Brabourne CEP School Horizontal planning – Mars Class – Spring Term 3/4 2023

Substantive & Disciplinary knowledge

MATHS Key Concepts Y1: Number (Place value)/Addition & Subtraction/Length & Height/Mass & Volume Y2: Money/Multiplication & Division/Length & Height, Mass, Capacity & Temperature	
Steps to learning	
Year 1	Year 2
Number: Place Value Step 1 Count within 20 Step 2 Understand 10 Step 3 Understand 11, 12 and 13 Step 4 Understand 14, 15 and 16 Step 6 Understand 20 Step 7 1 more 1 less Step 8 The number line to 20 Step 9 Use a number line to 20 Step 10 Estimate on a number line Step 11 Compare numbers to 20 Step 12 Order numbers to 20 **Addition & Subtraction** Step 1 Add by counting on within 20 Step 2 Add ones using number bonds Step 3 Find and make number bonds to 20 Step 4 Doubles Step 5 Near doubles Step 6 Subtraction counting back Step 7 Subtraction finding the difference	**Money** Count money – pence Count money – pounds (notes and coins) Count money – pounds and pence Choose notes and coins Make the same amount Compare amounts of money Calculate with money Make a pound Find change Step 10 Two-step problem **Multiplication & Division** Step 1 Recognise equal groups Step 2 Make equal groups Step 3 Add equal groups Step 4 Introduce the multiplication symbol Step 5 Multiplication sentences Step 6 Use arrays Step 7 Make equal groups – grouping Step 8 Make equal groups – sharing

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Step 8 Related facts Step 9 Missing number problems **Length & Height** Step 1 Compare lengths and heights Step 2 Measure length using objects Step 3 Measure length in cms **Mass & Volume** Step 1Heavier and lighter Step 2 Measure mass Step 3Compare mass Step 4 Full and empty Step 5 Compare volume Step 6 Measure capacity Step 7 Compare capacity	Step 9 The 2 times-table Step 10 Divide by 2 Step 11 Doubling and halving Step 12 Odd and even numbers Step 13 The 10 times-table Step 14 Divide by 10 Step 15 The 5 times-table Step 16 Divide by 5 Step 17 The 5 and 10 times table **Length & Height** Step 1 Measure in centimetres Step 3 Step 2 Measure in metres Step 4 Compare lengths and heights Step 5 Order lengths and heights Step 6 Four operations with lengths and heights **Mass, Capacity & Temperature** Step 1 Compare mass Step 2 Measure in grams Step 3 Measure in kilograms Step 4 Four operations with mass Step 5 Compare volume and capacity Step 6 Measure in millilitres Step 7 Measure in litres Step 8 Four operations with volume and capacity Step 9 Temperature

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Year 1	Year 2
Vocabulary: Y1L sort, represent, multiples, partitioning, ones, tens, addition/add, subtraction, difference, equals, facts, problems, missing number problems, 2 digit number, inverse, compare, mass, volume,	**Vocabulary:** Y2: value, change, multiplication tables, commutative, repeated addition, standard units, estimate, order, record results, centimetre cm, metre m, kilogram kg, gram g, quarter full, three quarters full, litres l, millilitres ml, temperature, Celsius
End points **Number:** • count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • Count numbers to 100 in numerals; count in multiples of twos, fives and tens • identify and represent numbers using objects and pictorial representations • read and write numbers to 100 in numerals • read and write numbers from 1 to 20 in numerals and words. • given a number, identify one more and one less **Addition & Subtraction**	**End points** **Measurement: Money**

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- read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ – 9

Length & Height / Mass & Volume

- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value
- find different combinations of coins that equal the same amounts of money
- solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

Multiplication & Division

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- compare, describe and solve practical problems for:
  - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
  - mass/weight [for example, heavy/light, heavier than, lighter than]
  - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
  - time [for example, quicker, slower, earlier, later]
- measure and begin to record the following:
  - lengths and heights
  - mass/weight
  - capacity and volume
  - time (hours, minutes, seconds)

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot
- calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts

