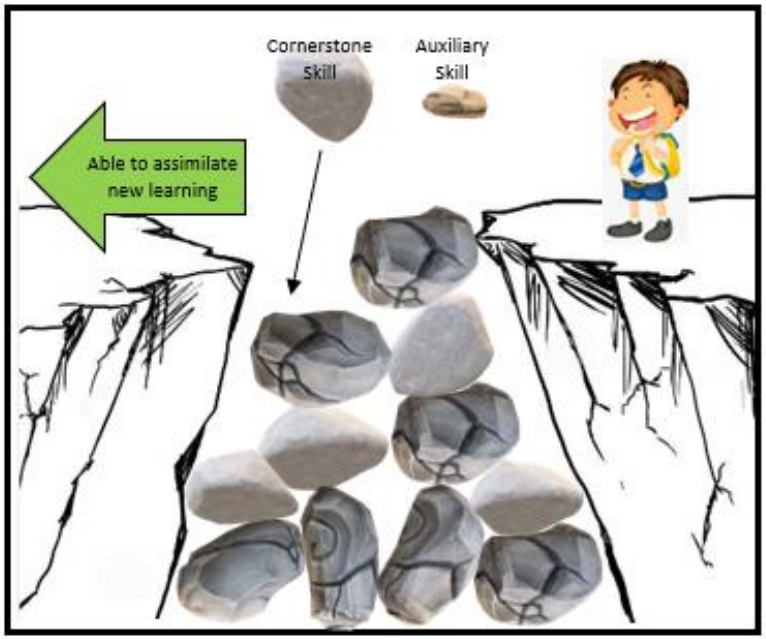
# Lansdown Park Academy Cornerstone Skills

## Rationale

At Lansdown Park Academy, primary pupils usually access our provision for between 12 (BANES) and 16 weeks (Bristol). Occasionally, pupils' stays are extended but never beyond a single academic year. Additionally, due to their social, emotional and mental health needs, all of the pupils have had a disrupted educational journey, causing gaps in knowledge and, consequently, cumulative dysfluency. Many pupils are working significantly below ARE for their chronological ages or, are missing the core building blocks for particular subjects and topics. They may also have developed a negative association to certain subjects or topics within that subject e.g. fractions or spelling etc.




Therefore, we as practitioners, understand that we have a very short amount of time to work with these pupils and close these gaps. In order to maximise the impact, we have attempted to ascertain, from the national curriculum, the **10** skills that are **most** essential for developing a foundation upon which to build: the cornerstone skills. Whilst we aim to help children catch up on as much of the learning they've missed as possible, whilst also developing positive attitudes to each subject and moving their learning forward, we hope, that by focusing on these essential cornerstone skills, we can ensure pupils have enough of a knowledge base for them to take in new information and build new connections without causing further cumulative dysfluency.

Effectively, if the pupil's knowledge deficits are holes in the bridge, these cornerstone skills are the largest rocks we can use to quickly but securely, fill in those holes so that the pupil can move safely across the canyon and begin to explore new learning instead of being left behind, with any ever-extending canyon to cross. The smaller rocks, though useful to the stability of the bridge, would not sufficiently fill the gaps on their own.

## How to use this document

Students are assessed using both baseline summative assessments and teacher assessments. These will help identify the gaps in children's learning. Once these have been established, the pupils can be assigned targets to work on. The targets should be matched to the skills below and in the order presented, so that, where possible, the next target builds upon skills from the previous target and the most vital skills are learned first. Once the pupil has secured the cornerstone skills at an age appropriate level, they can either move on to secure these skills at a greater level of depth or move on to targets based on the less essential skills of the curriculum (the smaller rocks). Targets should be changed as soon as children meet them and not after a given time frame.

