## Maths at Copperfield

## count

sort
count in steps ascending
negative numbers
ten thousands
millions
subitise
represent count in multiples
descending
roman numerals
one hundred thousands
ten millions
order/ordinal
multiples
place value
10 or 100 more 1000 more
powers of
compare


Subject Leadership

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## Subject Leaders at Copperfield

- Subject Leaders provide professional leadership for a subject or group of subjects to secure high-quality first teaching, a rich curriculum and the effective use of resources. The success of this will be measured by the impact on learning and progress for pupils.
- We do not expect Subject Leaders to be an 'expert' in the subject they lead. What is important is that they have the overview of what is going well and what needs to be improved - based on evidence.
- Subject leaders at Copperfield are part of both the Middle Leadership and the Copperfield Extended Leadership Teams
- Each Subject Leader has an assigned Mentor (from SLT)


## All Subject Leaders wil

- Be part of our distributed leadership
- Utilise the expertise, passion, pedagogical awareness and strengths of other leadership team members
- Establish a collective responsibility for demonstrating that everyone makes a difference
- Moving the school forward through driving the implementation aspect of each subject
- Professionally develop themselves and other staff team members
- Raise standards across all aspects of the curriculum
- Enrich the curriculum
- Share knowledge, expertise, skill, passion and enthusiasm

How does the role of Subject Leader fit into Copperfield's Ofsted Statement of Action?
The staff, pupils and school community are working on areas identified in the May 2021 Ofsted inspection.
'Leaders are developing their plans to ensure that all areas of the curriculum are equally ambitious and well sequenced. Currently, they are focusing on science and history. Leaders should review existing wider curriculum planning to ensure that essential knowledge is explicitly identified and sequentially mapped out from Nursery to Year 6. For this reason, the transition arrangement has been applied in this case'.
This handbook, along with every other handbook, maps out the sequential curricular links from Nursery to Year 6.
Our Curriculum Statement
Copperfield has an ambitious and aspirational curriculum designed to meet each individual's needs and to give all learners the knowledge and cultural capital they need to succeed in life. Strong teachers have been appointed to key posts within the school. They are aware of national curriculum developments, and pedagogical developments, and a range of strategies are implemented to improve practice, and to better meet the needs of pupils more effectively'

Our Four Drivers, making a well sequenced and ambitious curriculum.
Ethical, informed Individuals.
At Copperfield we aim to build confident, open-minded individuals who feel safe and secure within a caring environment based on mutual respect where everyone is valued and is able to maximise their individual potential. Children from our community may need to develop their self-esteem, confidence and communication skills. An example of this is our comprehensive PSHE curriculum, weekly Values Assembly, and expansive Wellbeing Programme, which all support with self-esteem, independence, perseverance and self-discipline. Our curriculum will also prepare our children to successfully engage with the wider community, as we educate the children on inclusivity and British values. Our 'hands-on' approach to learning in all areas of the curriculum will ensure the children have many opportunities to practice the traits and values they are learning on a daily basis.
Ambitious Capable Learners (Skills and Knowledge).
Our aim is to make learning exciting, enjoyable, relevant and appropriately challenging to build upon what learners already know. Reading is at the heart of our curriculum, it is central to all that we do. Children will read and enjoy a range of books from a myriad of genres. Enriching the children's vocabulary, knowledge and imagination. We also aim for every child to become confident and competent mathematicians, achievable through our maths mastery approach. Beyond the core subjects, the children's knowledge and awareness of how the wider curriculum, such as the arts, humanities, and sports, can be applied in, and have an impact on, their community will be explored. The children will be able to recite key facts and demonstrate their learning of news skills through various forms of outcomes.
Experiences to Inspire
Aware that children seldom explore beyond their very immediate community, our curriculum is designed to broaden the children's horizon. To inspire. The curriculum will be brought alive through hands-on experiences designed to teach and link new skills and knowledge to prior learning. Where possible, the learning will happen beyond the classroom, either on the school grounds, local community or beyond. To enhance their learning for each topic, the children will meet knowledgeable and engaging individuals (virtually or physically) whilst also immerse themselves in the worlds of craft, art, food and sport - taking the learning of skills and knowledge beyond textbooks and into real life experiences. Reach2's 11 b411 has also been embedded into our curriculum, to help enrich the children's learning even further.
Successful in Society
Mindful that some challenges in the local community could have an impact on the children's learning and progress, the school continues to be an outward looking school. Through using the curriculum and resources at our disposal, we openly encourage the parents to engage with, and learn from, the children's curriculum and thus better place them to progress and prosper along with their children. Termly invitations to curriculum days, parent \& teacher curriculum conferences and parent workshops with keynote speakers all come together as a package of support, upskilling and development for parents. This level of support for the support network is designed to elevate the standing of education, increase parental engagement and drive progress in the community. Running throughout the curriculum are our values we embed the 6 values in everything we do.

