



SEND provision in Science

Cognition and Learning		Communication and Interaction	
Learning Challenges	Provision	Learning Challenges	Provision
<ul style="list-style-type: none"> • Accessing reading/written work • Poor memory and recall skills • Recording written work or feedback to listening/appraising activities • Poor sequencing skills – understanding the steps modelled • Linking learning • Reading/interpreting data/tables etc • Calculations 	<ul style="list-style-type: none"> • Pre reading of any texts used • Simplified texts • Use of symbols, larger print, colour coding, multi sensory reinforcement. • Use of overlays, coloured paper • A greater emphasis on modelling and scaffolding for learning – smaller visual steps. • Use of writing frames, cloze passages • Use word banks which include pictures. • A working wall showing each lesson's focus and how successive lessons or topics link together to develop a mind map, including symbols, images or objects to make it more accessible. Repeat or display important information. • Use videos to show the children the expectations in a clear way, use ICT to allow them to re-watch if needed, step by step – not having to rely on their short, or long term memories. • New learning fits into the framework of what the pupil already knows – explicit links to prior learning • Smart grouping – pairing with a more able reader/writer. • Build in lots of repetition. • Give additional time for processing • Use of task boards – tick list of steps • Remove writing/reading expectations – use multiple choice, use pictures 	<ul style="list-style-type: none"> • Being able to use expressive language • Understanding and using new topic vocabulary. • Word finding difficulties • Following instructions and sequences. • Levels of concentration • Limited language will affect written work • Retention of new vocabulary • The language of science may be challenging 	<ul style="list-style-type: none"> • Use different forms of communication • Have pre-arranged prompts • Use visual support • Pre-teaching of new vocabulary prior to the lesson • Send vocabulary word mats home before the topic begins • Limit vocabulary to that which is necessary to ensure progress • Limit instructions – use short steps • Social stories. • Children are allowed time to discuss the answers to questions, and evaluate work with peers • Children with communication impairments are given time to think about questions before being required to respond. • Range of multi-sensory approaches to support language – symbols, pictures, concrete apparatus, artefacts, IT, role play • Prompt cards to help with understanding of question words • Word finding strategies • Support written work if child has limited language – matching activity, missing words, sticking activities, scribes, drawings, mind map

	<ul style="list-style-type: none"> • Support for those with a maths barrier when using data/calculations/figures etc • Alternative methods of recording – drawing, voice recording, typing, mind maps, symbols, use of a scribe, matching activity, sticking activity, missing words • Minimise copying from the board • Pre teaching of vocabulary • Pre learning tasks • Dual coding • Visual support for setting up any experiments • Kinaesthetic activities such as planting seeds, weather observations, modelling of cause and effect • Children with Spld in maths use a simpler way of recording data and using measurements when recording in science • Pop quizzes and retrieval practices are adapted to lower demand for writing • Plan wording of questions carefully, avoiding complex vocabulary and sentence structures. Prepare questions in different styles/levels • Use mnemonics to help pupils remember things • Use real objects 		<ul style="list-style-type: none"> • Visual support for setting up any experiments • Plan wording of questions carefully, avoiding complex vocabulary and sentence structures. Prepare questions in different styles/levels • Use mnemonics to help pupils remember things
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Physical and/or Sensory		Social, Emotional and Mental Health	
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Learning Challenge	Provision	Learning Challenge	Provision
<ul style="list-style-type: none"> • Videos with over stimulating or challenging themes • Difficulties with fine and gross motor skills • Difficulties with planning • Organisational skills • Hearing impairment • Visual impairment 	<ul style="list-style-type: none"> • Provide sources and themes which are matched to the needs of the child. i.e. enlarged sources/visuals/IT • Support of the child to avoid conflict/sensory overload – consider ear defenders, a quiet space to work in/an effective way for a child to communicate any distress • Adapted equipment • Use of hand over hand 	<ul style="list-style-type: none"> • Understanding own thoughts and contrasting with those of others • Working effectively as part of a group • No resilience - feeling they aren't any good – resulting in lack of care and effort • Difficulty concentrating and maintaining attention to a task 	<ul style="list-style-type: none"> • Working in a small group with a trusted adult for emotional support. • Pre-teaching • Clear rules and expectations, consistent boundaries, rewards and sanctions. • Praise the small steps and showcase their work – be proud.

<ul style="list-style-type: none"> • Colour vision deficiencies • Physical needs 	<ul style="list-style-type: none"> • Consider seating position for hearing/vision impaired pupils • Consider lighting/blinds • Multi-sensory learning • Reduce need to copy from board (visual impairment) • Attach paper to desk with masking tape to avoid having to hold with one hand and write with the other • Allow the child plenty of space to work • Gain pupil's attention before important information is given • Keep background noise to a minimum 	<ul style="list-style-type: none"> • Difficulties sitting still • Hypervigilance • Over stimulation • 	<ul style="list-style-type: none"> • Chunking work into smaller steps • Visual support • Task boards • Movement breaks • Use of fiddle toys/wobble cushions • Provide opportunities for multi-sensory learning • Make sure equipment is accessible and labelled clearly • Use of sandtimers • Use of safe space • The transition from whole-class to group or independent work, and back, is clearly signalled. • Pupils encouraged to look back to previous work/photos/ records to see how much progress they have made
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