Lanner Primary School

Strategies for supporting pupils with Special Educational Needs and Disabilities in **Mathematics** lessons.

Individual Need	This is how we help…
Dyslexia	• Ensuring that appropriately tinted books, overlays and whiteboards are available. • When feasible printed resources will be on pastel coloured paper, avoiding black font on white paper. • Using fonts such as Century Gothic, Comic Sans, Arial or Verdana on printed sheets • Presentation slides will avoid black font on a white background. • Visual displays (maths working walls) are used to support understanding of key information. • Concrete resources (Numicon, tens frames, cubes, base ten, place value counters etc.) used to support understanding. • Consistent visual representations (diagrams, pictures, illustrations) used to support understanding. • Mathematics specific vocabulary is taught, rehearsed and reinforced so that it's remembered. • Instructions will be broken down into smaller steps. • Pupils are asked to repeat back what they are required to do. • Pupils are given extra thinking and completion time. • Pre-warning pupils of questions – never "putting them on the spot". • When appropriate support pupils organisational skills with task boards. • We understand that pupils with dyslexic tendencies may find is hard to organise information on diagrams, graphs, and tables. If necessary, we will modify the task, for example by providing a blank table or graph, to ensure success. • If necessary, large spaces for working out will be provided. • We understand that pupils may find it tricky to complete pre-printed tables. We therefore make sure boxes and tables are big enough to easily write in. • We limit situations where pupils have to listen and write at the same time.
DCD Developmental Coordination Disorder	**Sensory Need** • Ensuring that pupils have access to the sensory equipment they need – wobble cushions, fiddle toys, Zuma chair, access to trampette etc.

	• Making sure movement breaks are available throughout the Mathematics Lesson – and are sometimes disguised- to ensure that the pupil is not embarrassed.
	• We understand that pupils may find it hard to wear standard school uniform and may like to wear more relaxed fit clothing or clothes of specific textures.
	Fine & Gross Motor Skills
	• When fine motor skills are inhibiting legible workings we make sure that written work is not the primary communicator / evidence of substantive and disciplinary knowledge in Mathematics.
	• We understand that pupils with DCD tendencies may find is hard to organise information on graphs and tables. If necessary, we will modify the task, for example by providing a blank table or enlarging tables, worksheets and diagrams to ensure success.
	• When equipment (compasses, mirrors, protractors, calculators etc.) is to be used, opportunities to practise is provided, before the lesson.
	• Thought is given of which group would me most beneficial to the pupil, ensuring that DCD pupils can thrive alongside their peers.
	• We provide
	  ○ Writing slopes.
	  ○ Finger grip rulers.
	• We understand that pupils may struggle with zips and buttons when putting on coats and cardigans.
	Organisation
	• Ensure the pupils peg is away from other children's clutter and is easy to reach.
	• Make sure the pupil's tray is close to their desk.
	• Encourage children to limit the amount of resources on their desks at a given time.
	• Task boards to help pupils remember all the things they need for the lesson ahead.
	• Visual displays (maths working walls) are used to support understanding of key information.
	• Pupils to sit directly facing the board / teacher.
	• Clear pencil cases so pupils can see their resources.
	• Visual timetables.
	• Adult support is given when it is necessary to organise movements – use of a compass / protractor.
	• Simple step-by-step instructions on the board or printed worksheet.
	• Instructions will be broken down into smaller steps

	• We will ask pupils to repeat back what they are required to do.
Dyscalculia	• Adoption of a little and often overlearning approach. Fluent in five, Flashback 4 and Number Sense sessions incorporate activities that specifically focus on recall and revisiting areas of mathematics the children have already explored in a previous term or year group. • Pupils supported with subitising so they can recognise common dot patterns and see the relationship between one number and another. • Concrete resources and manipulatives (Cuisenaire rods, ten frames, coloured place value counters, Numicon, base ten etc.) materials are always available. Adults ensure children understand how to use these manipulatives to support the specific learning goal. • Multiplication grids and number bond resources to reduce anxiety of having to remember this information. • Graph paper can be provided for written calculations (i.e. long division). • Rulers and highlighters can be used to visually support the drawing/organisation of written calculation methods. • Key words highlighted or circled along with and numbers on word problems. • Peer and adult support will be built into the lesson throughout to support any corrections with recording dictated numbers/ number formation. • Peer-teaching will be used as a great way of the child sharing new knowledge that has been learned. • Mathematical language taught and modelled. Encouragement for all pupils to do the same. • Extra thinking time and extra time in assessments.
Autism Spectrum Disorder	• Adults who have a positive, supportive, trusting relationship with the child will be available to support during the lesson. • The Mathematics lesson will be taught as part of the normal daily routine (eg 10.50-12.00 is when Mathematics is taught.) If the lesson has to be moved the pupils will be pre-warned. • Visual timetables will have reiterated the daily routine and pre-warned the pupil of the Mathematics lesson. • If necessary, the pupil will be pre-warned of the content of the Mathematics lesson, especially if it takes an unpredictable form. • Thought is given, prior to Mathematics lessons, of which group would me most beneficial to the pupil, to ensure that ASD pupils can thrive alongside their peers. • Any group activities will be thought-out carefully and children can work independently if the child finds the social expectations of group work tricky or difficult.