## Aligning INTENT, IMPLEMENTATION AND IMPACT to ensure we meet the criteria for a good quality of education in the Education Inspection Framework

## INTENT

Our curriculum is:

- deliberately ambitious
- designed to give all learners, particularly the most disadvantaged and SEND or high needs, the knowledge and cultural capital they need to succeed in life
- coherently planned and sequenced towards cumulatively sufficient knowledge and skills for future learning and employment
- broad and balanced, and allows all pupils access to the full range of subjects, throughout all years, from Nursery to Year 6
- successfully adapted to meet the needs of all learners, especially those with SEND, to develop their knowledge, skills and abilities to apply what they know and can do with increasing fluency and independence


## MPLEMENTATION

1. Teachers have good subject knowledge of the subject(s) they teach, and leaders support those teaching outside their main areas of expertise
2. Teachers:

- present subject matter clearly, promoting appropriate discussion about the subject matter they are teaching
- check learners' understanding systematically
- identify misconceptions accurately
- provide clear, direct feedback
- respond, and adapt their teaching as necessary

3. Teaching is designed to help learners to remember in the long-term the content they have been taught, and to integrate new knowledge into larger concepts
4. Teachers and Leaders:

- use assessment well to help learners embed and use knowledge fluently, or to check understanding and inform teaching
- understand the limitations of assessment, and do not use it in a way that creates unnecessary burdens for staff and learners

5. Teachers create an environment that focuses on pupils:

- textbooks and other teaching materials that teachers select - in a way that does not create unnecessary workload for staff - reflect the school's ambitious intentions for the course of study
- materials clearly support the intent of a coherently planned curriculum, sequenced towards cumulatively sufficient knowledge and skills for future learning and employment

6. Work given to pupils is demanding and matches the aims of the curriculum in being coherently planned and sequenced towards cumulatively sufficient knowledge
7. Reading is prioritised to allow pupils to access the full curriculum offer
8. A rigorous and sequential approach to the reading curriculum develops pupils' fluency, confidence and enjoyment in reading:

- At all stages, reading attainment is assessed and gaps are addressed quickly and effectively for all pupils
- Reading books connect closely to the phonics knowledge pupils are taught when they are learning to read

9. The sharp focus on ensuring that younger children gain phonics knowledge and language comprehension necessary to read, and the skills to communicate, gives them the foundations for future learning
10. Teachers ensure that their own speaking, listening, writing and reading of English support pupils in developing their language and vocabulary well

## IMPACT

1. Pupils develop detailed knowledge and skills across the curriculum, and as a result achieve well. This is reflected in results from national tests
2. Pupils are ready for the next stage of education:

- they have the knowledge and skills they need to go on to destinations that meet their interests and aspirations, and the course of study
- those with SEND achieve the best possible outcomes

3. Pupils' work across the curriculum is of good quality
4. Pupils:

- read widely and often, with fluency and comprehension appropriate to their age
- apply mathematical knowledge, concepts and procedures, appropriately for their age


## The Copperfield Way

 MATHS
## Statement of Intent

Our aim at Copperfield Academy is for all children to enjoy mathematics and have a secure and deep understanding of fundamental mathematical concepts and procedures when they leave us to go to secondary school. We want children to see the mathematics that surrounds them every day and enjoy developing vital life skills in this subject.

## Aims for our pupils

- To develop a growth mindset and positive attitude towards mathematics.
- To become confident and proficient with number, including fluency with mental calculation and look for connections between numbers.
- To become problem solvers, who can reason, think logically, work systematically and apply their knowledge of mathematics.
- To develop their use of mathematical language.
- To become independent learners and to work co-operatively with others.
- To appreciate real life contexts to learning in mathematics.


## Implementation

Our teaching for mastery is underpinned by the NCETM's 5 Big Ideas.

- Opportunities for Mathematical Thinking allow children to make chains of reasoning connected with the other areas of their mathematics.
- A focus on Representation and Structure ensures concepts are explored using concrete, pictorial and abstract representations, the children actively look for patterns and generalise whilst problem solving.
- Coherence is achieved through the planning of small, connected steps to link every question and lesson within a topic.
- Teachers use both procedural and conceptual Variation within their lessons and there remains an emphasis on Fluency with a relentless focus on number and times table facts


## Impact

- It is achievable for all - we have high expectations and encourage a positive 'can do' mindset towards mathematics in all pupils, creating learning experiences which develop children's resilience in the face of a challenge and carefully scaffolding learning so everyone can make progress
- Deep and sustainable learning - lessons are designed with careful small steps, questions and tasks in place to ensure the learning is not superficial.
- The ability to build on something that has already been sufficiently mastered - pupils' learning of concepts is seen a continuum across the school.
- The ability to reason about a concept and make connections - pupils are encouraged to make connections and spot patterns between different concepts (E.g. the link between ratio, division and fractions) and use precise mathematical language, which frees up working memory and deepens conceptual understanding.
- Conceptual and procedural fluency - teachers move mathematics from one context to another (using objects, pictorial representations, equations and word problems). There are high expectations for pupils to learn times tables, key number facts (so they are automatic) and have a true sense of number. Pupils are also encouraged to think whether their method for tackling a given calculation or problem is Appropriate, Reliable and Efficient (A.R.E).
- Problem solving is central - this develops pupils' understanding of why something works so that they truly have an appreciation of what they are doing rather than just learning to repeat routines without grasping what is happening.
- Challenge through greater depth - rather than accelerated content, (moving onto next year's concepts) teachers set tasks to deepen knowledge and improve reasoning skills within the objectives of their year group.
- Mathematical language - The national curriculum requires that children use mathematical language. It states that 'the quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting a mathematical justification, argument or proof.


## Reception

Week 1 Week 2 Week 3

Getting to know you
Take this time to play and get to know the children!)