| **Foundation Skills**<br>**These are skills that must be secured in order to access the cornerstone skills** | **Writing**<br>**Essential Cornerstone Skills**<br>**Key Stage 2** | **Extension Skills**<br>**These are ways of building upon secure cornerstone skills so that a greater depth of understanding can be achieved** |
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| I can form uppercase and lowercase letters correctly.<br>I can speak in full sentences, using actions to show the capital letter and full stop. | I can use capital letters at the start of sentences and full stops at the end. | I can extend simple sentences using phrases or clauses, joining them using the correct conjunctions and/or punctuation. |
| I can identify questions and statements. | I can use question marks and exclamation marks at the end of appropriate sentences. | I can use closing punctuation for effect. |
| I can identify and list common nouns and adjectives. | I can use expanded noun phrases. | I can expand noun phrases in a way that adds to the precision of the imagery and/or the atmosphere of the text. |
| I can speak and rewrite sentences to show simple past and present tense. | I can make consistent use of tense (past, present and future). | I can choose which tense to use for different purposes, including progressive and perfect tenses. |
| I can list a range of fronted adverbials for time and place. | I can sequence information using fronted adverbials. | I can sequence information using a wider range of techniques e.g. bullet points, paragraphs, headings etc |
| I can put my ideas into full sentences. | I am beginning to use paragraphs effectively. | I can use paragraphs securely, making links between them. |

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| I can write full sentences, including explaining why some groups of words are not full sentences. | I can use subordinate clauses. | I can use subordinate clauses, varying their position within the sentence and using commas when appropriate. |
| I can form my letters correctly.<br>I know my phoneme-grapheme correspondences. | I can spell most words phonetically plausibly as well as many common exception words. | I can spell most of the words that follow the rules on the national curriculum years 1 – 4, correctly. |
| I can read my writing to an adult and identify some areas I need help with. | I can read my writing back accurately and edit clear errors as a result. | I can not only spot and correct mistakes in my writing but I can make improvements as well. |
| I can use finger spaces to separate words and form each letter accurately. | I can write legibly, forming letters accurately and of a consistent size. | I can write in neat, fluent, joined up handwriting. |

**How will these targets be achieved?**

Pupils will be taught these skills, for the most part, through extended writing opportunities based on a high-quality text, experience or piece of visual literacy. Sometimes, this will be further supported through discrete skills teaching. These will make use of pedagogical approaches such as story mapping and oral rehearsal, Kung Fu punctuation and colourful semantics.

Pupils should also work on their targets during independent TEACCH activities at their work station. These activities must fit the general TEACCH principles of being independently achievable and kinaesthetic with clear, visual instructions (including clarity around when the task can be considered 'finished').

| **Foundation Skills**<br>**These are skills that must be secured in order to access the cornerstone skills** | **Maths**<br>**Essential Cornerstone Skills**<br>**Key Stage 2** | **Extension Skills**<br>**These are ways of building upon secure cornerstone skills so that a greater depth of understanding can be achieved** |
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| I can read and write numbers to 100 in numerals. | I can read, write and order numbers up to 1000. | I can read, write and order numbers up to 1,000,000 and involving negative numbers. |
| I can count to 100, starting from any number. | I can count forward and backwards in multiples of 2, 3, 5, 10, 25, 50, 100 and 1000. | I can take powers of 10 away from any number up to 1,000,000. I can count across zero. |
| I can identify and represent numbers up to 20 using different representations/equipment. | I can identify and represent numbers using different representations. | I can solve problems involving representing numbers. |
| I can identify tens and ones needed to make 2-digit numbers. | I can recognise the value of each digit in numbers up to 1,000 (ones, tens, hundreds and thousands) | I can identify the value of each digit in numbers up to 1,000,000 and less than one. |
| I can identify my number bonds to 5 and 10 using concrete resources. | I can quickly recall my number bonds to 5, 10, 20 and 100. | I can use number bonds to efficiently add and subtract numbers mentally. |
| I can use concrete resources moving to pictures to add and subtract numbers up to 2 digits. | I can mentally add and subtract numbers up to 3 digits, using concrete resources. | I can mentally add and subtract numbers, selecting the most efficient method. |
| I can recognise the addition, subtraction, multiplication and division signs and know which are the inverse to which. | I can use the inverse to show relationships between calculations and solve missing number problems. | I can apply the inverse to simple algebra problems (using symbols/shapes/single letters to represent the problem rather than missing number boxes) |

