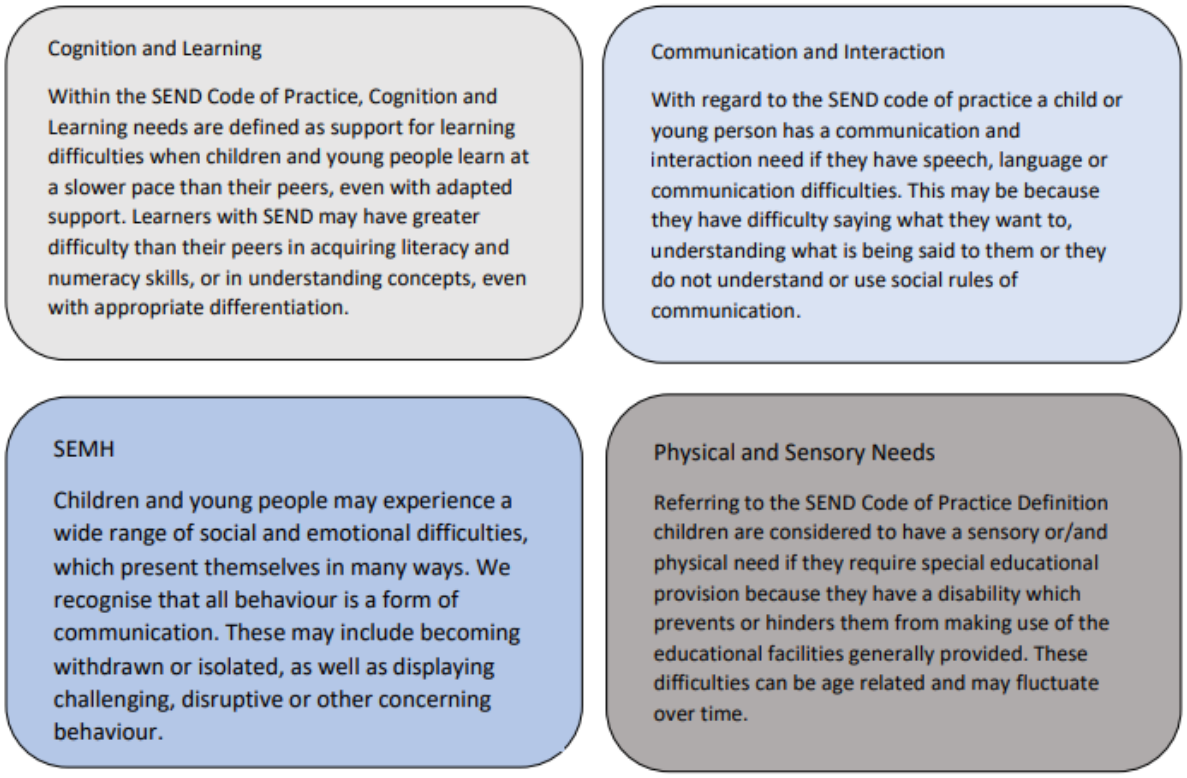
SEND Provision Science

Adaptations we make to teaching strategies and the learning environment to ensure that all pupils have the best possible outcomes in science.

The Four Broad Areas of Need



Communication and Interaction	Cognition and Learning
Recognise that the language of science may be challenging for many children – for example: The specific scientific use of everyday words such as 'weight', or terms specific to science, such as 'electrical circuit'. Pre-teach key vocabulary, then ensure multiple and regular exposure to these words including referring to knowledge organisers and make them clearly visual in the classroom environment. Label equipment with a symbol and word (dual coding)	Prepare the children prior to the lesson with a preteach introducing key knowledge/vocabulary. Consider the accessibility of science demonstrations. Plan the demonstration area so that it is clearly laid out, uncluttered and gives all children a clear view.

Explicitly teach the meaning of key scientific vocabulary in lessons Check children's' understanding by inviting them to reformulate explanations in their own words or in other ways. For example, after an investigation of floating and sinking, ask children to explain what happened using diagrams, as well as explaining it orally or in writing. Use vocabulary flashcards and prompts. Use real objects as a starting point for developing the concepts and the language needed to describe, discuss and explain what pupils have observed or experienced. Give children time to process and formulate their answers to questions before responding	Use the display and whiteboard to show the focus of each lesson and how it fits in the sequence of lessons. How do lessons link together to develop their scientific knowledge? Use symbols, images or objects to make it more accessible. Encourage the use of mind maps/pictures/flow charts.
Social, Emotional and Mental Health	**Physical and/or Sensory**
Consistency of approach reduces children's anxiety - it allows children to predict what will happen. Provide an overview of the lesson elements so the children know what is coming. Pre-teach the child some of the elements of the lesson etc. Consider groupings – prepare the children by ensuring they are aware of the group they will be working in. Assign roles to each member of the group with a clear outline of job roles. You may need to specifically teach the skills of cooperation and interaction for practical work. When organising a practical session consider: - how you establish investigation routines - the level of supervision needed - consider the resources available – does there need to be	Check safety procedures are understood. • Label new equipment and processes to help develop vocabulary. Colour water so it is easier to see. Consider ventilation and positioning of children for anything that may have an odour. Pre-teach showing/experiencing anything that may have sensory implications -e.g. videos of heart, handling materials. Ask for specialist advice on equipment for children with particular SEND e.g. tactile ridges on measuring glassware for children with a visual impairment. Consider children hard of hearing when teaching sound – follow guidance to develop children's understanding of how sound travels. Use of sensory aids as part of usual provision e.g. gloves, audio/visual support.

close supervision? Do some resources need limiting? - how will resources be organised in the classroom – from a central point or at the table? - how the task can be broken down into manageable steps and the best way to present any instructions e.g. some children prefer diagrams, others a checklist. Opportunities to develop social skills including being taught these discretely to support engagement in group work and collaborative learning. Use of PSHE to discuss healthy relationships, promote wellbeing and explore emotive topics within learning	Consider pupil sensory audits and adaptations. Use of standing desks, wobble boards, flexibility over where children write, writing slopes or other appropriate tool.