## Year 4 – Curriculum Map for 2019/20: Autumn Term – aprox. 14 weeks

### Learning Questions: 'How have things changed from the past?' 'What different kinds of places are there?'

**General guidance:** also see 'Guide to Planning and Teaching Using the Learning Toolbox'; suggestions here have developed from staff and pupil ideas through reviews and other discussions – this is not a final document but will need to grow and adapt over time with experience.

Each project should last around half a term.

### Initial experience:

- Keep it very open at this stage: e.g. walk in the park; looking at the school environment; looking at cloud patterns; look at patterns in the home; looking at patterns on fabric, leaves etc. Use photos, sketching & notes to record observations, ideas & questions.

### The Learning Toolbox:

- By Year 4, children should already have a reasonable sense of the different learning approaches in each of the 6 learning toolsets and the relevant language. We should be looking for more independence in children explaining what learning approaches would be useful and why.
- Increasingly, children should be able to refer to approaches they have used in the past and how well they worked. They should be able to give examples of each toolset: Communication, Thinking, Creativity, Physical, Social/Emotional and Learning about Learning.
- They will need support in assessing how effective they are at the different approaches and identifying what practice or new skills are needed.
- Continue to notice and draw attention to the Toolsets *during* the learning e.g. 'Those questions showed great Thinking,' 'When you tried a different way to solve that maths problem, that was creative.'
- In planning the project with the children, even though the children are more used to the Toolbox, you may still need to find ways to demonstrate and exemplify the key tools in each toolset that you might need – e.g. for Communication, ask 'Who could we e-mail about the Tudors?'

### Evaluation:

- Periodically, the teacher needs to reflect on the general progress of the project with the children and partner teacher.

### How to approach the Learning Question:

**'How have things changed from the past?'**

- The key concepts here are 'change' and 'the past'. In Year 3, the children explored 'What kinds of changes are there?' This project should build on their ideas about change and look at change across a longer span of time, particularly from Tudor times.
- The project is history-led in that it needs to explore Tudor times in some depth; however, the concept of change over time is relevant to most areas of the curriculum.

**'What different kinds of places are there?'**

- This can be interpreted in different ways across the curriculum. Although it lends itself to geographical study, it is not a major geographical enquiry i.e. it does not have to focus on a particular locality. Instead, the project should develop children's understanding of the kinds of aspects of places that can be compared (some can be measured, some are opinions etc).

### Assessment:

- Once the main learning tools have been selected for the project, discuss with the children how they will know if they have used them well and what skills they need e.g. 'We need to interview an artist. Let's think about what makes a good interview (e.g. active listening, preparing questions, recording responses) and what skills we need to practise (e.g. note-taking).' Also discuss how to capture examples of each tool
- Highlight the tools selected on the IWB and make notes – save for future reference.
- During the project, ensure that there are opportunities for reflection, discussion and journal entries during learning and at the end of particular sections of learning e.g. talking to a learning partner about how well we communicated.
- Use the all Toolsets as starting points for thinking about how well the learning went e.g. 'People found the questions I asked today interesting – this shows I am thinking well.'
- Written teacher comments should be developmental (next steps) & address misconceptions.

## Learning Presentations:

- Plan the purpose, type, timing and audience at the start of the project with the children. The focus is on sharing the process and products of learning.
- Presentations of learning can be during the project rather than at the end. You could elicit the audience's suggestions as to how to continue the project.

## Timings/timetables:

- Time can be devoted to the different subjects according to what is appropriate for the learning and realistic e.g. Geography in this project could be one session weeks on mapping.
- What matters is whether the children achieve valuable learning outcomes in every subject, not how much time is spent. However, learning in depth requires sufficient time so judgements need to be made carefully. In order for a balanced curriculum, choices will have to be made about what the learning priority is for the children at any given time.
- Maximising project-based Mathematics and English and linking subjects where appropriate reduces time pressure.
- Ensure your weekly timetable has a good balance across the Toolbox.

## Other mini-projects:

- **Poetry performance project:** the week before half term. Each year group selects a poem for performance. Once the children have learnt the poem by heart, the focus should be on bringing the poem to life through vocal expression, variety, actions, movements etc. *Success criteria for the performance:* audible and clear; captures the interest of the audience; all children actively involved.
- **Christmas project:** learning question: 'How does the Christmas story present different places?' to be explored as part of the main learning project. This will culminate in a learning presentation to the parents towards the end of term. This does not have to be a large-scale production – it can simply present the learning in an interesting and engaging way e.g. using an art form (dance, drama, narrative writing) to show the children's ideas and observations about the settings in the story e.g. travelling in the desert; busy Bethlehem; the calm stable etc.

## Resources:

- **Classrooms:** involve the children in the management and maintenance of resources e.g. table leaders, monitors etc. Regularly check that resources are complete and in good condition. Create a culture in which everyone looks after the classroom and recognises that the resources are there to support everyone's learning.
- **Central stores:** think through and check the resources needed well ahead of the lesson – if there are crucial resource gaps, see the relevant Learning Team Leader. Collect your resources before the lesson and return them as soon as you no longer need them. If resources are lost or damaged, inform the relevant Learning Team Leader.
- **Internet and KCA HUB:** make maximum use of this resource to enrich the curriculum e.g. photos, paintings, locations, films etc. Follow the Internet Use Policy – promote safe use but children need as much access as possible.
- **Library Service:** there is a wide range of artefacts and topic-related books that can enrich a project.
- **Trips and visits:** these are to enrich children's experience and stimulate thinking. They provide collaborative opportunities for observation, gathering information, note-taking, photography, sketching, interviewing etc. If the visit is at the start of a learning project, this should be seen as a stimulus to thinking – the initial experience should still leave room for children to come up with their own ideas and questions. Trips and visits need to planned to lead to purposeful learning activities in the classroom. Children need to learn to communicate their findings from trips through blogs, journals, assembly presentations, leaflets, displays etc. Every learning project benefits from at least one visit outside the school gates, whether it is geographical fieldwork, historical research on local KX buildings, making a collection of environmental colours or a visit to a specific exhibition or museum.