Contains overviews and frequently asked questions

VIEW

## Alive in 5!

Introducing zero
Comparing numbers to 5
Composition of 4 \& 5
Compare mass (2)
Compare capacity (2)

## To 20 and beyond

Build numbers beyond 10
Count patterns beyond 10
Spatial reasoning 1
Match, rotate, manipulate

VIEW

## Just like me!

Match and sort
Compare amounts
Compare size, mass \&
capacity
Exploring pattern
VIEW

## Growing 6, 7, 8

6. 7 \& 8

Combining two amounts
Making pairs
Length \& height
Time (2)
VIEW

## First, then, now

Adding more
Taking away
Spatial reasoning 2
Compose and decompose

VIEW

It's me 1, 2, 3!
Representing 1, 2 \& 3
Comparing 1. 2 \& 3
Composition of 1, 2 \& 3
Circles and triangles
Positional language
VIEW

## Building 9 \& 10

Counting to $9 \& 10$
Comparing numbers to 10
Bonds to 10
3-D shapes
Spatial awareness
Patterns
VIEW

## Find my pattern

 DoublingSharing \& grouping
Even \& odd
Spatial reasoning 3 Visualise and build

## Light \& dark

Representing numbers to 5
One more or less
Shapes with 4 sides
Time

Consolidation

## On the move

Deepening understanding Patterns \& relationships Spatial mapping (4) Mapping

Year 1


## Year 2

|  | Week 1 Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  |  | Number |  |  |  |  | Geomerty |  |  |
| ¢ | Place value |  |  | Addition and subtraction |  |  |  |  | Shap |  |  |
|  | VIEW |  |  |  |  |  | VEW |  |  |  | VIEW |
| $\begin{aligned} & E \\ & \vdots \\ & \text { on } \\ & \text { in } \\ & \text { í } \end{aligned}$ | Measurement | Number |  |  |  |  | Measurement |  | Measure |  |  |
|  | Money | Multiplication and division |  |  |  |  | Length and height |  | Mass, <br> temp | apacit ature |  |
|  | VIEW |  |  |  |  | VIEW |  | VIEW |  |  | VEW |
|  | Number |  | Measurement |  |  | Statistics |  | Geomerry |  |  |  |
|  | Fractions |  | Time |  |  |  |  | Posi and dire |  | Cons |  |
|  |  | view |  |  | VIEW |  | VIEW |  | VIEW |  |  |

## Year 3



## Year 4



Year 5


## Year 6



KEY ASSESSMENT CRITERIA
Development Matters - Number


Shape Space and Measure

|  | A Unique Child: <br> observing what a child is learning |
| :---: | :---: |
|  |  |
| 30-50 months | - Shows an interest in shape and space by playing with shapes or making arrangements with objects. <br> - Shows awareness of similarities of shapes in the environment. <br> - Uses positional language. <br> - Shows interest in shape by sustained construction activity or by talking about shapes or arrangements. <br> - Shows interest in shapes in the environment. <br> - Uses shapes appropriately for tasks. <br> - Beginning to talk about the shapes of everyday objects, e.g. 'round' and 'tall'. |
| 40-60+ months | - Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. <br> - Selects a particular named shape. <br> - Can describe their relative position such as 'behind' or 'next to'. <br> - Orders two or three items by length or height. <br> - Orders two items by weight or capacity. <br> - Uses familiar objects and common shapes to create and recreate patterns and build models. <br> - Uses everyday language related to time. <br> - Beginning to use everyday language related to money. <br> - Orders and sequences familiar events. <br> - Measures short periods of time in simple ways. <br> Early Learning Goal <br> Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them. |

## Ready-to-progress criteria: year 1 to year 6

The table below is a summary of the ready-to-progress criteria for all year groups.

| Strand | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NPV | 1NPV-1 Count within 100, forwards and backwards, starting with any number. |  | 3NPV-1 Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10 ; apply this to identify and work out how many 10s there are in other threedigit multiples of 10 . | 4NPV-1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100 ; apply this to identify and work out how many 100s there are in other four-digit multiples of 100 . | 5NPV-1 Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1 . <br> Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01 . <br> Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01 . | 6NPV-1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10 , 100 and 1,000). |
|  |  | 2NPV-1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and nonstandard partitioning. | 3NPV-2 Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning. | 4NPV-2 Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning. | 5NPV-2 Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning. | 6NPV-2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and nonstandard partitioning. |
|  | 1NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and $=$ | 2NPV-2 Reason about the location of any twodigit number in the linear number system, including identifying the previous and next multiple of 10 . | 3NPV-3 Reason about the location of any threedigit number in the linear number system, including identifying the previous and next multiple of 100 and 10 . | 4NPV-3 Reason about the location of any fourdigit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100 , and rounding to the nearest of each. | 5NPV-3 Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each. | 6NPV-3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts. |


| Strand | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NPV |  |  | 3NPV-4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with $2,4,5$ and 10 equal parts. | 4NPV-4 Divide 1,000 into $2,4,5$ and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with $2,4,5$ and 10 equal parts. | $5 \mathrm{NPV}-4$ Divide 1 into 2 , 4,5 and 10 equal parts, and read scales/number lines marked in units of 1 with $2,4,5$ and 10 equal parts. | $6 \mathrm{NPV}-4$ Divide powers of 10, from 1 hundredth to 10 million, into $2,4,5$ and 10 equal parts, and read scales/number lines with labelled intervals divided into $2,4,5$ and 10 equal parts. |
|  |  |  |  |  | 5NPV-5 Convert between units of measure, including using common decimals and fractions. |  |
| NF | 1NF-1 Develop fluency in addition and subtraction facts within 10. | 2NF-1 Secure fluency in addition and subtraction facts within 10, through continued practice. | 3NF-1 Secure fluency in addition and subtraction facts that bridge 10 , through continued practice. |  |  |  |
|  | 1NF-2 Count forwards and backwards in multiples of 2,5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers. |  | 3NF-2 Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number. | 4NF-1Recall multiplication and division facts up to $12 \times 12$, and recognise products in multiplication tables as multiples of the corresponding number. | 5NF-1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice. |  |
|  |  |  |  | $4 \mathrm{NF}-2$ Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context. |  |  |
|  |  |  | 3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10 ). | $4 \mathrm{NF}-3$ Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100) | 5NF-2 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth). |  |


