Science – Supporting children with SEND

Cognition & Learning		Communication & Interaction	
Barrier	**Steps to Support**	**Barrier**	**Steps to Support**
Difficulty understanding scientific concepts.	Use practical investigations, models and visual demonstrations to explain concepts.	Difficulty understanding verbal instructions.	Use simple language alongside visual demonstrations.
Difficulty remembering scientific vocabulary.	Pre-teach key vocabulary using pictures, definitions and real objects.	Difficulty explaining scientific ideas and observations.	Provide sentence starters, such as "I observed that..."
Struggling to follow multi-step investigation instructions.	Break investigations into smaller steps using visual instruction cards.	Struggling to ask questions or request help.	Introduce a help card or simple help signal.
Difficulty making predictions and drawing conclusions.	Provide sentence starters, such as "I predict that..." and "I noticed that..."	Difficulty working collaboratively during investigations.	Allocate specific roles, such as equipment manager, recorder or observer.
Difficulty understanding cause and effect.	Use simple, hands-on experiments to demonstrate cause and effect.	Difficulty understanding scientific vocabulary.	Display key vocabulary with pictures and definitions.
Difficulty recording and interpreting scientific results.	Provide prepared tables, labelled diagrams and simple recording sheets.	Difficulty listening to and responding to others' ideas.	Use structured partner discussions with clear turn-taking expectations.

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Physical & Sensory		Social, Emotional & Mental Health	
Barrier	**Steps to Support**	**Barrier**	**Steps to Support**
Difficulty handling scientific equipment due to fine motor difficulties.	Provide larger, adapted or easier-to-grip equipment.	Anxiety about unfamiliar experiments or scientific activities.	Explain and visually demonstrate what will happen before beginning an investigation.
Visual difficulties when observing scientific materials or diagrams.	Provide magnifiers, enlarged images and high-contrast diagrams.	Low confidence when making predictions or answering questions.	Provide achievable starting points and celebrate contributions.
Sensitivity to smells, textures or materials used in investigations.	Offer alternative materials or ways to participate without direct sensory contact.	Difficulty managing frustration when experiments do not go as expected.	Model how unexpected results are a normal part of scientific enquiry.
Hearing difficulties when following instructions or discussions.	Provide written instructions and visual demonstrations.	Difficulty maintaining attention during investigations.	Break activities into short, manageable stages with clear goals.
Sensory overload from noisy or busy practical investigations.	Provide access to a quieter working area.	Anxiety about working collaboratively or sharing findings.	Allow children to work with a familiar, supportive partner.
Physical difficulties accessing equipment or participating in investigations.	Adapt the workspace and position equipment within easy reach.	Difficulty managing excitement or impulsivity during practical activities. to an audience	Establish clear safety rules and visual reminders before investigations begin.