| LEARNING PROJECTS | GUIDANCE |
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| | **ENGLISH – COMMUNICATION TEAM** |
| **'How have things changed from the past?'**<br>**Narrative:** Stories with Historical Settings – Power of Reading: Children of Winter – Berlie Doherty<br>**Suggested activities:**<br>▪ Explore what makes the setting distinctive? What tells you that this is set in the past?<br>▪ Explore how the children feel to find themselves in the past? How would you feel? Explore how it must have felt to be separated from your family. How would we deal with a 'plague' nowadays?<br>▪ Write a setting for the same story set in the present. Compare how children are treated in the story with how children are treated nowadays. Write letters from the characters in the past to their modern selves.<br>**Non- Fiction:** Explanation Texts:<br>▪ Opportunities for extended writing and research in History e.g. researching Eyam on the internet.<br>**Whole school poetry performance event before autumn half-term:** your choice of poem from Power of Reading text '100 Best Poems for Children – Roger McGough'; this can relate in some way to the learning project but does not have to. | ***General:***<br>▪ You do not need an hour-long, discrete English lesson every day – you do need a balance of writing, reading and speaking & listening across the curriculum.<br>▪ Every day, whether discretely or part of the learning project, there should be some shared reading or writing, guided reading or writing and some independent reading or writing activities.<br>▪ There is a plain A4 book for all writing and writing-related activities; reading is tracked through PACT booklets and guiding reading folders; phonic passports allow children and parents to get a sense of and celebrate their own progress.<br>▪ **Power of Reading:** some texts are not linked to the learning projects directly and are separate; where possible, link Power of Reading to the learning project.<br>▪ Texts can be articles, e-mails, web pages, diaries, adverts, newspapers, teacher's own writing as well as books.<br>***Discrete:***<br>▪ Skills & knowledge can be learnt/practised separately – not as part of the learning project – but not for an hour daily.<br>▪ **Phonics and Spelling:** you will need to practise phonics and explore word families and other features of spelling and word use. It is vital that this is *applied* in children's reading and writing.<br>▪ **Reading:** there need to be times when children choose their own texts to read. Classroom libraries offer the opportunity for children to take responsibility for their own reading choices both for reading in school and as part of PACT. Book marks provide guidance for parents on supporting their child's reading at home. 20 minutes sustained silent reading daily (PACT book) provides an opportunity for the adults to assess reading skills and manage PACT (track books etc). It is essential that PACT folders are brought in every day.<br>▪ **Writing:** some extended writing opportunities come from Power of Reading some will come from non-project activities e.g. reports on events, book reviews or personal narratives of their own choice.<br>***Project-based:***<br>▪ **Phonics and spelling:** Any reading and writing within the project is an opportunity to apply knowledge and skills (phonics, spelling) – children need to be reminded or supported to do this.<br>▪ **Reading:** shared and individual reading using project-related texts is an opportunity for exploration at text, sentence and word level. This helps children to apply the sub-skills.<br>▪ **Writing:** project-related writing should address different genres with a focus on both accessibility (spelling, grammar, handwriting, basic sense making, etc) and impact (purpose, interest, structure etc). All subject areas are opportunities for extended writing; keep the focus on what makes quality writing whatever the context or purpose e.g. writing about different places in geography or comparing past and present in history.<br>***Resources:***<br>▪ **Classroom books:** each class has a set of texts allocated that is recorded on the central system. Further texts can be selected from the library by the teacher to boost the class stock during the year – at least every half term – these must be processed on the system.<br>▪ **Library books:** Children can also choose individual books through a periodic visit to the school library as a class but these must be processed on the system. Children must not be unsupervised in the library.<br>▪ **Reading Areas:** every class needs an attractive, well-organised reading area to promote the enjoyment of reading. Class librarians should be trained to maintain this area. It should be used e.g. during individual reading time or guided reading etc.<br>▪ **Every class should have:** Power of Reading guidance book; Letters and Sounds; Grammar for Writing; Spelling Bank; Y2-3 Exemplification for Spelling; Guided Reading Folder; Writing APP folder.<br>▪ **Writing resources:** a tray with pots for pencils, pens, rulers, coloured pencils and sharpeners needs to on every group's table and maintained by the children. |
| **'What different kinds of places are there?'**<br>**Narrative:** Power of Reading – Stories set in Imaginary Worlds – I was a Rat! – by Philip Pullman<br>**Suggested activities:**<br>▪ Describe the setting of the story – what makes it unusual?<br>▪ Explore the different locations in the story and create a story map. Label the locations with descriptive language – devise symbols to show the mood at each location.<br>**Non- Fiction:** Explanation Texts:<br>Opportunities for extended writing and research in Geography:<br>**Suggested activities:**<br>▪ How does the setting of this story differ from that of 'Children of Winter'? (urban/rural). How do the setting descriptions differ? Consider which setting you would prefer to be in and why?<br>▪ What are the key features to consider when comparing places? E.g. population, green space, land use, access to rivers or sea, weather, buildings etc. | |

## MATHEMATICS – THINKING TEAM

***Both projects can touch on most mathematical strands.***

**'How have things changed from the past?'**

**Simulation:** a voyage by a Tudor explorer in the 1500s. Imagine that you are captain of a Tudor sailing ship exploring the World. Work collaboratively to plan supplies. The journey can be simulated using dice to control events e.g. roll a six = 'a hurricane, 10% of your food is lost overboard.'
**Counting and understanding number:** estimating how much food/water is required per person.
**Number facts:** using number facts in estimation.
**Calculating:** calculating supplies needed.
**Measuring:** using old units of measure for supplies e.g. gallons, pints, pounds, and exploring their metric equivalent.
**Handling Data:** keeping track of supplies over time; keep a ship's log to show how much has been used and how much is left at different points in the journey.

