



## Support SEND Pupils in Science



| Barriers to Science   | High Quality Teaching Strategies   | Support 'additional to' or 'different'   |
|---|--|--|
| Understanding new scientific vocabulary   | <p>Consider teaching sequence – build on prior knowledge and vocabulary consolidated. Plan opportunities to use new vocabulary within another lesson or context to consolidate</p> <p>Display new vocabulary alongside visual supports- provide regular opportunities to revisit this (e.g. vocabulary mat available on desk, knowledge organiser)</p> <p>Plan practical lessons to use the new vocabulary within a context e.g. within an investigation</p> | <p>Pre-teaching of new vocabulary prior to the lesson (where adult support is available). Look at the meaning of a new word to derive familiar words e.g. thermometer – thermal (heat)</p> <p>Adapt knowledge organisers – simplify and reduce cognitive load to key vocabulary only</p> |
| Using science equipment safely and effectively (inc fine motor difficulties)  | <p>Teach safety instructions explicitly within the lesson</p> <p>Consider assigning a role when using equipment e.g. photographing the equipment/investigation</p>   | <p>Consider adult support to support safety and equipment use where available.</p> <p>Show SEND Pupils equipment they will be using ahead of the lesson with an explanation of how it is used and an opportunity to rehearse.</p>  |
| <p>Recording information in graphs or tables and interpreting graphs and tables to form conclusions.</p> <p>Drawing scientific diagrams</p> | <p>Provide scaffolded resources to pupils to assist as required e.g. axis labelled ahead of the lesson/ heading in table provided in advance.</p> <p>Show a good example of a complete table/chart/diagram to demonstrate expectations.</p>  | <p>Provide visual supports to assist with scientific drawing e.g. traceable items.</p> <p>Consider adult support where available to help question, scaffold and interpret the information with a pupil.</p>  |
| Working collaboratively with others to complete investigations  | <p>Consider groupings/ pairings of pupils carefully.</p> <p>Assign a specific role to a pupil that will enable them to achieve success e.g. stop watch, records results)</p> <p>Consider the preference of the pupil e.g. do they prefer practical learning or written responses?</p>  | <p>Provide adult support where available to lead, model or adapt group work to allow SEND pupils to be included and achieve success.</p>   |
| Recording an investigation in a report style/ longer written response   | <p>Consider alternative methods of recording – flow diagram, mind map, use of technology to photograph and annotate ideas.</p> <p>Use of word banks/ vocabulary mats to prompt the writing process.</p>  | <p>Provide a writing frame with labelled subheadings.</p> <p>Consider adult support to scribe/ record ideas as available.</p>  |