| Strand | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AS | 1AS-1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. | 2AS-1 Add and subtract across 10 . | 3AS-1 Calculate complements to 100. |  |  | 6AS/MD-1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). |
|  | 1AS-2 Read, write and interpret equations containing addition (+), subtraction ( - ) and equals ( $=$ ) symbols, and relate additive expressions and equations to real-life contexts. | 2AS-2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?". | 3AS-2 Add and subtract up to three-digit numbers using columnar methods. |  |  | 6AS/MD-2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding. |
|  |  | 2AS-3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a twodigit number. | 3AS-3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction. |  |  | 6AS/MD-3 Solve problems involving ratio relationships. |
|  |  | 2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 twodigit numbers. |  |  |  | 6AS/MD=4 Solve problems with 2 unknowns. |


| Strand | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MD |  | 2MD-1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables. | 3MD-1 Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division. | 4MD-1 Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size. | $5 \mathrm{MD}-1$ Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size. | For year 6, MD ready-toprogress criteria are combined with AS ready-to-progress criteria (please see above). |
|  |  | 2MD-2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division). |  | 4MD-2 Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication. | $5 \mathrm{MD}-2$ Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors. |  |
|  |  |  |  | $4 \mathrm{MD}-3$ Understand and apply the distributive property of multiplication. | $5 \mathrm{MD}-3$ Multiply any whole number with up to 4 digits by any one-digit number using a formal written method. |  |
|  |  |  |  |  | 5MD-4 Divide a number with up to 4 digits by a one-digit number using a formal written method, and interpret remainders appropriately for the context. |  |


| Strand | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F |  |  | $3 \mathrm{~F}-1$ Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts. |  |  | 6F-1 Recognise when fractions can be simplified, and use common factors to simplify fractions. |
|  |  |  | $3 \mathrm{~F}-2$ Find unit fractions of quantities using known division facts (multiplication tables fluency). |  | $5 \mathrm{~F}-1$ Find non-unit fractions of quantities. | 6F-2 Express fractions in a common denomination and use this to compare fractions that are similar in value. |
|  |  |  | 3F-3 Reason about the location of any fraction within 1 in the linear number system. | 4F-1 Reason about the location of mixed numbers in the linear number system. |  | 6F-3 Compare fractions with different denominators, including fractions greater than 1 , using reasoning, and choose between reasoning and common denomination as a comparison strategy. |
|  |  |  |  | 4F-2.Convert mixed numbers to improper fractions and vice versa. | 5F-2 Find equivalent fractions and understand that they have the same value and the same position in the linear number system. |  |
|  |  |  | 3F-4 Add and subtract fractions with the same denominator, within 1. | 4F-3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers. | $5 \mathrm{~F}-3$ Recall decimal fraction equivalents for $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}$ and $\frac{1}{10}$, and for multiples of these proper fractions. |  |
| G | 1G-1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another. | 2G-1 Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties. | 3G-1 Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations. |  | 5G-1 Compare angles, estimate and measure angles in degrees ( ${ }^{\circ}$ ) and draw angles of a given size. |  |


| Strand | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G |  |  |  |  | 5G-2 Compare areas and calculate the area of rectangles (including squares) using standard units. |  |
|  | 1G-2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations. |  | 3G-2 Draw polygons by joining marked points, and identify parallel and perpendicular sides. | 4G-1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant. |  | 6G-1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems. |
|  |  |  |  | 4G-2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons. |  |  |
|  |  |  |  | 4G-3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry. |  |  |

Mathematics Vocabulary Progression document (YR-Y6)

This document is designed to assist with the teaching of vocabulary across EYFS, KS1 and KS2 and is aligned with the White Rose schemes of learning, R2 long-term overviews and R2 knowledge organisers. The words in bold signify in which year group this vocabulary should be introduced to the children. However, these words should be consolidated and revisited as children move through the school. This version carries the words over into the subsequent year groups, there is a scaled down version available also.

Some vocabulary might be introduced earlier (shapes for instance) if necessary or as part of an activity, however this document ensures coverage is progressive. There is also some language that is only listed in Reception and not continued, as it is more general tier 1 vocabulary. This document is fully editable so language can be moved into earlier or later year groups where necessary.