Length & Height / Mass, Capacity & Temperature

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	• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels • compare and order lengths, mass, volume/capacity and record the results using >, < and =

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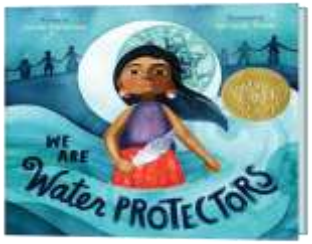
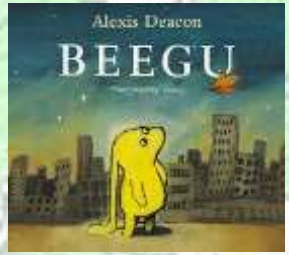
English Key Concepts Writing – composition, transcription Reading – word reading, comprehension	
Reading (texts + key skills)	
Term 1 Key Text – We Are Water Protectors  	**Term 2 Key Text – Beegu (POR)** 
Reading Year 1 Term 1 **Phonics Level 5: ir, ue, ew, y saying /ee/, aw, au**	**Reading Year 1 Term 2** **Phonics Level 5: ow, oe, wh, 'c' saying /s/, 'g' saying /j/, ph**
Reading Year 2 Term 1 **Unit 7 - Inference** **Unit 8 - Retrieval** **Unit 9 - Sequencing** **Unit 10 - Inference** **Unit 11 – Word meaning**	**Reading Year 2 Term 2** **Unit 12 - Prediction** **Unit 13 - Inference** **Unit 14 - Sequencing** **Unit 15 - Sequencing**
Writing **Vocabulary, grammar & punctuation** **Year 1/2 Term 3/4**	

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Composition	**Vocabulary, Grammar & Punctuation**	**Composition**	**Vocabulary, Grammar & Punctuation**
Term 1		**Term 2**	
Year 1: To write a variety of genre including poetry To write for different purposes To say out loud what they are going to write about Composing a sentence orally before writing it Sequence sentences to form short narratives Re-reading what they have written to check it makes sense To read aloud their writing clearly enough to be heard by their peers and the teacher **Year 2:** To write simple poetry To have a positive attitude towards writing and develop writing stamina To proof read work and check grammar and punctuation To encapsulate what they want to say sentence by sentence To write for different purposes	**Year 1:** Singular nouns, capital letters for names of people and places, question marks, joining words and clauses using 'and', writing question statements, punctuating sentences **Year 2:** Changing adjectives into adverbs, punctuating sentences, questions and commands, commas in lists, sentence writing	**Year 1:** To say out loud what they are going to write about To discuss what they have written with the teacher To read their writing to check that it makes sense and to independently begin to make changes To read their writing aloud clearly enough to be heard by their peers and the teacher **Year 2:** Develop positive attitudes towards and stamina for writing by: Writing narratives about personal experiences and those of others (real and fictional) Consider what they are going to write before beginning by: Planning or saying out loud what they are going to write about Writing down ideas and/or key words, including new vocabulary	**Year 1:** Compound words, past and present verbs, suffices –ed –es, plural nouns, noun suffixes –s, nouns **Year 2:** Compound words, noun phrases, forming nouns using –er, apostrophes for contractions, subordination

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To write narratives about personal experiences and those of others (real and fictional) Planning or saying out loud what they are going to write about To write down ideas and key words including new vocabulary		Make simple additions, revisions and corrections to their own writing by: Evaluating their writing with the teacher and other pupils Re-reading to check that their writing makes sense and that verbs to indicate time are used correctly and consistently Proof-reading to check for errors in spelling, grammar and punctuation [for example, ends of sentences punctuated correctly] Read aloud what they have written with appropriate intonation to make the meaning clear	
Writing end points			
End Products: **Persuasive – Letter** **Poetry – List Poem** **Narrative – character description** **Report (Non-chronological) – Fact File (endangered animals linked to topic)**		**End Products:** **Narrative - Found poster** **Recount - Letter** **Narrative - Own version fantasy world narrative** **Poetry - Spring Acrostic Poem (Science)** **Instructions – How to Make a Windmill (DT)**	