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| I can add using partitioning and my number bonds as opposed to counting. E.g. 7 + 5 is 7 + 3 then + 2. | I can use column method to solve written addition calculations. | I can choose whether to use a mental or written method for addition problems based on the numbers involved.<br>I can add decimal numbers. |
| I can subtract using a number line, moving from counting back to jumping using number bonds. | I can use column method to solve written subtraction calculations. | I can choose whether to use a mental or written method for subtraction problems based on the numbers involved.<br>I can subtract decimal numbers. |
| I can solve addition and subtraction word problems when presented concretely or pictorially, or acted through role play. | I can solve word problems, choosing whether to use addition or subtraction. | I can solve multistep word problems, writing each stage out as a number sentence. |
| I can recognise odd and even numbers, as well as quickly recall the multiplication and division facts for the 2, 5 and 10 times tables. | I can quickly recall the multiplication and division facts for the 3, 4 and 8 times tables.<br><br>I can quickly recall the multiplication and division facts for all times tables to 12 x 12. | I can use a doubling and halving method to quickly list a set of multiples for any 2 digit number. |
| *Continue to learn times tables.* | I can multiply and divide numbers mentally using known facts and place value (e.g. because I know 5 x 6, I know 50 x 600). | I can use a given calculation to quickly solve an associated number sentence using knowledge of place value and/or doubling & halving etc. |
| *Support with concrete resources on a place value grid.* | I can multiply and divide whole numbers by 10, 100 and 1000 (using a place value grid). | I can multiply and divide by 10, 100 and 1000, including decimals and missing number problems. |

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| I can represent times tables using different arrays. | I can multiply a number up to 4 digits by a single digit number, using the formal written method. | Multiply a number up to 4 digits by a two digit number, using the formal written method. |
| I can recognise, find and name ½ and ¼ of an object, shape or quantity. | I can identify and represent fractions from halves to twelfths, understanding that they are equal parts of the whole. | I can recognise equivalent fractions. |
| I can recognise ½ of a number and understand the relationship between ½ and 2/4. | I can use pictures and objects to help me compare unit fractions or those with the same denominator. | I can compare fractions with different numerators and/or denominators. |
| *Focus on halves, quarters and eighths only and support with concrete resources.* | I can recognise and find equivalent fractions. | I can solve problems involving the need to find equivalent fractions. |
| *Focus on halves, quarters and eighths only and support with concrete resources.* | I can find fractions of objects and amounts using a bar model. | I can solve problems that involve fractions of amounts. |
| *Focus on halves, quarters and eighths only and support with concrete resources.* | I can add and subtract fractions with the same denominator. | I can add and subtract fractions with different denominators.<br><br>I can add and subtract mixed numbers, making use of improper fractions where helpful. |
| *Review and consolidate above.* | I can convert between fractions and decimals for numbers in tenths and hundredths as well as ½, ¼ and ¾. | I can convert between fractions, decimals and percentages for numbers in tenths and hundredths as well as ½, ¼ and ¾. |