	• If necessary learning will be adapted so that it is accessible to the child. • Providing a range of ways for pupils to show their learning, not relying just on workings to demonstrate substantive and disciplinary knowledge in Mathematics. • Concrete resources (Numicon, tens frames, cubes, base ten, place value counters etc.) used to support understanding. • Visual representations (diagrams, pictures, illustrations) used to support understanding. • Visual displays (maths working walls) will be used to support understanding of key information. • Mathematics specific vocabulary is taught, rehearsed and reinforced so that it is remembered. • Planned and unplanned sensory breaks will be used and there will be a breakout space available throughout the lesson.
Anxiety	• The PACE approach will be used by all adults supporting the child within the lesson. • Adults will carefully check through the content of the lesson to ensure they are considering the child's context and background before the lesson takes place. If necessary, lessons will be adapted with this information in mind to avoid triggers and to ensure the child feels safe and secure. • If necessary Giving feedback or answers is always a non-compulsory option during any maths lesson so that children are not 'put on the spot' or made to feel pressured or uncomfortable. • Consideration given to the appropriateness of timed timetable assessments. Adaptations made to assessment methods if necessary. • Any changes made to the seating plan or organisation of the lesson will be shared with the child beforehand. • Children will be able to use a signal in a pre-agreed manner, if they feel that they need support within the classroom. • Children will be provided with a safe and familiar break out space if they need it throughout the lesson
Attention Deficit Hyperactivity Disorder	• All adults supporting the child within the classroom will have a good understanding of how best to support the child. • Any rules/expectations will be consistently implemented. • Concrete resources (numicon, tens frames, cubes, base ten, place value counters etc) used to support understanding. • Consistent visual representations (diagrams, pictures, illustrations) used to support understanding. • Mathematics specific vocabulary is taught, rehearsed and reinforced so that it is remembered.

	• Visual displays (maths working walls) will be used to support understanding of key information. • Seating arrangements will be considered carefully to minimise distractions within the Mathematics session. • 'Time out' or 'help cards' can be used to ensure the child is able to communicate that they need to use their break out space. • Instructions and key information will be given clearly so the child understands what is being asked of them and how they will achieve the learning intention.
Cognition & Learning Challenges	• Simple step-by-step instructions verbally, on the board or printed worksheet. • Instructions will be broken down into smaller steps. • Ask pupils to repeat back what they are required to do. • Extra thinking time. • Pre-warning of what question will be asked and thinking time given. • Concrete resources (Numicon, tens frames, cubes, base ten, place value counters etc.) used to support understanding. • Consistent visual representations (diagrams, pictures, illustrations) used to support understanding. • Mathematics specific vocabulary is taught, rehearsed and reinforced so that it is remembered. • Visual displays (maths working walls) will be used to support understanding of key information. • Clear steps to success. • Providing a range of ways for the pupil to show their learning, not relying just on workings to demonstrate substantive and disciplinary knowledge in Mathematics. • Pre-planned peer pairings and group support.
Experienced Trauma	• The PACE approach will be used by all adults supporting the child within the lesson. • Adults will carefully check through the content of the lesson to ensure they are considering the child's context and background before the lesson takes place. If necessary, lessons will be adapted with this information in mind to avoid triggers and to ensure the child feels safe and secure. • Children will be provided with a safe and familiar break out space if they need it throughout the lesson. • Adults supporting the child will have good understanding of the child's context and how best to support the child with their emotions.
Speech, Language &	• Speech will be clear and slowly paced so that children can understand what is being said, what information is being shared and any instructions that are being given.

Communication Needs	• Long sentences will be broken up into smaller, short sentences that can be clearly interpreted. • Children will be given time to process information and to give responses to answers. • Symbols, signs and visual timetables will be used to support communication. • Visual aids and word-mats to help with vocabulary. • Visual displays (maths working walls) will be used to support understanding of key information. • Lots of opportunities will be given to communicate in either a pair or small group context to develop confidence. • Positive responses will be given to any attempts at communicating. • Adults will regularly check the child's understanding throughout the lesson.
Vision Impairment	If appropriate • The pupil will be seated facing the teacher. • A reading slope will be provided. • A thicker/darker pencil will be provided to support the child with reading their own workings and writing. • Children will be given enlarged images, pictures and diagrams. • Concrete resources (Numicon, tens frames, cubes, base ten, place value counters etc.) used to support understanding. • Resources will be provided in the correct font size for the child in question. • If appropriate large squared exercise books to be used.
Hearing Impairment	• Minimisation of background noise. • Consideration of the most beneficial seating arrangement through consultation with the pupil. Placing the child at the front or close to the teacher or demonstration, or in the place the child feels is best for them. • An awareness that group members, teacher and TA must face the child when speaking. • Adults will discretely check that the child is wearing their hearing aid. • If necessary, provide written and pictorial instructions. • Concrete resources (Numicon, tens frames, cubes, base ten, place value counters etc) used to support understanding. • Children will be provided with key vocabulary specific to Mathematics with technical terms explained. • Adult support to encourage discussion and sharing of ideas to build verbal skills.
Toileting Issues	• Children will be able to leave the classroom whenever necessary. • Seating arrangements will be carefully organised so that the child can access the toilet as easily as possible.