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GEOGRAPHY – Our Environment Key Concept: Energy and Sustainability Key Concept Question: How can we look after our Planet?				
National Curriculum	Key enquiry questions	Vocabulary	Disciplinary knowledge	Evidence
Prior learning	Energy & Sustainability: Are some modes of transport better than others?			
Understand the processes that give rise to key physical and human features of the world and how these are interdependent	What effect does the weather have on our environment? How can we reduce, reuse and recycle? What can we do to be more energy efficient? Why is it important to save water? What is a rainforest and who lives there? What can we do to save our rainforests?	Environment Global warming Atmosphere Greenhouse gas Climate change Fossil fuel Energy Habitat Tropical forest Endangered Landfill	Interpret a range of sources of geographical information Communicate geographical information including writing at length	Knowledge mind-map Pupil understanding of KQ All pupils will be able to: **Explain in detail how we can look after the Planet**

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Identify physical changes in the UK and the world Use world maps to identify countries		Incineration Litter Recycle Reuse Reduce Water conservation Renewable Non renewable extinct	Researching facts on internet and books Identifying rainforests on maps Performing simple tests (linked to science skills) Identifying and classifying (linked to science skills) Gathering and recording data to answer questions (linked to science skills)	Explain how climate change is having an impact on our planet. Explain the positive effects on our planet when we reuse, reduce and recycle. Understand ways we can be more energy efficient at school and home. Explain why rainforest animals have become endangered and suggest ways we can stop this happening. Understand why it is important to look after our planet for future generations.

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DT T4 Structures: Making a Windmill KCS – Food, Mechanisms, Structures, Textiles				
National Curriculum	Key enquiry questions	Vocabulary	Disciplinary knowledge	Evidence
Prior learning	Structures – EY to KS1 document Planning - Brabourne Church of England Primary School			
Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and	How do we design a structure? How do we build a stable structure? How do we assemble the component mechanisms? How can we test and evaluate our structure?	axle bridge design design criteria model net packaging structure template unstable stable strong weak	Learn the importance of a clear design criteria. Include individual preferences and requirements in a design. Make stable structures from card, tape and glue. Learn how to turn 2D nets into 3D structures.	Design & finished product for evaluation All pupils will be able to: Identify some features that would appeal to the client (a mouse) and create a suitable design. Explain how their design appeals to the mouse. Make stable structures, which will eventually support the turbine, out of card, tape and glue.

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communication technology Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria			Follow instructions to cut and assemble the supporting structure of a windmill. Make functioning turbines and axles which are assembled into a main supporting structure	Make functioning turbines and axles that are assembled into the main supporting structure. Say what is good about their windmill and what they could do better.

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Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products				

SCIENCE T1+2 Seasonal Changes (Spring & Summer) KC: Physics KCs – Biology, Chemistry, Physics				
National Curriculum	Key enquiry questions	Vocabulary	Disciplinary knowledge	Evidence
Prior learning	Physics – Seasonal changes (Autumn and Winter T1+2)			
Observe changes across the 4 seasons. Observe and describe weather associated with the seasons and how day length varies.	How does day length vary from Winter to Spring? What are the signs of Spring? What is the weather like in Spring? How does day length vary from Spring to Summer? What is the weather like in Summer?	**Seasons**: **spring, summer, autumn, winter**, seasonal change. **Weather**: e.g. sun, rain, snow, sleet,	asking simple questions and recognising that they can be answered in different ways; observing closely, using simple equipment;	Knowledge mind-map End of unit assessment Pupil questioning of KQ All children will be able to: Name the four seasons Name different types of weather

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		frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast. **Measuring weather:** temperature, rainfall, wind direction, thermometer, rain gauge. **Day length**: night, day, **daylight.**	performing simple tests; identifying and classifying; using their observations and ideas to suggest answers to questions; gathering and recording data to help in answering questions.	Make observations about the weather Describe the weather associated which each season Collect and record simple data Make simple observations about changes across the seasons