| Number - Number and place value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| count | count | count | count | count | count | count |
| subitise | subitise | subitise | subitise | subitise | subitise | subitise |
|  | sort | sort | sort | sort | sort | sort |
|  |  | count in steps | count in steps | count in steps | count in steps | count in steps |
|  |  | count in multiples | count in multiples | count in multiples | count in multiples | count in multiples |
|  | represent | represent | represent | represent | represent | represent |
| order/ordinal | order/ordinal | order/ordinal | order/ordinal | order/ordinal | order/ordinal | order/ordinal |
|  |  |  | ascending | ascending | ascending | ascending |
|  |  |  | descending | descending | descending | descending |
|  |  |  |  | negative numbers | negative numbers | negative numbers |
|  |  |  |  | Roman numerals | Roman numerals | Roman numerals |
| compare | compare | compare | compare | compare | compare | compare |
| forwards | forwards | forwards | forwards | forwards | forwards | forwards |
| backwards | backwards | backwards | backwards | backwards | backwards | backwards |
| numerals | numerals | numerals | numerals | numerals | numerals | numerals |
| digit | digit | digit | digit | digit | digit | digit |
|  | multiples | multiples | multiples | multiples | multiples | multiples |
| one more | one more | one more | one more | one more | one more | one more |
| one less | one less | one less | one less | one less | one less | one less |
|  |  |  | 10 or 100 more | 10 or 100 more | 10 or 100 more | 10 or 100 more |
|  |  |  | 10 or 100 less | 10 or 100 less | 10 or 100 less | 10 or 100 less |
|  |  |  |  | 1000 more | 1000 more | 1000 more |


|  |  |  |  | 1000 less | 1000 less | 1000 less |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| equal to | equal to | equal to | equal to | equal to | equal to | equal to |
| more than | more than | more than | more than | more than | more than | more than |
| less than (fewer) | less than (fewer) | less than (fewer) | less than (fewer) | less than (fewer) | less than (fewer) | less than (fewer) |
|  |  | place value | place value | place value | place value | place value |
|  | partitioning | partitioning | partitioning | partitioning | partitioning | partitioning |
|  | ones | ones | ones | ones | ones | ones |
|  | tens | tens | tens | tens | tens | tens |
|  |  |  | hundreds | hundreds | hundreds | hundreds |
|  |  |  |  | thousands | thousands | thousands |
|  |  |  |  |  | ten thousands | ten thousands |
|  |  |  |  |  | one hundred thousands | one hundred thousands |
|  |  |  |  |  |  | millions |
|  |  |  |  |  |  | ten millions |
|  |  | estimate | estimate | estimate | estimate | estimate |
|  |  | compare | compare | compare | compare | compare |
|  |  |  |  | round | round | round |
|  |  |  |  |  | powers of | powers of |
|  |  |  |  |  | integer | integer |


| Addition and subtraction |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| add | addition/add | addition/add | addition/add | addition/add | addition/add | addition/add |
| plus | plus | plus | plus | plus | plus | plus |
| altogether | altogether | altogether | altogether | altogether | altogether | altogether |
| total | total | total | total | total | total | total |
|  |  | sum | sum | sum | sum | sum |
| take away /minus | take away /minus | take away / minus | take away /minus | take away /minus | take away / minus | take away /minus |
|  | subtraction | subtraction | subtraction | subtraction | subtraction | subtraction |
|  | difference | difference | difference | difference | difference | difference |
|  | equals | equals | equals | equals | equals | equals |
| number bonds | number bonds | number bonds | number bonds | number bonds | number bonds | number bonds |
|  | facts | facts | facts | facts | facts | facts |
| part | part | part | part | part | part | part |
| whole | whole | whole | whole | whole | whole | whole |
|  | problems | problems | problems | problems | problems | problems |
|  | missing number problems | missing number problems | missing number problems | missing number problems | missing number problems | missing number problems |
| digit | digit | digit | digit | digit | digit | digit |
|  | 2 digit number | 2-digit number | 2-digit number | 2-digit number | 2-digit number | 2-digit number |
|  |  | 3-digit number | 3-digit number | 3-digit number | 3-digit number | 3-digit number |


|  |  |  | 4-digit number | 4-digit number | 4-digit number |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | commutative | commutative | commutative | commutative | commutative |
| inverse | inverse | inverse | inverse | inverse | inverse |
|  |  | column addition | column addition | column addition | column addition |
|  |  | column subtraction | column subtraction | column subtraction | column subtraction |
|  |  | exchange | exchange | exchange | exchange |
|  |  | estimate | estimate | estimate | estimate |
|  |  |  | operations | operations | operations |
|  |  |  | methods | methods | methods |


| Multiplication and division |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  | multiplication | multiplication | multiplication | multiplication | multiplication | multiplication |
| double | double | double | double | double | double | double |
| half | half | half | half | half | half | half |
|  | division | division | division | division | division | division |
| equal | equal | equal | equal | equal | equal | equal |
| unequal | unequal | unequal | unequal | unequal | unequal | unequal |
| share | share | share | share | share | share | share |
| group | group | group | group | group | group | group |
|  | arrays | arrays | arrays | arrays | arrays | arrays |
|  |  | multiplication tables | multiplication tables | multiplication tables | multiplication tables | multiplication tables |
| odd | odd | odd | odd | odd | odd | odd |
| even | even | even | even | even | even | even |
|  |  | commutative | commutative | commutative | commutative | commutative |
|  |  | repeated addition | repeated addition | repeated addition | repeated addition | repeated addition |
| twice as many |  |  | exchange | exchange | exchange | exchange |



