

Inclusive Approaches and Adaptations Across All Maths Units			
Planning and Design - Provide clear learning intentions and success criteria using child-friendly mathematical language. - Break mathematical concepts and procedures into small, manageable steps. - Use concrete resources, pictorial representations and abstract notation to support understanding. - Model mathematical methods explicitly using worked examples and think-alouds. - Provide examples of completed work and model how to set out calculations clearly. - Use consistent mathematical representations and language across lessons. - Provide visual prompts, worked examples, calculation mats and reference materials where appropriate. - Allow pupils to demonstrate mathematical understanding through practical work, discussion, diagrams, manipulatives and written calculations. - Provide additional processing time where required. - Provide opportunities for guided practice before independent application. - Reduce unnecessary recording demands where this does not assess the mathematical skill being taught.	Foundational Knowledge and Vocabulary Development - Identify and explicitly teach the essential mathematical knowledge needed for each unit. - Pre-teach and revisit key mathematical vocabulary using vocabulary mats, images, symbols and practical examples. - Display key vocabulary and refer to it consistently during teaching. - Explicitly teach the meaning of mathematical symbols and language. - Revisit previously taught number facts and concepts through retrieval activities. - Use regular opportunities to practise number bonds, times tables and other key facts. - Make connections between mathematical concepts and prior learning explicit. - Use dual coding, visual representations and concrete resources to support abstract concepts. - Provide opportunities to verbalise mathematical thinking before recording it. - Use stem sentences to support precise mathematical explanations. - Explicitly teach mathematical vocabulary such as: greater than, less than, equivalent, multiple, factor, product, denominator, numerator, estimate, inverse, perimeter, area, volume and coordinates.	Mathematical Reasoning and Problem Solving - Model how to approach mathematical problems systematically. - Break multi-step problems into smaller stages. - Highlight key information and mathematical vocabulary within problems. - Use practical equipment, bar models, part-whole models, number lines and diagrams to represent problems. - Provide structured problem-solving frameworks where appropriate. - Model different strategies and encourage pupils to select an appropriate method. - Use worked examples and identify common misconceptions explicitly. - Provide opportunities to explain, justify and prove mathematical thinking. - Allow pupils to rehearse their reasoning orally before recording it. - Provide scaffolded reasoning questions before moving towards greater independence.	Communication and Language Support - Pre-teach vocabulary and language structures needed to access mathematical problems. - Use visual vocabulary mats and displays. - Provide sentence starters such as: "I know this because..." "First I need to..." "I chose this method because..." "I notice that..." "The answer is reasonable because..." "I can prove this by..." "The pattern shows..." - Encourage partner talk and mathematical discussion before written work. - Model precise mathematical language consistently. - Allow pupils to explain their mathematical thinking verbally, using diagrams or manipulatives where appropriate. - Clarify the difference between everyday language and mathematical terminology.
Cognition and Learning Support - Break new learning into small, sequential steps. - Use explicit teaching before expecting independent application. - Provide repeated opportunities to practise and overlearn key mathematical concepts. - Use guided practice, supported practice and independent practice progressively. - Provide additional examples and opportunities to revisit concepts where required. - Use scaffolds that can be gradually removed as independence develops. - Provide carefully selected questions that build in small steps of difficulty.	Physical and Sensory Needs - Consider sensory needs when selecting resources, displays and classroom activities. - Avoid unnecessarily cluttered worksheets and visual overload. - Provide appropriate seating, workspace and positioning within the classroom. - Ensure mathematical equipment is accessible and manageable for pupils with physical needs. - Provide alternatives to small or difficult-to-manipulate resources where required.	Social, Emotional and Mental Health (SEMH) Inclusion - Establish a classroom culture where mistakes are viewed as an important part of mathematical learning. - Avoid creating anxiety around speed or rapid recall where this is not the learning objective. - Provide thinking time before expecting answers. - Celebrate different mathematical strategies and approaches. - Encourage pupils to explain mistakes and misconceptions as part of the learning process.	Challenge and Greater Depth for SEND Pupils Where appropriate, pupils should be challenged through: - Explaining and justifying mathematical methods and solutions. - Finding more than one way to solve a problem. - Identifying and explaining patterns and relationships. - Creating their own mathematical problems and questions. - Proving or disproving mathematical statements. - Explaining why an answer is correct rather than simply giving the answer.