RE T3 – Gospel: What is the good news Jesus brings? T4 – Salvation: why does Easter matter to Christians? KCs Salvation, Gospel, God, Incarnation

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National Curriculum	Key enquiry questions	Vocabulary	Disciplinary knowledge	Evidence
Prior learning	Salvation – why do Christians put a cross in an Easter garden?			
Our RE Curriculum is delivered through the Kent Agreed Syllabus for Religious Education and the Understanding Christianity resource	T3: Gospel – What good news did Jesus bring? T4: Salvation – Why does Easter matter to Christians?	T1 Forgiveness T2 Bible Gospel Hosanna	T1 Tell stories from the Bible Give clear, simple accounts of what Bible texts mean to Christians. Recognise that Jesus gives instructions to people about how to behave. Give at least two examples of ways in which Christians follow the teachings studied Give examples of how Christians put these beliefs into practice	Knowledge mind-map Pupil questioning of KQ End of unit assessment All pupils should know that: T1 Christians believe Jesus brings good news for all people. For Christians, this good news includes being loved by God, and being forgiven for bad things. Christians believe Jesus is a friend to the poor and friendless. Christians believe Jesus' teachings make people think hard about how to live and show them the right way

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			Think, talk and ask questions about whether Jesus' 'good news' is only good news for Christians, or if there are things for anyone to learn, exploring different ideas. T2 Recognise that Incarnation and Salvation are part of a 'big story' of the Bible. Tell stories of Holy Week and Easter from the Bible and recognise a link with the idea of Salvation Recognise that Jesus gives instructions about how to behave. Give examples of how Christians show	T2 Easter is very important in the 'big story' of the Bible. Christians believe Jesus rose again, giving people hope of a new life.

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			their beliefs about Jesus' death and resurrection in church worship at Easter. Think, talk and ask questions about whether the story of Easter has anything to say to them about sadness, hope or heaven, exploring different ideas.	

PE T1 - Gymnastics T2 - Fitness KCs: Competence, Performance, Creativity, Healthy Lifestyle, Evaluation & Analysis

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National Curriculum	Key enquiry quetsions	Vocabulary	Disciplinary knowledge	Evidence
Prior learning	Gymnastics/Fitness alternate cycle			
Master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities participate in team games, developing simple tactics for attacking and defending perform dances using simple movement patterns.	T1 What are travelling movements? How do we perform and link shapes? How do we perform balances? How do we perform shape jumps? How do we perform different rolls? How do we create a sequence? T2 How can exercise make you feel? How can exercise make you strong and healthy? How does exercise relate to breathing? How does exercise help the brain? How does exercise help my muscles? Why is daily exercise important?	T1 Straight Barrel Tuck Pike Straddle Sequence T2 Exercise Circulation Blood Oxygen Breathing Muscles Mood	T1 Make the body curled, tense, stretched and relaxed Control my body when balancing and travelling in different ways Plan and perform sequence of moves Use balance agility and coordination T2 Run with coordination, stamina, agility and balance Cooperate with other as part of a team	End of unit tracking All pupils will be able to: T1 Confidently perform in front of others. Link simple actions together to create a sequence. Make my body tense, relaxed, stretched and curled. Recognise changes in my body when I do exercise. Remember and repeat actions and shapes. Say what I liked about someone else's performance. Use apparatus safely and wait for my turn.

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				T2 Recognise changes in my body when I do exercise. Share my ideas with other people in the class. Talk about what exercise does to my body. Recognise how exercise makes me feel. Try my best in the challenges I am set. Understand why it is important to warm up.