| Fractions/Decimals/Percentages |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| whole | whole | whole | whole | whole | whole | whole |
| half | half | half | half | half | half | half |
|  | quarter | quarter | quarter | quarter | quarter | quarter |
|  |  | three quarters | three quarters | three quarters | three quarters | three quarters |
|  |  | third | third | third | third | third |
|  |  |  |  |  | fifth | fifth |
|  | equal parts | equal parts | equal parts | equal parts | equal parts | equal parts |
|  |  |  |  | decimal equivalence | decimal equivalence | decimal equivalence |
|  |  |  |  | decimal point | decimal point | decimal point |
|  |  |  | tenths | tenths | tenths | tenths |
|  |  |  |  | hundredths | hundredths | hundredths |
|  |  |  |  |  | thousandths | thousandths |
|  |  | unit fractions | unit fractions | unit fractions | unit fractions | unit fractions |
|  |  | non-unit fractions | non-unit fractions | non-unit fractions | non-unit fractions | non-unit fractions |
|  |  | numerator | numerator | numerator | numerator | numerator |
|  |  | denominator | denominator | denominator | denominator | denominator |
|  |  | equivalent fractions | equivalent fractions | equivalent fractions | equivalent fractions | equivalent fractions |
|  |  | one whole | one whole | one whole | one whole | one whole |
|  |  |  |  | convert | convert | convert |
|  |  |  |  | proper fractions | proper fractions | proper fractions |
|  |  |  |  | improper fractions | improper fractions | improper fractions |
|  |  |  |  |  | mixed numbers | mixed numbers |
|  |  |  |  |  | per cent \% | per cent \% |
|  |  |  |  |  | factors | factors |
|  |  |  |  |  | integer | integer |


|  |  |  |  | complements | complements |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ratio and proportion |  |  |  |  |  |  |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  |  |  |  |  | relative size |
|  |  |  |  |  |  | missing values |
|  |  |  |  |  |  | integer multiplication |
|  |  |  |  |  |  | percentages |
|  |  |  |  |  |  | scale factor |
|  |  |  |  |  |  | unequal sharing \& grouping |


| Algebra |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  |  |  |  |  | formulae |
|  |  |  |  |  |  | linear number sequences |
|  |  |  |  |  |  | algebraically |
|  |  |  |  |  |  | equation |
|  |  |  |  |  |  | unknowns |
|  |  |  |  |  |  | combinations |
|  |  |  |  |  |  | variables |


| Measurement (Measure and Length) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| measure | measure | measure | measure | measure | measure | measure |
| wide(er) |  | standard units | standard units | standard units | standard units | standard units |
| narrow(er) |  | estimate | estimate | estimate | estimate | estimate |
| compare | compare | compare | compare | compare | compare | compare |
| long(er)(est) |  | order | order | order | order | order |
| short(er)(est) |  | record results | record results | record results | record results | record results |
|  |  |  |  |  | decimal notation | decimal notation |
|  |  |  |  |  | scaling | scaling |
|  |  |  |  |  | metric units | metric units |
|  |  |  |  |  | imperial units | imperial units |
|  |  |  |  |  | inches | inches |
|  |  |  |  |  |  | feet |
|  |  |  |  |  |  | conversion |
| length | length | length | length | length | length | length |
|  |  | centimetre cm | centimetre cm | centimetre cm | centimetre cm | centimetre cm |
|  |  | metre m | metre m | metre m | metre m | metre m |
|  |  |  | millimetre mm | millimetre mm | millimetre mm | millimetre mm |
|  |  |  | perimeter | perimeter | perimeter | perimeter |
|  |  |  |  | kilometres km | kilometres km | kilometres km |
|  |  |  |  |  |  | miles |
|  |  |  |  | rectilinear figure | rectilinear figure | rectilinear figure |
|  |  |  |  | area | area | area |



| Measurement (Height, Weight and Capacity) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| height | height | height | height | height | height | height |
| long(er)/short(er) | long(er)/short(er) | long(er)/short(er) | long(er)/short(er) | long(er)/short(er) | long(er)/short(er) | long(er)/short(er) |
| tall(er)/short(er) | tall(er)/short(er) | tall(er)/short(er) | tall(er)/short(er) | tall(er)/short(er) | tall(er)/short(er) | tall(er)/short(er) |
|  | mass | mass | mass | mass | mass | mass |
| weight | weight | weight | weight | weight | weight | weight |
| heavy/light | heavy/light | heavy/light | heavy/light | heavy/light | heavy/light | heavy/light |
| heavier than | heavier than | heavier than | heavier than | heavier than | heavier than | heavier than |
| lighter than | lighter than | lighter than | lighter than | lighter than | lighter than | lighter than |
| big/bigger/biggest |  | kilogram kg | kilogram kg | kilogram kg | kilogram kg | kilogram kg |
|  |  | gram g | gram g | gram g | gram g | gram g |
| capacity | capacity | capacity | capacity | capacity | capacity | capacity |
|  | volume | volume | volume | volume | volume | volume |
| full/empty | full/empty | full/empty | full/empty | full/empty | full/empty | full/empty |
| more than | more than | more than | more than | more than | more than | more than |
| less than | less than | less than | less than | less than | less than | less than |
| half/half full | half/half full | half/half full | half/half full | half/half full | half/half full | half/half full |
|  |  | quarter full | quarter full | quarter full | quarter full | quarter full |
|  |  | three-quarters full | three-quarters full | three-quarters full | three-quarters full | three-quarters full |



| Measurement (Time) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| time | time | time | time | time | time | time |
| quicker | quicker | quicker | quicker | quicker | quicker | quicker |
| slower | slower | slower | slower | slower | slower | slower |
| earlier | earlier | earlier | earlier | earlier | earlier | earlier |
| later | later | later | later | later | later | later |
|  | chronological order | chronological order | chronological order | chronological order | chronological order | chronological order |
| before | before | before | before | before | before | before |
| after | after | after | after | after | after | after |