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| I can sequence events in chronological order using language (e.g. before and after, next, first, today, yesterday, tomorrow, morning etc)<br><br>I can compare and sequence intervals of time. | I can calculate and compare time taken. | I can solve problems involving time difference, including interpreting information from timetables. |
| I can tell the time on an analogue clock to the hour and half hour. | I can tell the time to the nearest minute on an analogue clock, a 12-hr digital and 24-hr digital clock. | I can tell the time to the nearest minute on an analogue clock, a 12-hr digital and 24-hr digital clock, with increasing accuracy and speed. |
| I can use simple comparative language accurately. | I can use comparative vocabulary accurately e.g. longer, faster, quicker, less than, lighter than, heavier, narrower, wider, taller, higher etc | I can understand comparative vocabulary in context and use it to help me solve word problems. |
| I can measure and begin to record the following: lengths and heights, mass/weight, capacity and volume, time (hours, minutes, seconds) | I can estimate, measure, compare, add and subtract different measures (length, mass, volume), including using units correctly. | I can convert between metric measures in order to solve problems involving calculating with lengths, mass, capacity, temperature etc. |
| *For younger/less able children – complete unit on money instead of Geometry and Measures (area and perimeter/capacity etc)* | I can measure and calculate the area and perimeter of simple 2D and rectilinear shapes. | I can measure and calculate the perimeter and area of compound rectilinear shapes, including finding necessary missing side lengths.<br><br>I can use formula to find the area of rectangles, triangles and parallelograms.<br><br>I can find the volume of cubes, cuboids and those shapes made up of cubes. |

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| *For younger/less able children – complete unit on money instead of Geometry and Measures (area and perimeter/capacity etc)* | I can use appropriate equipment to estimate and measure length, height, mass, capacity, temperature etc (e.g. scales, thermometers, rulers, jugs, beakers etc). | I can make decisions around which equipment and units to select based on the context of the task or problem. |
| In a group, with support, I can record and interpret information in pictograms and bar charts. | I can interpret and present information, using bar charts, line graphs and pictograms. | I can interpret and present information using a wider variety of graphs, including pie charts and those that are unfamiliar. |
| I can create patterns and sequences using shapes, colours, symbols and simple numbers. | I can describe and plot coordinates on a graph in the first quadrant. | I can describe and plot coordinates on a graph in all four quadrants.<br><br>I can reflect and translate shapes. |
| *Support with concrete resources.* | I can describe positions and movement using prepositional language (behind, before, next to), using compass directions and knowledge of turns (quarter turn, half turn, full turn etc). | I can use positional language to describe translations on a co-ordinate grid. |
| I can identify and draw familiar 2D shapes (circle, triangle, square and rectangle). | I can identify and list the properties of 2D shapes. | I can compare similarities and differences between 2D shapes and use my knowledge of their properties to solve problems. |
| I can name 3D shapes when presented concretely. | I can identify and list the properties of 3D shapes. | I can use my knowledge of 3D shapes to solve problems. |

Skills which are notably absent from our programme of study include the following:

- Roman Numerals
- Rounding
- Factors, Multiples, Prime, Squared and Cubed Numbers (though vocabulary should be used where appropriate during teaching of other subjects e.g. multiplication and division).
- Formal division (this is a challenging, mostly abstract concept which should only be taught to UKS2 pupils with a secure understanding of the concept of division/sharing and sufficient fluency in multiplication facts)
- Multiplying and Dividing Fractions (This topic will be taught to pupils working at UKS2 ARE and beyond)
- Calculating decimal fractions equivalents and solving division problems where the question and/or the answer has digits after the decimal point.
- Ratio and Proportion
- Algebra
- Angles
- Volume

NB – We have chosen to include the teaching of time as a key life skill and the teaching of shape as many of our pupils excel in visual challenges and will benefit from the feeling of success that may be associated with this area of mathematics.

These topics WILL be taught to children who possess a thorough knowledge of the cornerstone skills. Once this foundation has been established, excess time can then be spent on these topics which have less of an impact on the pupil's mathematical competency as a whole. This approach has been chosen to ensure that what pupils learn is able to be mastered and retained so that they can feel successful upon returning to mainstream provision. The topics LPA have opted not to prioritise are those which experience tells us take a long time for children to grasp and have little to no connection to the other elements of the maths curriculum. For example, we know that rounding is important for teaching pupils to estimate and check their calculations; however, we also know that it requires a depth of place value knowledge many of our pupil's lack and therefore, after spending a significant amount of time teaching and re-teaching, pupils tend to leave the topic without having fully mastered the skill. Whereas, spending more time developing fluency with number bonds can impact children's capacity to solve all four operation calculations. Information about which skills have been taught and to what level they have been mastered and retained by pupils will be sent to their next teachers to ensure that they are supported to learn those areas not focused upon now that they have the underlying skills necessary.