**'What different kinds of places are there?'**

**Counting and understanding number:** recognising the size of numbers involved in different scales used on maps 1:10 (e.g. map of the classroom) compared to 1:10000 (e.g. map of London); explore impact of changing scale using e.g. Google Earth and when you might use different scales.
**Number facts:** multiplication by 10, 100, 1000 etc (in using scales with maps).
**Calculating:** calculating the length of features on maps drawn to scale e.g. x1000.
**Understanding shape:** how do maps look different when you change the scale? Estimating distances and areas of different places using maps. Exploring routes – shortest/longest routes, routes avoiding certain features. Routes round the perimeter of different areas.
**Measuring:** explore scale in mapping; measuring routes on a map then calculating the real distance using scale.
**Handling Data:** recording data about different places to create a database; presenting and interpreting the data.

### *General:*

- You do not need an hour-long, discrete Mathematics lesson every day – you do need a balance of skill development and practice, oral and mental maths, problem-solving, investigations and maths across the curriculum. There needs to be a balance across the seven strands: using and applying maths, counting and understanding number, knowing and using number facts, calculating, understanding shape, measuring and handling data.
- The Framework provides the structure and progression in planning mathematics by allowing you to map out the content and objectives clearly. However, the Framework must be seen as a starting point and resource rather than a strait jacket.
- Dialogue is central to effective mathematics: paired talk, group discussion, questioning and explaining methods and reasoning are vital.
- Collaborative problem-solving and investigations – using meaningful contexts – promote mathematical thinking and the construction of shared meanings.
- Puzzles, games and challenges are motivating, can be chosen to reinforce particular skills and knowledge and allow for collaborative learning (e.g. Skemp's mathematical games).
- Look at the current unit within the Framework; if possible, find contexts within the learning project or at least ones that are meaningful and purposeful. Annotate the unit plan to show the sequence of teaching; you can use the learning project medium planner if you need to change the unit plan significantly.
- Written teacher comments in books should focus on developmental advice (next steps) and address any ongoing misconceptions.

### *Skill development/practice:*

- Although Mathematics skills often needs to be taught discretely, look for opportunities to use the classroom, school or home environment as a context e.g. sorting resources, grouping children etc. or find cross-curricular opportunities to apply skills e.g. measurement in Science and cookery.
- Mental and oral starters should be focused (5-10 minutes) and active.
- Mental and oral maths can be used to: rehearse skills; recall knowledge; refresh previous learning; refine methods and procedures; read vocabulary, symbols etc; reason with evidence.
- Recording: there should be a range of types of recording, not just 'sums'. There needs to be self and peer assessment and notes alongside the maths.
- Skill development and practice is recorded usually in the squared books (though sometimes calculations should be carried out on plain paper so that children are required to use their understanding of place value!).

### *Problem-solving/enquiry:*

- All mathematics can be explored through collaborative problem-solving and enquiry.
- Children need to learn how to organise collaborative activity – they need to listen to each other, to ensure that everyone contributes, to challenge each other's thinking, to ask for evidence and to explain reasoning. They also need to seek agreement as they work. These expectations need to be discussed, reinforced and modelled by the teacher.
- Recording: the process of the enquiry should be clear from the recording; children's thinking should be made explicit including questions they may have or conclusions they have drawn; there should be self and peer assessment.
- Problem solving and enquiry is recorded usually in plain books.

### *Resources:*

- Classroom resources for mental work: number fans, flip-flops, counting stick, place value cards, number lines, whiteboards, are all essential interactive resources for oral and mental work. They should be used regularly, varying approaches. Children should become used to using these resources efficiently and thoughtfully.
- Other resources need to be accessible, labelled (words and pictures) and well-organised: multilink, unifix, various sorting objects, set loops, compare bears, calculators, small and large dice, 2D and 3D shapes, money, rulers etc.
- Central resources: Dienes, Cuisenaire, weighing scales and weights, timers, measuring cylinders etc.

## *SCIENCE – PHYSICAL TEAM*

### Science

**'How have things changed from the past?' *Children need to…***

**Electricity -Pupils should be taught to:**

♣ identify common appliances that run on electricity
♣ construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
♣ identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
♣ recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
♣ recognise some common conductors and insulators, and associate metals with being good conductors.

- **Suggested activities:**
  Learn that batteries and mains electricity are the most widely used sources of electricity and that electricity can be dangerous so care needs to be taken. Design a poster to highlight the potential dangers of electrical appliances at home/school.

- Children make a simple circuit and recognise when/why a circuit will not work. They understand that a circuit needs a source of power and a device that uses that power to make it work. Use pictures to represent components of an electrical circuit in drawings.

- Children carry out an enquiry to find out which materials are good electrical conductors and which are good electrical insulators. Where might these materials be used? They then discover what to do if someone has an electric shock.

- Relate the electrical conductivity of materials to their uses in wires and plugs and find out how to wire a plug successfully. Understand that wires are coloured to keep people who are colour blind safe. Study the phenomenon of static electricity.