Music T3 – Pitch and Tempo T4 – Musical Me KCs: Singing, Listening, Composing, Performing, Musicianship				
National Curriculum	Key enquiry questions	Vocabulary	Disciplinary knowledge	Evidence
Prior knowledge	T3 Music and movement YR			

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Experiment with, create, select and combine sounds using the inter-related dimensions of music Listen with concentration and understanding to a range of high-quality live and recorded music Play tuned and untuned instruments musically Use their voices expressively and creatively by singing songs and speaking chants and rhymes	T1 What is pitch? How do we create a pattern using 2 pitches? What is tempo? How do we create a superhero theme tune? How do we perform confidently as part of a group? T2 How do we sing and play an instrument at the same time? How do we choose and play appropriate dynamics and timbres for a piece of music? How do we use musical notation to play melodies? How do we use letter notation to write my own melody? How do we use timbre and dynamics in musical composition?	T1 accelerando high pitched low pitch perform performance pitch pitch pattern tempo T2 rhythm pulse dynamics timbre beat melody notation	T1 Recognising basic tempo, dynamic and pitch changes. Describing the character, mood, or 'story' of music they listen to (verbally or through movement). Describing the differences between two pieces of music. Expressing a basic opinion about music (like/dislike). Listening and responding to other performers by playing as part of a group.	Pupil questioning of KQ/assessment against of learning outcomes All children will be able to: T1 Explain what pitch means. Identify whether a note is higher or lower. Create a pattern using two pitches, then play or sing it. Explain what tempo means. Identify simple tempo changes in music. Perform a pattern that gradually gets faster (accelerando).

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			Selecting and creating short sequences of sound with voices or instruments to represent a given idea or character. Creating simple melodies using a few notes. Choosing dynamics, tempo and timbre for a piece of music. Responding to simple musical instructions such as tempo and dynamic changes as part of a class performance T2 Recognising timbre changes and	Contribute to a group composition and performance by creating, selecting, combining and performing sounds. Suggest improvements to their work. T2 Clap the rhythm of their name. Sing the melody accurately while playing their instrument in time. Show a range of emotions using their voices. Describe the dynamics and timbre of their pieces.

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			structural features in music they listen to. Beginning to use musical vocabulary to describe music. Identifying melodies that move in steps. Listening to and repeating a short, simple melody by ear. Suggesting improvements to their own and others' work. Selecting and creating longer sequences of appropriate sounds with voices or instruments to represent a given idea or character.	Play a known melody from letter notation in the right order, if not with the right rhythms. Play a new melody from letter notation in the right order, if not in time. Invent a melody, write it down and play it back. Select instruments with different timbres. Compose and perform a piece using different dynamic levels.

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			Successfully combining and layering several instrumental and vocal patterns within a given structure. Creating simple melodies from five or more notes. Choosing appropriate dynamics, tempo and timbre for a piece of music. Using letter name and graphic notation to represent the details of their composition. Using their voices expressively when singing, including the use of basic	

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			dynamics (loud and quiet). Singing short songs from memory, with melodic and rhythmic accuracy. Copying longer rhythmic patterns on untuned percussion instruments, keeping a steady pulse. Performing expressively using dynamics and timbre to alter sounds as appropriate. Singing back short melodic patterns by ear and playing short melodic patterns from letter notation.	

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PSHE KC T3: Safety and the Changing Body KC T4: Citizenship KCs: Family & Relationships * Health & Well-being * Safety & the Changing Body * Citizenship * Economic Well-being * Transition * Identity				
National Curriculum	Key enquiry questions	Vocabulary	Disciplinary knowledge	Evidence
Prior knowledge	Safety & the Changing Body/Citizenship alternate cycle			
N/A	T1 How do we respond to adults in school? How do we respond to adults outside of school? What do we do if we get lost? What is an emergency and how do we make a phone call? What is acceptable and unacceptable physical contact? What is safe to put into out bodies? How do we stay safe at home? Who is there to help us? T2 Why are rules important? How do we care for animals? How do we care for others? How are we the same and different? What groups do we belong to? How does democracy work?	T1 accident drug emergency hazards medicine physical contact polite respect role trust T2 care democracy different fair pet responsibility rule	T1 Practising what to do if I get lost. Identifying hazards that may be found at home. Understanding people's roles within the local community that help keep us safe. Learning what is and is not safe to put in or on our bodies.	Knowledge mind-map Pupil questioning of KQ End of unit quiz All children will be able to: T1 Know a number of adults in school. Know that they should speak to an adult if they are ever worried or feel uncomfortable about another adult. Understand ways to keep safe and not get

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		similar unique vote	Practising making an emergency phone call. T2 Recognising why rules are necessary. Discussing how to meet the needs of different pets. Exploring the differences between people. Recognising the groups that we belong to.	lost and know the steps to take if they do get lost. Know the number for the emergency services and their own address. Understand that some types of physical contact are never acceptable. Know what can go into or onto the body and when they should check with an adult. Understand that there are hazards in houses and know how to avoid them. Understand and name jobs that people do to help keep us safe T2 Explain why the class and school rules are important.