| first | first | first | first | first | first | first |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| next | next | next | next | next | next | next |
| today | today | today | today | today | today | today |
| yesterday | yesterday | yesterday | yesterday | yesterday | yesterday | yesterday |
| tomorrow | tomorrow | tomorrow | tomorrow | tomorrow | tomorrow | tomorrow |
| morning | morning | morning | morning | morning | morning | morning |
| afternoon | afternoon | afternoon | afternoon | afternoon | afternoon | afternoon |
| evening | evening | evening | evening | evening | evening | evening |
|  | days of the week | days of the week | days of the week | days of the week | days of the week | days of the week |
|  | months of the year | months of the year | months of the year | months of the year | months of the year | months of the year |
| day | day | day | day | day | day | day |
| week | week | week | week | week | week | week |
|  | month | month | month | month | month | month |
|  | year | year | year | year | year | year |
|  | o'clock | o'clock | o'clock | o'clock | o'clock | o'clock |
|  | half past | half past | half past | half past | half past | half past |
| hour | hour | hour | hour | hour | hour | hour |
| minutes | minute | minute | minute | minute | minute | minute |
|  | second | second | second | second | second | second |
|  |  | intervals of time | intervals of time | intervals of time | intervals of time | intervals of time |
|  |  | quarter past/to | quarter past/to | quarter past/to | quarter past/to | quarter past/to |
|  |  |  | analogue clock | analogue clock | analogue clock | analogue clock |
|  |  |  | Roman numerals | Roman numerals | Roman numerals | Roman numerals |
|  |  |  | 12-hour clock | 12-hour clock | 12-hour clock | 12-hour clock |


|  |  | 24-hour clock | 24-hour clock | 24-hour clock | 24-hour clock |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | a.m./p.m. | a.m./p.m. | a.m./p.m. | a.m./p.m. |
|  |  | noon | noon | noon | noon |
|  |  | midnight | midnight | midnight | midnight |
|  |  | leap year | leap year | leap year | leap year |
|  | duration | duration | duration | duration | duration |
|  |  | digital | digital | digital | digital |
|  |  |  | convert | convert | convert |


| Measurement (Money) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  | money | money | money | money | money | money |
|  | coins | coins | coins | coins | coins | coins |
|  | notes | notes | notes | notes | notes | notes |
|  | pounds $£$ | pounds $£$ | pounds $£$ | pounds $£$ | pounds $£$ | pounds $£$ |
|  | pence $p$ | pence p | pence $p$ | pence p | pence p | pence p |
|  |  | value | value | value | value | value |
|  |  | change | change | change | change | change |


| Geometry - Properties of Shape |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| 2-d shapes | 2-d shapes | 2-d shapes | 2-d shapes | 2-d shapes | 2-d shapes | 2-d shapes |
| rectangle | rectangle | rectangle | rectangle | rectangle | rectangle | rectangle |
| square | square | square | square | square | square | square |
| circle | circle | circle | circle | circle | circle | circle |


| triangle | triangle | triangle | triangle | triangle | triangle | triangle |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | right-angle triangle | right-angle triangle | right-angle triangle | right-angle triangle |
|  |  |  |  | isosceles | isosceles | isosceles |
|  |  |  |  | equilateral | equilateral | equilateral |
|  |  |  |  | scalene | scalene | scalene |
|  |  | pentagon | pentagon | pentagon | pentagon | pentagon |
|  |  | hexagon | hexagon | hexagon | hexagon | hexagon |
|  |  |  | heptagon | heptagon | heptagon | heptagon |
|  |  |  | octagon | octagon | octagon | octagon |
|  |  |  | polygon | polygon | polygon | polygon |
|  |  |  |  | trapezium | trapezium | trapezium |
|  |  |  |  | rhombus | rhombus | rhombus |
|  |  |  |  | parallelogram | parallelogram | parallelogram |
|  |  |  |  | kite | kite | kite |
|  | sides | sides | sides | sides | sides | sides |
|  | corners | corners | corners | corners | corners | corners |
|  |  | line of symmetry | line of symmetry | line of symmetry | line of symmetry | line of symmetry |
|  |  |  |  | geometric shapes | geometric shapes | geometric shapes |
|  |  |  |  | quadrilaterals | quadrilaterals | quadrilaterals |
| characteristics | properties | properties | properties | properties | properties | properties |
| 3-d shapes | 3-d shapes | 3-d shapes | 3-d shapes | 3-d shapes | 3-d shapes | 3-d shapes |
| cuboids | cuboids | cuboids | cuboids | cuboids | cuboids | cuboids |
| cubes | cubes | cubes | cubes | cubes | cubes | cubes |
| cone | cone | cone | cone | cone | cone | cone |
|  | pyramids | pyramids | pyramids | pyramids | pyramids | pyramids |
| spheres | spheres | spheres | spheres | spheres | spheres | spheres |
|  |  | cylinder | cylinder | cylinder | cylinder | cylinder |


|  |  | edges | edges | edges | edges | edges |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | vertices | vertices | vertices | vertices | vertices |
|  |  | vertex | vertex | vertex | vertex | vertex |
|  | faces | faces | faces | faces | faces | faces |
|  |  |  | prism | prism | prism | prism |
|  |  |  |  |  |  | radius |
|  |  |  |  |  |  | diameter |
|  |  |  |  |  |  | circumference |
|  |  |  |  |  | regular polygon | regular polygon |
|  |  |  |  |  | irregular polygon | irregular polygon |
|  |  |  |  |  |  | dimensions |
| curved | curved | curved | curved | curved | curved | curved |
| straight | straight | straight | straight | straight | straight | straight |
| flat | flat | flat | flat | flat | flat | flat |