- Discover that switches are used to break an electrical circuit and that switches are used to stop

### *General:*

- Children need to explore and challenge their current understanding of scientific concepts and develop the appropriate language based upon understanding.
- Dialogue is fundamental in helping children to explore, develop and clarify their ideas.
- **Science teaching needs to develop key skills:**
  1. PLANNING: asking questions, using first-hand experience and information to answer questions, make predictions, identify fair and unfair tests;
  2. COLLECTING AND USING EVIDENCE: following instructions for safety, exploring using the senses, measuring, recording, communicating findings;
  3. EVALUATING EVIDENCE: comparing and interpreting data, identifying patterns, comparing to predictions and explaining outcomes, evaluating and presenting learning

### *Skill and knowledge development:*

- Science skills and knowledge can sometimes be taught discretely but look for opportunities to use the classroom, school or home environment as a context e.g. materials in the school, growing etc. or find cross-curricular opportunities to apply skills e.g. knowledge of light in growing.
- Shorter sessions can introduce children to specific scientific skills e.g. observing using a magnifier. The need for careful recording of observations (drawings, photos, diagrams, measurements, notes and descriptions etc) can be emphasised as well as careful and accurate use of scientific vocabulary.
- Key knowledge can be introduced in shorter sessions through practical demonstrations and direct experience.
- Recording: focus on children's scientific thinking rather than just factual information. Science should be recorded in the Project Book.

### *Scientific enquiry:*

**National Curriculum: During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:**

♣ asking relevant questions and using different types of scientific enquiries to answer them
♣ setting up simple practical enquiries, comparative and fair tests
♣ making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
♣ gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
♣ recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
♣ reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
♣ using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
♣ identifying differences, similarities or changes related to simple scientific ideas and processes
♣ using straightforward scientific evidence to answer questions or to support their findings.

### *Growing:*

- During the year, your year group is responsible for maintaining a planter. This autumn will involve planting, watering and tending garlic.
- Before planting garlic, children should observe them (drawing, photo, measuring, labelled diagram etc); they should predict when they think the garlic will show signs of growth; discuss how to plant the garlic; create labels for the garlic.
- You will need to have a group of gardeners to plant the onions either with the teacher or TA.
- Every few weeks, a group of gardeners can check on the garlic.

### *Resources:*

- Classroom resources for scientific work (to be purchased if not currently available): hand lenses, magnifiers, microscope, containers, sorting trays. Children should have access to some scientific, especially observational, equipment at all times.
- Central resources: force meters, datalogging equipment, pooters, pipettes, beakers, mirrors, lenses, prisms, light-box, torches, electrical apparatus, anatomy models, teeth hygiene materials, varied materials, ramps etc. Some non-fiction books available in the library and from the Islington Library Service.

and start an electrical appliance or to change how it works. There are various forms of switches. The children design, make and test their own switch.

- Set up an enquiry to find out how changing the number of components in a series circuit can make a bulb brighter or dimmer. Swap the bulbs for motors or buzzers and make further enquiries. Predict, use fair tests and draw conclusions.

- Discuss Benjamin Franklin, Thomas Edison and Michael Faraday's contribution to our understanding of electricity – Literacy link

**'What different kinds of places are there?'** ***Children need to understand…***

**Change of state - Pupils should be taught to:**

♣ compare and group materials together, according to whether they are solids, liquids or gases

♣ observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)

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

**Suggested activities:**

- Recap Y3 solids, liquids, gases. What are they made up of? How can we change from one to the other?
- Investigate evaporation and what this means, where you might experience this in everyday life.
- Question and plan an experiment of where evaporation happens the quickest, different liquids, times, temperatures etc
- Investigation and explanation of condensation
- What is the water cycle and how evaporation and condensation are a part of this

| Computing – CREATIVE TEAM | |
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| **'How can we get even better at using the learning toolbox?'**<br>**ICT focus:** Modelling effects on screen<br>**Suggested activities:**<br>▪ Use the Learning Toolbox to assess our skills in programming using Logo.<br><br>**'How have things changed from the past?'**<br>**ICT focus:** Handling data<br>**Suggested activities:**<br><br>**Children understand that changes can be measured, recorded and graphed over time.**<br>-They understand that data can be collected more efficiently by a data logging device compared with manual methods<br>-They investigate physical change through monitoring data<br>-They understand that sensors can be used to solve problems and answer specific lines of enquiry<br><br>- They can create a database to follow a line of enquiry, and graph the results of this. They use key words to search for and select appropriate information.<br>- They begin to make choices about how to present data to solve a specific problem (e.g. to show different heights in the class)<br>- They talk about the use of ICT to present, organise and amend data and describe how this helps them with their work<br>- They use simple spreadsheets to organise and present data, knowing that spreadsheets can carry out a range of calculations and functions<br><br>**'What different kinds of places are there?'**<br>**ICT focus:** Modelling and Simulation<br>**Suggested activities:**<br><br>Children use computer simulations and modelling tools to explore ideas and extend their thinking.<br>- They use ICT to explore design alternatives<br>- They use simulations to support their work, changing | ***General:***<br>▪ Specific skills outlined in the ICT scheme should be applied in other curriculum areas/projects. The ICT suite should be used for a minimum of 45 minutes per week in KS1 and 60 minutes in KS2 (outlined in the ICT timetable). Further time in the suite can be booked using the ICT diary in the staffroom.<br>**ICT learning at KCA focuses on the following key skills:**<br>▪ Communication and handling information. (e.g. mail, mangodata, web casting, digital blues, KCA HUB)<br>▪ Designing, developing, exploring and evaluating models of real and imaginary situations (e.g CD ROMS, internet sites, blogs)<br>▪ Measuring and controlling physical variables and movement (e.g. scientific sensory logs, roamers, bee-bots, logo)<br>▪ Making informed judgements about ICT applications and information presented through use of ICT.<br>▪ Exploring attitudes and giving views towards ICT.<br>**ICT as a cross-curricular tool**<br>▪ Learners at KCA should apply ICT capability to support and enhance their learning across the curriculum.<br>▪ Through continuous access to well-organised ICT, learners at KCA can choose to use ICT to assist their learning at any time, just as they might switch on a light when needed.<br>▪ Teachers must plan opportunities for learners to make informed decisions on the best ICT for a particular learning task.<br>▪ Learners must have opportunities for learning collaboratively using ICT. The IWB, a classroom computer, digital cameras and other technology should be used as tools to support collaborative learning in almost every lesson.<br>**Health and Safety**<br>▪ It is the responsibility of staff and children at KCA to know and follow the rules for computer and Internet use.<br>**Moving towards the future – the KCA HUB and the Virtual Learning Toolbox:**<br>▪ Staff must promote a positive, forward-looking attitude to ICT. Every learner including staff to have a personal web space as part of the KCA HUB. The KCA HUB aids communication & helps make connections across the learning community.<br>Virtual Toolbox: examples of effective learning using the tools in the Learning Toolbox will be collected and uploaded to the Virtual Toolbox. This will provide an invaluable bank of exemplars to help children assess their own learning skills and to select learning tools during the planning phase. The Virtual Toolbox communicates our view of effective learning to parents.<br><br>**<u>National Curriculum: Pupils should be taught to:</u>**<br>♣ design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts<br>♣ use sequence, selection, and repetition in programs; work with variables and various forms of input and output<br>♣ use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs<br>♣ 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 ♣ use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content<br>♣ select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information<br>♣ use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact**.**<br><br>***Resources:***<br>▪ Classroom resources for ICT: it is essential that every class has the capacity to capture learning for assessment and for the Virtual Toolbox. Children need access to a digital camera, digital video and recording equipment (e.g. speakerphones etc). Control technology (beebots, Roamers etc) should be available in Foundation and KS1. IWBs are to be used by children during group work rather than just as a presentation tool.<br>▪ Central resources: lap-tops; Suite: PCs, IWB, e-microscopes, scanner; dataloggers (Science); quizdoms, visualisers. |