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				Discuss the different needs of a range of pets. Describe some of the needs of babies and young children. Recognise some similarities and differences between themselves and others. Identify some groups which they belong to. Recognise that different individuals belong to different groups. Explain why voting is a fair way to make a decision involving a lot of people.

Computing T3 - Skills showcase: Rocket to the moon (Y1)

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T4 - Computing systems and networks 1: What is a computer? (Y2) KCs Computing systems and networks • Programming • Data and information • Creating media • Online Safety				
National Curriculum	Key enquiry questions	Vocabulary	Disciplinary knowledge	Evidence
Prior knowledge	Computing systems and networks 1: Improving mouse skills (T2)			
Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies Understand what algorithms are; how they are	T1 What is digital content? How can we design a rocket using a graphics programme? How do we sequence a set of instructions? How do we build a rocket? How do we test a design and record data? T2 What are the different parts of a computer? How is technology controlled? How do we create a design for an invention? What is the role of computers?	T1 Annotate Cells Components Create Data Debug Designing Digital content Digital image Document E-document Edit Editing program Evaluate Folder Input Instructions Log in Photo Program	T1 Learning where keys are located on the keyboard. Learning how to operate a camera to take photos and videos. Using logical reasoning to predict the behaviour of simple programs. Developing the skills associated with sequencing in unplugged activities. Following a basic set of instructions.	Knowledge mind-map Pupil questioning of KQ End of unit assessment All children should be able to: T1 Use a computer to make a list Explain the benefits of making a list on the computer Use a basic range of tools on graphics editing software to design a rocket Sequence instructions

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implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Create and debug simple programs		Order Robot Save Sequence Share Software Spreadsheet Table T2 Battery Buttons Camera Computer Desktop Device Digital Digital recorder Electricity Function Input Invention Keyboard Laptop Monitor Mouse Output	Assembling instructions into a simple algorithm. Learning to debug instructions when things go wrong. Learning to debug an algorithm in an unplugged scenario. Learning where keys are located on the keyboard. Learning how to operate a camera to take photos and videos. Using logical reasoning to predict the behaviour of simple programs. Developing the skills associated with sequencing in unplugged activities.	Follow instructions to build their model rocket Input data about their rockets into a table or spreadsheet T2 Name some computer peripherals and their function. Recognise that buttons cause effects. Explain that technology follows instructions. Recognise different forms of technology. Design an invention which includes inputs and outputs. Explain the role of computers in the world around them.

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		Paying till Scanner Screen System Tablet Technology Video Wires	Following a basic set of instructions. Assembling instructions into a simple algorithm. Learning to debug instructions when things go wrong. Learning to debug an algorithm in an unplugged scenario. Using a basic range of tools within graphic editing software. Taking and editing photographs. Developing control of the mouse through dragging, clicking	

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			and resizing of images to create different effects. Developing understanding of different software tools. Recognising devices that are connected to the internet. Understanding that technology can be used to represent data in different ways: pictograms, tables, pie charts, bar charts, block graphs etc. Logging in and out and saving work on their own account. T2	

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			Understanding what a computer is and that it's made up of different componen ts. Recognising that buttons cause effects and that technology follows instructions. Learning how we know that technology is doing what we want it to do via its output. Using greater control when taking photos with cameras, tablets or computers. Developing word processing skills, including altering text, copying	

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			and pasting and using keyboard shortcuts. Using word processing software to type and reformat text. Creating and labelling images. Learning how computers are used in the wider world.	