knows how to measure forces and identify the direction in which they act |
| Knows about some mechanisms, including levers, pulleys and gears, allowing a smaller force to have a greater effect |
| Knows the relative positions of the Earth, Sun and planets in the solar system |
| Knows how the position of the Sun appears to change during the day, and how shadows change as this happens |
| Knows that the Earth orbits the Sun once each year, and that the Moon takes approximately 28 days to orbit the Earth |
| Can simply describe the water cycle |
| Can compare everyday materials and objects on the basis of their material properties, including hardness, strength, flexibility and magnetic behaviour, and to relate these properties to everyday uses of the materials |
| Knows about reversible changes, including dissolving, melting, boiling, condensing, freezing and evaporating |
| Can use knowledge of solids, liquids and gases to decide how mixtures might be separated |