• Use targeted intervention and additional practice to address identified misconceptions. • Allow additional processing time for pupils who need it. • Use peer support and paired problem solving where appropriate. • Reduce cognitive load by presenting information clearly and avoiding unnecessary visual distractions. • Provide access to appropriate manipulatives throughout learning rather than expecting pupils to memorise procedures prematurely.	• Allow pupils to use larger equipment, adapted writing tools or digital technology where appropriate. • Consider fatigue and provide movement breaks where necessary. • Ensure all pupils can access practical mathematical activities and equipment. • Provide additional adult or peer support for practical tasks where required.	• Use low-stakes retrieval and questioning to build confidence. • Provide achievable steps towards the learning intention to promote success. • Use paired and collaborative problem solving to develop confidence. • Recognise and celebrate perseverance, reasoning and mathematical thinking as well as correct answers. • Provide appropriate support for pupils who experience mathematics anxiety or low confidence.	• Identifying errors and explaining misconceptions. • Applying mathematical knowledge to unfamiliar contexts. • Making connections between different areas of mathematics. • Generalising mathematical relationships. • Selecting efficient methods independently. Using increasingly sophisticated mathematical vocabulary. • Reasoning with increasingly complex representations and problems. • Applying secure knowledge to open-ended and non-routine problems. • Working with greater independence while retaining appropriate scaffolds where needed.
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Maths Area	Inclusive Adaptations
Number and Place Value	Use concrete resources, place-value charts, counters and number lines to develop understanding of quantity and positional value. Use visual representations and practical examples before introducing abstract notation.
Addition and Subtraction	Use manipulatives, part-whole models and number lines to develop conceptual understanding. Model formal written methods step-by-step and provide worked examples and calculation mats where appropriate.
Multiplication and Division	Use arrays, grouping, sharing, counters and practical equipment to develop conceptual understanding. Link multiplication and division facts explicitly and provide visual representations to support recall.
Fractions	Use concrete fraction resources, fraction walls, number lines and visual models. Make explicit links between fractions, division and quantities. Use practical examples before moving to abstract calculations.
Decimals and Percentages	Use place-value grids, money, hundred squares and visual representations to develop understanding. Explicitly connect decimals, fractions and percentages through equivalent representations.
Ratio and Proportion	Use practical contexts, objects, bar models and visual representations to demonstrate relationships. Break multi-step ratio problems into manageable stages and explicitly teach proportional language.
Algebra	Use concrete objects, patterns and visual representations before introducing letters and symbols. Model how unknown quantities and variables can be represented and provide structured examples.
Measurement	Provide practical opportunities to measure using appropriate equipment. Use visual scales, real-life objects and estimation activities. Ensure pupils understand the units before applying formal calculations.

Money	Use real or realistic coins and notes, role play and practical shopping activities. Provide visual prompts and structured problem-solving steps for calculations involving money.
Time	Use analogue clocks, timelines and visual schedules. Provide repeated opportunities to practise reading and comparing times and make links between units of time and real-life contexts.
Geometry – Properties of Shape	Use physical shapes, sorting activities, geoboards and visual examples. Explicitly teach mathematical vocabulary and provide opportunities to handle and classify shapes.
Geometry – Position and Direction	Use practical movement, floor grids, maps, coordinates and visual prompts. Model positional language explicitly and provide opportunities to rehearse directions verbally.
Statistics	Use real-life data, practical sorting and physical representations before moving to tables and graphs. Provide structured templates and explicitly model how to interpret data.
Area and Perimeter	Use practical resources such as tiles, squared paper and string to demonstrate concepts. Explicitly distinguish between area and perimeter and use visual models to reinforce the difference.
Volume and Capacity	Use practical containers, water, cubes and measuring equipment. Provide opportunities to estimate, compare and measure before recording calculations formally.
Problem Solving	Break problems into manageable steps, identify key vocabulary and information, and use bar models, diagrams and concrete resources. Provide structured reasoning prompts that can gradually be removed.
Mathematical Reasoning	Provide sentence stems, worked examples and opportunities for partner discussion. Model how to justify, prove, compare and explain mathematical ideas using precise vocabulary.
Mental Calculation and Fluency	Provide regular, low-stakes practice of key facts. Use concrete and visual supports where necessary and gradually reduce reliance on these as fluency develops. Avoid over-reliance on speed as an indicator of mathematical understanding.
Written Calculation	Model each stage explicitly and provide clear examples of layout and presentation. Use place-value grids and visual prompts to support alignment and accuracy.
Mathematical Vocabulary	Pre-teach vocabulary, use visual vocabulary mats and revisit terminology regularly. Encourage pupils to use precise mathematical language when explaining their thinking.