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| variables to produce desired results. Know that a graphical model can be used to explore alternatives & patterns Use a graphical modelling tool or drawing package to create designs and test alternatives.<br>- They create simple simulations or games to challenge others, creating rules testing them and making changes as necessary. | |
| **PHYSICAL EDUCATION – PHYSICAL TEAM** | |
| **PE does not lend itself to linking to the learning projects this term.**<br><br>**1st half:**<br>• **Games-** striking/fielding games focus<br>• **Gym- (Julia) Apparatus** create and perform fluent sequences using apparatus<br>**2nd half:**<br>• **Games-** Problem solving & Inventing games (Invasion focus)<br>• **Dance-** create and perform dances using a range of movement patterns, including those from different places<br><br>*Refer to Val Sabin for games and dance ideas* | ***General:***<br>▪ In P.E., children develop their knowledge, understanding and skills through activities that involve them in planning, performing and evaluating their work. These processes are reflected in the following six aspects of P.E.: *planning and performing, linking actions, improving performance, relationships, making judgements and health related exercise*<br>▪ Make links where possible, into other curriculum areas (e.g. link two art forms dance and poetry – creating a poem about colour and use as a stimulus for dance)<br>▪ Design learning experiences for the needs of all children, differentiating where necessary. All children must participate in PE.<br>▪ Ensure children wear an appropriate P.E. kit for all lessons (white or blue t-shirt, shorts, appropriate footwear and no jewellery). Staff should at least wear suitable footwear (if possible, change into a PE kit).<br>▪ Promote positive attitudes of sensitivity, co-operation, competition and tolerance.<br>▪ Encourage the drinking of water during all physical activities and promote the eating of nutritional and healthy snacks after physical activity in accordance with KCA's Food Policy (no chocolate, crisps or fizzy drinks).<br>▪ Provide for lots of activity and maximum involvement – do not play full-sided games (e.g. 11-a-side football) where the weaker players will have little contact with the ball. Use skill practice e.g. grids and small groups.<br>***Resources:***<br>▪ Central resources: a range of equipment is available in the PE store. Children are not allowed in the PE store unsupervised.<br>▪ Lunchtime supervisors and Play Leaders are responsible for maintaining lunchtime and playtime resources (each class has a box of wet play equipment to be maintained by class monitors). |

## ART – CREATIVE TEAM

***As the D&T for the first project will be more time-consuming, Art could be given more of a focus on the second project on places. However, both projects give rich opportunities for art.***

***Sketchbook focus: How do we use a sketchbook to collect visual and other information to help develop our ideas about change and places?***

***Suggested activities:***

- Introduce and discuss the ground rules for sketchbooks (add or amend using children's ideas).

**Change:**

- Build on Year 3 work on change: sketch examples of change in different contexts e.g. building works, children at different ages, different expressions showing changing emotions etc. Look for greater detail in observations.

**Places:**

- Make observations of different places e.g. during an environmental walk. Record colours, pattern, buildings, people etc. Make notes and take photos or film. Try to capture the mood of each place and look for telling detail i.e. things that say something meaningful about the place.

**Drawing focus: Change:**

**Suggested activities:**

- Discuss what design means. How does design of an object affect its use?
- Explore how objects have changed over time. What features of different designs do I like and why? Can I redesign a familiar object and give reasons for my changes?

**Drawing and painting focus: Places:**

**Suggested activities:**

- Use watercolour to create different washes as backgrounds for drawings of places. How can you create different moods?
- Choose a small local place (an area of the school, part of a building etc). Make detailed observations. Create a painting that evokes the mood of that place. Create a second painting that transforms the place in some way e.g. different colour range, old building changed to modern etc.

