



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

	Strategies we will use:
Attention Deficit Hyperactivity Disorder	<ul style="list-style-type: none"> • Lessons divided into small chunks of “listening” and “doing” – science lends itself particularly well to this by including lots of practical tasks. • Experiment instructions could be produced as a checklist to follow. • Adult support where required.
Anxiety	<ul style="list-style-type: none"> • Pre-teaching or discussion of any subjects which might cause anxiety. Particular areas to be aware of are blood / body parts, phobias of various animals such as spiders or snakes and relationships / sex education. • Preparation for and discussion of the fact that experiments can often go wrong. This is an important part of science and can be used to build resilience.
Autism Spectrum Disorder	<ul style="list-style-type: none"> • Pre-warning of any experiments where the result might be loud or unexpected. • Adapting experiments to meet own sensory needs, for example by wearing ear defenders for loud noises, dark glasses for bright lights or gloves for mess. • Adult or peer support as required. • Instructions for experiments provided orally / in writing / pictorially as required. Instructions worded so that there is only one action per step.
Dyscalculia	<ul style="list-style-type: none"> • Use of paired, group or adult led work to facilitate reading numbers on scales, timers and measuring equipment. • Support with performing calculations to convert between units of measure and drawing and using scales on graphs.
Dyslexia	<ul style="list-style-type: none"> • Give options for different ways to present work; for example, drawing a picture of an experimental method or results rather than writing when recording an experiment. • Use keys and matching activities to reduce requirement for writing. • Practical experiments could be recorded using photographs. • Children could explain scientific concepts orally. • Key scientific vocabulary, which can often be difficult to spell, to be displayed in the classroom. Children can also refer to their knowledge organisers in their books to help with spelling.

<p>Dyspraxia</p>	<ul style="list-style-type: none"> • Keep amounts of equipment that are out at any one time to a minimum. • Consider minimising movement around the classroom while carrying equipment. • Use pair or group work to ensure all children can work to their strengths. • Adult support with practical experiments to be given when required.
<p>Hearing Impairment</p>	<ul style="list-style-type: none"> • Adults to make sure children’s hearing aids are switched on and working during lessons. • Provide instructions in writing (or diagrams) as well as orally. • Face the child when speaking and, during group tasks, brief other children to do the same.
<p>Toileting Issues</p>	<ul style="list-style-type: none"> • Allow children to leave the room to use the toilet without needing to ask or draw attention to this. • Consider toilet access when using different areas of the school for practical investigation, particularly outside. • Depending on the nature of the condition, use sensitivity during units on nutrition and how the body works and, if required, discuss with the pupil beforehand.
<p>Cognition and Learning Challenges</p>	<ul style="list-style-type: none"> • Use of a range of ways for children to explain their experiments and scientific understanding including diagrams and photographs. • Ensure instructions are specific and broken down into small steps. • Demonstrate activities before asking the children to carry them out, wherever possible.
<p>Speech, Language & Communication Needs</p>	<ul style="list-style-type: none"> • Use a range of ways for children to present their work and explain their understanding including writing, drawing, photographs, labelled diagrams, presentations and working in groups. • Use visual representations alongside scientific vocabulary to aid understanding.
<p>Tourette Syndrome</p>	<ul style="list-style-type: none"> • Consider how physical tics may affect a pupil’s ability to carry out practical tasks – e.g. make sure water containers are not completely full and do not need to be carried by children around the classroom. • Ensure experiments are carefully supervised by adults.
<p>Experienced Trauma</p>	<ul style="list-style-type: none"> • Understanding of potential triggers (sights, smells) and areas where children may have experienced trauma e.g. sex education, drugs and alcohol education. Prepare children in advance and give them the opportunity to leave the room if required. • Observe rather than participate in group work as required.
<p>Visual Impairment</p>	<ul style="list-style-type: none"> • Ensure pupils wear their prescribed glasses. • Be aware of seating to ensure the board is easy to see, particularly when moving round during practical activities. • Sensitivity to visual impairment difficulties during units on light: child

could be briefed beforehand.

- Be aware of the effects of colour blindness, particularly when using colours to categorize (e.g. colours of plants); during units on colour mixing (e.g. light) and when using colours to represent categories in graphs and charts – consider using patterns or shading instead.
- Read all written instructions and information aloud.
- Allow children to handle equipment prior to using it.