| Geometry - Properties of shape (2) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  |  | orientations | orientations | orientations | orientations |
|  |  |  | angles | angles | angles | angles |
|  |  |  | acute angle | acute angle | acute angle | acute angle |
|  |  |  | obtuse angle | obtuse angle | obtuse angle | obtuse angle |
|  |  |  |  |  | reflex angles | reflex angles |
|  |  |  |  |  | degrees | degrees |
|  |  |  |  |  | one whole turn | one whole turn |
|  |  |  |  |  | angles on straight line | angles on straight line |
|  |  |  |  |  | angles around a point | angles around a point |


|  |  |  |  |  | vertically opposite | vertically opposite |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | missing angles | missing angles |
|  |  |  | turn | turn | turn | turn |
|  |  |  | right angles | right angles | right angles | right angles |
|  |  |  | half turn | half turn | half turn | half turn |
|  |  |  | three quarters of a turn | three quarters of a turn | three quarters of a turn | three quarters of a turn |
|  |  |  | greater than right angle | greater than right angle | greater than right angle | greater than right angle |
|  |  |  | less than right angle | less than right angle | less than right angle | less than right angle |
|  |  |  | horizontal lines | horizontal lines | horizontal lines | horizontal lines |
|  |  |  | vertical lines | vertical lines | vertical lines | vertical lines |
|  |  |  | perpendicular lines | perpendicular lines | perpendicular lines | perpendicular lines |
|  |  |  | parallel lines | parallel lines | parallel lines | parallel lines |


| Geometry - Position and direction |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| over | position | position | position | position | position | position |
| under | direction | direction | direction | direction | direction | direction |
| between | movement | movement | movement | movement | movement | movement |
| around | whole turn | whole turn | whole turn | whole turn | whole turn | whole turn |
| through | quarter turn | quarter turn | quarter turn | quarter turn | quarter turn | quarter turn |
| on | half turn | half turn | half turn | half turn | half turn | half turn |
| into | three-quarter turn | three-quarter turn | three-quarter turn | three-quarter turn | three-quarter turn | three-quarter turn |


| next to |  | clockwise/anticlockwise | clockwise/anti-clockwise | clockwise/anti-clockwise | clockwise/anti-clockwise | clockwise/anti-clockwise |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| behind |  | straight line | straight line | straight line | straight line | straight line |
| beneath |  | rotation | rotation | rotation | rotation | rotation |
| order | order | order | order | order | order | order |
| repeat |  | arrange | arrange | arrange | arrange | arrange |
| patterns | patterns | patterns | patterns | patterns | patterns | patterns |
| on top of |  | sequences | sequences | sequences | sequences | sequences |
|  |  |  |  | co-ordinates | co-ordinates | co-ordinates |
|  |  |  |  | first quadrant | first quadrant | first quadrant |
|  |  |  |  |  |  | four quadrants |
|  |  |  |  | grid | grid | grid |
|  |  |  |  | translation | translation | translation |
|  |  |  |  | plot | plot | plot |
|  |  |  |  | polygon | polygon | polygon |
|  |  |  |  |  | reflection | reflection |
|  |  |  |  | axis | axis | axis |
|  |  |  |  |  |  | co-ordinate plane |


| Statistics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  | pictograms | pictograms | pictograms | pictograms | pictograms |
|  |  | tally chart | tally chart | tally chart | tally chart | tally chart |
|  |  | block diagram | block diagram | block diagram | block diagram | block diagram |
|  |  |  | table | table | table | table |
|  |  |  |  |  | timetable | timetable |
|  |  |  | bar chart | bar chart | bar chart | bar chart |


|  |  |  | time graph | time graph | time graph |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | discrete data | discrete data | discrete data |
|  |  |  | continuous data | continuous data | continuous data |
|  |  |  | line graph | line graph | line graph |
|  |  |  |  | two-way tables | two-way tables |
|  |  |  |  |  | pie chart |
|  | category | category | category | category | category |
|  | sorting | sorting | sorting | sorting | sorting |
|  | totalling | totalling | totalling | totalling | totalling |
|  | comparing | comparing | comparing | comparing | comparing |
|  |  |  | comparison problem | comparison problem | comparison problem |
|  |  |  | sum problem | sum problem | sum problem |
|  |  |  | difference problem | difference problem | difference problem |
|  |  | one-step problem | one-step problem | one-step problem | one-step problem |
|  |  | two-step problem | two-step problem | two-step problem | two-step problem |
|  |  |  | calculate | calculate | calculate |
|  |  |  | interpret | interpret | interpret |
|  |  |  |  |  | mean |
|  | horizontal | horizontal | horizontal | horizontal | horizontal |
|  | vertical | vertical | vertical | vertical | vertical |

## OVERVIEW OF SUBJECT/MONITORING/PROGRESSION/COVERAGE AND OUTCOMES

- Has the school made the objectives of their curriculum clear for your subject?
- Does the school's curriculum for your subject align with national policy and statutory requirements?
- How do you know your curriculum is working? Can you demonstrate how you know?
- Why is the curriculum right for the children in your school at this time?
- What are the strengths of your current subject curriculum?
- What are the areas of the curriculum that might need development?
- How effectively are curriculum policies and plans translated into practice?
- Is the same importance given to all foundation subjects?
- How is the curriculum delivered across each year group and across key stages, ensuring progress in skills, knowledge and understanding from different starting points?
- How is progress and attainment measured?
- How are pupils given opportunities to apply basic skills in your subject?
- Where is the evidence of pupils' SMSC development?
- What is the impact of the curriculum in your subject on the pupils' outcomes?