### *General:*

- Children need to develop artistic skills and techniques but also *apply* these creatively.
- **The key elements of Art are:** pattern, texture, colour, line, tone, shape, form, and space.
- Each artistic medium used (painting, drawing, textiles, clay sculpture etc) needs to be explored and played with in order that children can use it creatively. Some exploratory sessions e.g. mark-making, getting used to the texture and 'feel' of clay, experimenting with different weaving techniques etc will help to develop confidence and a sense of the options available in different media.
- Most artistic work starts with some sort of stimulus and observation. There can be plenty of observational work before moving on to a creative piece e.g. observing the leaves of different plants (colour, pattern, texture etc) could lead to a creative piece drawing on one element and transforming it e.g. the pattern of a leaf transformed into an abstract design.
- Art stimuli could be something seen, felt, heard or touched; something to stimulate the memory or imagination.
- **Colour:** children can explore primary (red, blue, yellow) and secondary colours (orange, green, violet) that can be made by mixing two primary colours. Limit the range of colours available to encourage exploration. The double primary system limits colours to: warm – brilliant yellow, crimson, brilliant blue; cold – lemon yellow, vermillion, turquoise plus white and Prussian blue (instead of black).
- **Textiles:** children should explore the qualities of different materials e.g. rough, smooth, shiny, stretchy etc. Textile practices include: fabric construction (e.g. card weaving), dyeing, surface decoration, printing, 3D work.
- **Sketchbooks:** these are a key part of art teaching – children should be developing their sketching skills and learning how to use a sketch book to record observations, ideas, colours, patterns etc. Sketchbooks should include notes and comments and questions from peers and adults.
- **Key purposes of sketchbooks:** to explore objects in detail; to capture observations of people, animals and places; to develop ideas for an artwork; to develop ideas for a structure or sculpture; to explore techniques e.g. mark-making, shading, showing light, dark and shadow; to explore the elements of art including colours e.g. recording all the different shades of green leaves.
- **Sketchbook Ground rules:** it is essential that children know, discuss and refer back to the ground rules for using sketchbooks:
    1. *Be clear about the purpose of what you are doing in the sketchbook.*
    2. *When collecting observations from the environment or objects, always look closely and carefully.*
    3. *Use different media to collect observations: pencil, crayon, photos etc.*
    4. *Stick things in that might help e.g. leaves, fabric, papers etc.*
    5. *Be creative – make your sketchbook interesting to look at.*
    6. *Make notes and collect other people's comments and suggestions.*

### *Resources:*

- Classroom resources: we need to develop effective art resource areas in every classroom – paints, a range of paintbrushes, palettes, water pots, pastels or chalks, black pens, drawing pencils, charcoal, crayons, a range of papers, paste, glue and glue sticks, digital camera etc.
- Central resources: clay and tools, artefacts, sculptural materials, visual resources, art books, printing and rollers, sponge brushes, inks, watercolour paints, lino-cutting equipment, collage materials, modelling materials, textile materials and equipment e.g. needles, plasticine, photography equipment etc.
- Environmental resources: the school building, the local environment, museums, galleries, places of interest.
- Artists-in-residence: Daniel Baker (Cubitt Artists) – visual arts including graphic arts and animation; Chloe Purcell (Little Angel) – puppetry.

## DESIGN and TECHNOLOGY – PHYSICAL TEAM

**Learning question: 'How can we design, build and evaluate a sailed boat to carry settlers to Virginia?'**

**Suggested activities:**

- Research and explore the key features of effective boats: buoyancy (e.g. air below the waterline), balance (e.g. keel), watertight hull (e.g. waterproof joins) etc. Test out hull shapes and keels with plasticine test boats.
- Identify suitable reclaimed materials to build a boat e.g. polystyrene boxes or plastic bottles (catamaran style) for the hull; wooden dowel for mast; plastic from packaging for keel; fabric for sail etc.
- Design, build and evaluate boats – if possible, test at the Camden Boat club (opposite the Academy).
- Compare model boats to the design of Tudor ships e.g. Mary Rose.

***General:***

- **The three types of D&T activity are:**
    1. Investigating and Evaluating Products;
    2. Focused Practical Tasks;
    3. Design and Making Activities.
- **The classic design journey:** 1 – problem identified; 2 – early ideas generated; 3 – develop and research ideas; 4 – choose the idea to be made; 5 – making; 6 – testing and evaluating; 7 – modifying and improving.
- **Materials:** children need experience in working with different materials – wood, metal, plastic, paper, fabric etc – exploring the way different materials can be joined, shaped and finished.
- **Children need to explore these aspects of materials:**
    1. the different physical and aesthetic qualities of materials.
    2. how different properties of different materials lead to different uses.
    3. how different properties of materials require different tools and techniques (e.g. joining, linking, strengthening).

**Key concepts/techniques of D&T:**

- **Energy sources:** batteries, elastic bands (twisted or stretched), human energy (pushes and pulls), water power (water wheel), pneumatic or hydraulic (syringe pumping air or water), gravity (a counter-weight to lift something).
- **Dynamic structures:** mechanisms with moving parts such as see-saw, levers, pulleys and gears.
- **Static structures:** buildings, towers, sculptures and models.
- **Control:** mechanical and electrical devices to control movement e.g. switches, levers, sensors etc.
- **FOOD TECHNOLOGY:** We need to develop children's skills, knowledge and understanding of cooking in a systematic way that allows them to build progressively as they move through the school. We are working towards at least 12 hours per year of cookery experiences for every child.
- **The 5 key aspects of food technology:** Food Hygiene; Nutrition; Properties of Food (how food changes, how to prepare different foods – measuring, mixing, cooking, preserving etc); Tasting and Testing; Production Processes.
- **COOKING: 3 core recipes (minimum required)** Chapatti and chatni; raisin, sultana and cherry scones; twice-baked cheesy potatoes.

