SEND in Science

Cognition and Learning		Communication and Interaction	
Subject Challenges for SEND	**Provision for SEND**	**Subject Challenges for SEND**	**Provision for SEND**
Age appropriate content for all children in the science lessons	Using personal stories to understand different contexts 1:1 session Use of books/stories	Children may struggle to communicate and express opinions in science	Visual cues/picture cards Visual words/ phrases Minimise background noise Child to face T to support lip reading Write new vocabulary down
Gaps in knowledge and understanding in science	Ensure previous years science learning objectives are covered Knowledge organisers from previous year groups available Pre-teach to identify gaps Pre-expose children to science equipment		Language Buddies
		Language difficulties may make children unable to access their science learning	Lots of reinforcement and repetition Scaffold observational skills through careful questioning Use of simple instructions
Accessing learning due to poor literacy skills	Key words displayed Use of shorter/less complex sentences in resources given Writing frames where possible		Step by step instructions/task boards Now/Next/Then boards Careful and appropriate modelling to support understanding Visual aids Use of IT to support e.g.video of examples and practice
Children may struggle to remember information/facts/previous learning in science	Lots of retrieval opportunities and reinforcement in science lessons Apply new vocab into lots of different contexts – pre teaching vocab Physical warm ups to recall previous learning Use of concrete resources		

Physical and sensory		Social Emotional and Mental Health	
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Children with visual impairment may find it difficult to see images shown during the science lessons.	Ensure images are enlarged and accessible Use Ipad to photograph board to eliminate copying from the board Ensure children are close to whiteboard/ sources	Children may become frustrated/withdraw/ aggressive when work is challenging	Ensure instructions are clear Children provided with a role which may not involve active participation Use of ICT to support access Providing appropriate resources so that children can access the lesson eg fiddle toy/move 'n' sit cushions/movement breaks
Recording information may be difficult from a scientific investigation.	Provide additional ways to record e.g. video, drawings, verbal explanation		Providing a safe space for the children within the lesson if needed- breakout spaces
Children with fine motor difficulties may find it difficult to use specific Science equipment	EYFS tools that may be larger to use Working in groups to support Pencil grips and tripod pencils Use of ICT to support access	Children's mental health and wellbeing may impact on their ability to access their learning	Teach with empathy and understand Ensure children have opportunities to have sensory breaks etc from their work Consider cognitive overload and children's ability to manage this
Children who might not be able to touch or handle equipment	Addressing individual needs in a lesson/on a school trip to ensure full access eg breaks for walking, pre-expose children to equipment		Ensuring that parents are aware of curriculum and can support in science.

Non Negotiables that need to be in place in all lessons/classrooms when teaching science:

1. Opportunities to explore tactile resources/equipment where appropriate
2. New vocabulary on display (pre-taught where necessary)
3. Explicit modelling of key skills – scientific enquiry, investigations