# Strategies for supporting pupils with Special Educational Needs and Disabilities in Science lessons

| Individual Need | Here's how we can help everyone learn… |
|---|---|
| **Attention Deficit Hyperactivity Disorder** | • Practical activities – science lessons have practical activities at their heart – if a child needs support for this, the teacher will endeavour to support or group the child with peers who will be supportive.<br>Clear expectations for behaviour and participation will be made. |
| **Anxiety** | • Children are prepared before the science lesson – instructions for carrying out the investigations are given and children are talked through the steps, predictions are discussed and children are prepared for any reactions/noises.<br>• Sometimes investigations go wrong or do not provide the expected results. Building resilience in this area is important. Adults will support pupils with the importance of learning from mistakes. Pupils will be encouraged to work with peers they feel confident with. |
| **Autistic Spectrum Disorder** | Depending on the child and their specific needs, children on the Autism Spectrum may benefit from:<br>• Group work (they may be given a role within the group that they have chosen or can observe).<br>• 1:1 TA support – children can complete the investigation with tailored support.<br>• Preparation if there will be loud noises/mess etc.<br>• Being allowed to meet their own sensory needs, e.g. wash hands/give themselves distance if required.<br>• Use annotated photographs as evidence – scribe if needed.<br>• Work is adapted to match the child's level of understanding. |
| **Dyscalculia** | The most difficult element for dyscalculia in science is recording accurately. To help we will: |

| | |
|---|---|
| | • Give the child a pre-made graph with some data already completed.<br>• Have a range of ways to show their learning including: photographs, diagrams, labels to stick onto pictures, worksheets, posters, presentations (oral and visual), working in groups, verbal contributions, practical investigations and observations, matching activities etc. |
| **Dyslexia** | • Provide a range of ways for the child to show their learning including: photographs, diagrams, labels to stick onto pictures, worksheets, posters, presentations (oral and visual), working in groups, verbal contributions, practical investigations and observations, matching activities etc. so writing does not interfere with showing knowledge.<br>• Adapted learning to meet the needs of the child. |
| **Dyspraxia** | • Give opportunity for working in groups to allow children to work to their strengths.<br>• Investigations will be altered to allow access and participation.<br>• TA/Teacher support will be given where required. |
| **Hearing Impairment** | • Provide written and pictorial instructions<br>• Allow discussion and sharing of ideas to build verbal skills.<br>• Have group members face the child when sharing. |
| **Toileting Issues** | • Allow time to complete the investigation with opportunity to use the toilet. |
| **Cognition and Learning Challenges** | • Allow for a range of ways for children to explain their learning, including in words, photographs, diagrams, comparisons to real-life situations and contextualisation.<br>• Have a range of ways to record their learning including: photographs, diagrams, labels to stick onto pictures, worksheets, posters, presentations (oral and visual), working in groups, verbal contributions, practical investigations and observations, matching activities etc.<br>• Adapted learning as necessary to meet the needs of the child. |
| **Speech, Language and Communication Needs** | • Have a range of ways to record their learning including: photographs, diagrams, labels to stick onto pictures, worksheets, posters, presentations (oral and visual), working in groups, verbal contributions, practical investigations and observations, matching activities etc.<br>• Adapted learning to meet the need of the child. |

| | |
|---|---|
| **Tourette Syndrome** | • Depending on the frequency and severity of tics, some investigations may need to be adapted to accommodate spillage and others will be required to be carefully supervised. |
| **Experienced Trauma** | • As with anxiety, trauma can stop a child learning in science due to associations e.g. sights, smells, textures.<br>• Prepare the child regarding noises, mess etc. if the investigation has the potential to trigger them.<br>• Allow the child to observe rather than participate if needed – in group work, this could be allowing them to scribe, give instructions etc. to be involved in the investigation without handling the materials/equipment. |
| **Visual Impairment** | • Familiarise the child with the equipment being used beforehand – let them feel the equipment and create an image in their mind. Discuss the investigation beforehand and prepare the child for any noises/textures.<br>• The child will complete the investigation with support given by TA/teacher as needed, or by a trusted peer.<br>• Provide a range of ways to show their learning, including: photographs, diagrams, labels to stick onto pictures, worksheets, posters, presentations (oral and visual), working in groups, verbal contributions, practical investigations and observations, matching activities etc.<br>• Explain the representation to the child and scribe responses to the investigation, predictions etc. beforehand. |