***Resources:***

- **Central:** should include craft knives, steel rulers & mats, construction tools, wood, plastics, card, glue guns, bench hooks, saws, drills, materials for wheels & axles, wire, propellers, motors, pulleys, gears, syringes (for hydraulics & pneumatics) etc.

## HISTORY – COMMUNICATION TEAM

**'How have things changed from the past?'**

**Enquiry: '**What would strike you most if you went back to Tudor times?'

**Suggested activities:**

- Create timeline to show how Tudor times relate to now.
- How different was life in Tudor London to now? Research health, hygiene, clothes, food, education etc. Visit London Museum, Hampton Court etc. Look at portraits, pictures, letters etc.
- How were Tudor people different – how were they the same?
- Compare the role of the monarch then and now. Does Elizabeth II make real decisions? Did Henry VIII?

***General:***

- **The 5 key elements of history:** chronology; historical knowledge and understanding; historical interpretation; historical enquiry; organisation and communication.
- Children need to ask questions about aspects of the past & think about whether/how they can be answered. Some questions will be factual e.g. 'When was Henry VIII born?' others will be opinion e.g. 'What did people think about Henry VIII?' Factual questions can be researched on the internet. Opinion-type questions need to be investigated using evidence e.g. looking at portraits of Henry VIII.
- **Chronology:** relating periods of history to children's own lifespan and those of their families e.g. Henry VIII became king 500 years ago which is more than 50 of my lifetimes. Explore a person's life or a series of events e.g. the key stages in Henry VIII's rule.
- **Knowledge and understanding:** being able to talk or write about a historical figure – when and where they lived; what they achieved; their life's work; to talk or write about events or a series of events. Where there is a meaningful purpose for the historical investigation (e.g. creating a classroom museum), the knowledge and understanding comes alive rather than being inert facts.
- **Historical interpretation:** exploring how we can say things about the past – using different sources of evidence and understanding what they tell us. Recognising that evidence can be from different perspectives e.g. Elizabeth I's speeches give you her point of view but not what other people thought. Photographs, paintings can give a false impression. Primary

**New curriculum:**

- A study of an aspect or theme in British history that extends pupils' chronological knowledge e.g. culture, exploration and health.
- The changing power of monarchs using case studies such as Henry VIII and Elizabeth I.
- -Changes in an aspect of social history, such as religion and the Reformation.
- Were they successful rulers? Was it a fair society? How has society changed?

Link – Power of Reading text (Children of Winter) to the Stuarts, The Plague, Review The Great Fire of London (From year 2). How did the Plague spread?

sources are from the time itself or directly from people involved. Secondary sources are removed from the event or time e.g. books, letters written by those indirectly involved. Children need not to believe everything they read – whether primary or secondary source.

- **Historical enquiry:** generate interesting questions that will lead to in-depth enquiry e.g. 'What was it like to be a child during Elizabeth I's rule?'
- **Organisation and communication:** learning how to collect information, ideas, evidence etc and present it clearly in writing, verbally or through pictures, diagrams, maps, tables etc.

**National curriculum:**

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 and 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.

***Resources:***

- **Artefacts, books, photos, films:** sourced largely from Islington Library Services, the internet and children's homes.
- **Environmental resources:** the school, local buildings, museums, galleries, local people, staff etc.

## GEOGRAPHY – COMMUNICATION TEAM

**'What different kinds of places are there?'**

**Enquiry:** Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time

**Suggested activities:**

- Revisit biomes, how do they affect the way we and animals live? What habitats are created?
- Revisit explorers (Francis Drake from Y2 etc)
- -Link with English topic 'Children of Winter'
- Derbyshire > Look at geographical features of counties in the UK
- Draw maps to show population change and land use over time.

***General:***

- **The 4 key elements:** places; patterns & processes; environmental relationships and issues; geographical enquiry and skills.
- **Places:** Ask questions about aspects of local/global places. Begin to identify key features and make comparisons.
- **Patterns and processes:** exploring why places are as they are, why people live where they do, how places have changed and why, why businesses and other amenities are located where they are, impact of weather and other physical conditions.
- **Environmental relationships and issues:** exploring children's and other people's different views about the local environment and change; the impact of environmental change e.g. pollution, climate change, recycling and waste etc. Exploring how to manage the environment e.g. promoting bicycle use and walking to school.
- **Enquiry and skills:** generating questions worth investigating. Make direct observations about places and the environment and use maps, atlases and other secondary sources. Use simple equipment e.g. anemometer (wind measure).

**Recording:** notes, ideas, questions, plans for enquiries, sketch maps, observations and journals from fieldwork, data collected e.g. questionnaires, traffic count, tables and charts (link to Handling data). Geographical conclusions and thinking can be used for some meaningful purpose and presented persuasively as a leaflet for a particular audience, a web blog, a poster, a letter to local politicians etc.