The cornerstone skills will be taught over four, four-week blocks (TBC depending on link to Power Maths).

Block 1 – Place Value and Number, Block 2 – Four Operations, Block 3 – Geometry and Measures, Block 4 – Problem Solving

| **Foundation Skills**<br>**These are skills that must be secured in order to access the cornerstone skills** | **Reading**<br>**Essential Cornerstone Skills**<br>**Key Stage 2** | **Extension Skills**<br>**These are ways of building upon secure cornerstone skills so that a greater depth of understanding can be achieved** |
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| I can use my knowledge of phonics to decode words. | I can use my knowledge of prefixes, suffixes and root words to read unfamiliar words. | I can use my knowledge of prefixes, suffixes and root words to read unfamiliar words and identify their meaning. |
| I can fluently read the first 100 common exception words. | I can fluently read the first 200 common exception words. | I can recognise a wider range of common exception words and note what is unusual. |
| I can listen to and understand stories and poems. | I can listen to and discuss a wide range of text types, including fiction, non-fiction, poetry and playscripts. | I can note the conventions of different text types and make comparisons between texts. |
| I can join in with repetitive phrases in poems and stories, sometimes re-telling larger chunks using story maps and actions. | I can retell a wider range of texts, including fairy tales, traditional tales and poems. | I can identify and retell a wider range of texts, including myths, legends and books from other cultures. |
| I can use story map symbols and actions to learn and recite short poems. | I can learn and recite poems by heart. | I can learn and recite poems and plays, including those I have prepared. |
| I can use pictures and some word clues to help identify the meaning of an unfamiliar word. | I can identify the meaning of new words from context. | I can use a combination of context and word family knowledge to identify the meaning of unfamiliar words. |

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| *Offer more scaffolding to identify moral.* | I can identify morals and messages in a story. | I can relate messages in stories to my own experiences. |
| I can think of a title for what I have read. | I can summarise the main idea of the text. | I can identify key details in order to summarise. |
| I can make inferences based on what a character has said or done. | I can draw inferences about a character's thoughts, feelings and motives, based on their actions. | I can use evidence from the text to justify my inferences. |
| I can predict what might happen next. | I can make predictions based on details in the text. | I can make predictions based on implied details. |
| I can retrieve direct information. | I can retrieve and record information. | I can retrieve, record and present information. |
| I can say if I have liked a book/poem and why. | I can recommend books I have read. | I can identify authors and genres I like. |

Skills from the KS2 curriculum that will not be explicitly taught:

- Using dictionaries (our pupils do not own dictionaries and are far more likely to use technology for this purpose)
- Discuss words and phrases that capture the reader's interest and imagination (will be incorporated in English writing lessons)
- Identify how language, structure, and presentation contribute to meaning (will be incorporated in English writing lessons)

We have narrowed the reading curriculum in order to spend more time focusing on these essential skills: fluency, enjoyment, understanding. We understand that the ability to read effectively is the single greatest asset any pupils can attain.

The objectives set above should equip pupils with the skills they need to both read for pleasure and read to learn. They should also go some way toward meeting the pupil's attachment needs, which will positively impact their capacity to engage with books and learning in general (for example, the group re-telling of stories with repetitive phrases and poems that use rhythm and rhyme is good for building connections and easing stress; whilst the identification of morals and hidden messages can be an excellent vehicle for exploring ethically-challenging situations, conflict resolution etc).