**National Curriculum:**

**Location knowledge**

- 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
- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

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| | **Place knowledge**<br>▪ 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, and a region within North or South America<br>▪<br>***Resources:***<br>▪ **Maps, atlases, plans, photos, films:** sourced largely from Islington Library Services, the internet and children's homes.<br>▪ **Environmental resources:** fieldwork in the school grounds, locality, trips, local people etc. Weather instruments etc. |
| **MUSIC – CREATIVE TEAM** | |
| **'How has music changed over time?'**<br>**Suggested activities:**<br>• Listen to Tudor music e.g. Dowland songs, Greensleeves etc.<br>• Listen to Tudor dances and explore the rhythms e.g. pavane.<br>**'What different kinds of places are there?'**<br>**Suggested activities:**<br>• Create a class composition evoking different settings. Each group has a contrasting place to portray in music.<br><br>Orchestra in the Age of Enlightenment project – Baroque dance project linked with Barnard Park – details to be confirmed. | ***General:***<br>▪ Music will be taught during PPA by a specialist music teacher. .<br>▪ **Composition and performance:** in Nursery and Reception, specialist singing teaching is provided; five choirs support singing across the school; there are fortnightly singing assemblies in KS2. Alongside PPA, teachers should promote music in class where there is a link to the project e.g. listening to Tudor music.<br>▪ **Instrumental tuition:** Year 4 and 5 – cellos and violins – Years 1-3 recorders. Other children are involved in Suzuki violin or flute taught by external tutors (paid for with some subsidised places).<br>▪ **Listening and appraising:** there are many opportunities in learning projects to develop children's skills in listening closely to music, commenting and responding using different media.<br>***Resources:***<br>▪ **Central:** a range of tuned/untuned instruments. Recordings for listening & appreciation. |
| **PSHE – THINKING TEAM** | |
| **PSHE links to the learning project:**<br>**Suggested activities:**<br>**Changes:**<br>• How has the way children are treated changed since Tudor times? Is it all better? How has the treatment of women and girls changed?<br>**Places:**<br>• How do different places impact on how people behave? How do people survive in difficult or challenging environments e.g. desert, Arctic etc?<br>**Other PSHE themes to be addressed through the curriculum and, where necessary, discretely:**<br>• **Classroom rules:** Exploring choices<br>• **Looking after myself:** About Tobacco<br>• **Making a difference:** School roles and me<br>• **Living Together** | ***General:***<br>▪ Many of the themes of PSHE can be addressed in the day-to-day practice and organisation of the class and school e.g. hygiene through washing hands before lunch; identity by exploring languages spoken at home etc.<br>▪ **During key stage 2** pupils learn about themselves as growing and changing individuals with their own experiences and ideas, and as members of their communities.<br>▪ They become more mature, independent and self-confident. They learn about the wider world and the interdependence of communities within it.<br>▪ They develop their sense of social justice and moral responsibility and begin to understand that their own choices and behaviour can affect local, national or global issues and political and social institutions.<br>▪ They learn how to take part more fully in school and community activities.<br>▪ As they begin to develop into young adults, they face the changes of puberty and transferring to secondary school.<br>▪ They learn how to make more confident and informed choices about their health and environment; to take more responsibility, individually and as a group, for their own learning; and to resist bullying.<br>▪ **Personal learning** is about developing a sense of identity & confidence. Children develop their own distinctive characters, learning to take responsibility, show commitment & leadership, acting as a role model & contributing to the community.<br>▪ **Social and emotional learning** is one of the six areas of the Learning Toolbox. We believe that ALL learning involves emotions and almost all learning is social. Children need to become aware of their emotions and learn to manage them. They need to develop the skills to work with others, to show leadership and to make decisions.<br>▪ **Health education** developing understanding & awareness of choices involved in healthy eating, drugs, sex & relationships.<br>***Resources:***<br>▪ **Photos, images, artefacts, stories etc:** from the internet, Islington Library Service, staff, home. Guidance held centrally. |

| RELIGIOUS EDUCATION – THINKING TEAM | |
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| **'What places are special to people?' Where do people worship?'**<br>**Suggested activities:**<br>• Why is home special to people? What other places are special e.g. memorable holidays, places your relations have lived etc?<br>• Where do people worship?<br>• Why is Mecca important to Muslims?<br>• Explore the Christmas learning question ''How does the Christmas story present different places?' as part of a wider exploration of special places and places of worship. | ***General:***<br>▪ We follow the Agreed Syllabus for Camden schools. This means that children learn about various aspects of the major religions and systems of thought. They explore beliefs but belief does not have to be religious—people can be very wise and live very considerate lives without belonging to an organised religion. Our message is that every single child can experience the wonder of the world and life; every child can think about moral issues and learn about other people.<br>▪ The main aim is for children to understand and respect what different people believe, drawing attention to the moral issues that all religions, systems of thought and philosophies address.<br>▪ Children should see the commonalities between different sets of beliefs as well as recognising the differences.<br>▪ Religious Education is not primarily about learning facts; it means reflecting on your own beliefs and attitudes and recognising that not all questions can be answered.<br>▪ In trying to understand the beliefs of others, we can become more tolerant. In such a diverse school as KCA, people with different beliefs need to learn together and learn about each other.<br>▪ Religious Education is not just about the world religions. It also involves reflecting on the world, on nature, on science and the universe to appreciate the incredible variety and often beauty that we can experience if we notice it. Becoming aware of the incredible complexity of many things—like the human brain—can be awe-inspiring. At the same, time we can learn to appreciate simplicity and quiet. A meditative approach is not just for those who practise a religion or believe in god or gods. We can all learn to be calm and reflective.<br>▪ As children move through the school, they should begin to engage with difficult moral issues such as how we might respond to the suffering of others. Areas that religious education can consider include: death and grief; loss; how we celebrate; people who help us; conflict; things that are important to us; our families.<br>▪ Some of the ways that we teach RE include: discussion, drama and role-play, using puppets, reflecting quietly, watching videos or looking at photographs, creating art to show our feelings or ideas. We also visit places of worship from time to time to understand how different people practice their religion.<br>▪ Assemblies explore stories from the major religions and systems of thought as well as non-religious stories about moral issues or the nature of the world.<br>***Resources:***<br>▪ **Artefacts, photos, books, films, puppets etc:** from Islington Library Service, internet, some held centrally.<br>▪ **Environmental resources:** visits to religious places of worship, visitors (vicars, rabbis, imams, monks etc). |