Sciences

Gifted scientists are likely to show competence in a wide range of areas, such as linguistic, logical-mathematical, visual-spatial, kinaesthetic, and sometimes interpersonal skills.

Pupils who are gifted in the Sciences are likely to:

·be imaginative

·read widely, particularly science or science fiction

· have scientific hobbies and/or be members of scientific clubs and societies

· be extremely interested in finding out more about themselves and things around them

·enjoy researching obscure facts and applying scientific theories, ideas and models when explaining a range of phenomena

·be able to sustain their interest and go beyond an obvious answer to underlying mechanisms and greater depth

·be inquisitive about how things work and why things happen (they may be dissatisfied with simplified explanations and insufficient detail)

·ask many questions, suggesting that they are willing to hypothesise and speculate

·use different strategies for finding things out (practical and intellectual) -- they may be able to miss out steps when reasoning the answers to problems

·think logically, providing plausible explanations for phenomena (they may be methodical in their thinking, but not in their recording)

·put forward objective arguments, using combinations of evidence and creative ideas, and question other people's conclusions (including their teacher's!)

·decide quickly how to investigate fairly and manipulate variables

·consider alternative suggestions and strategies for investigations

·analyse data or observations and spot patterns easily

·strive for maximum accuracy in measurements of all sorts, and take pleasure, for example, from reading gauges as accurately as possible (sometimes beyond the accuracy of the instrument)

·make connections quickly between facts and concepts they have learned, using more extensive vocabulary than their peers

·think abstractly at an earlier age than usual and understand models and use modelling to explain ideas and observations. For example, key stage 3 pupils may be willing to apply abstract ideas in new situations; key stage 4 pupils may be able to use higher-order mathematical skills such as proportionality, ratio and equilibrium with some complex abstract ideas when offering explanations

·understand the concepts of reliability and validity when drawing conclusions from evidence

·be easily bored by over-repetition of basic ideas

·enjoy challenges and problem solving, while often being self-critical

·enjoy talking to the teacher about new information or ideas

·be self-motivated, willingly putting in extra time -- (but they may approach undemanding work casually and carelessly)

·show intense interest in one particular area of science (such as astrophysics), to the exclusion of other topics.

Inclusion Issues.

Pupils are given opportunities to show their ability to analyse, evaluate, synthesise and create effectively in complex situations. Success in challenging thinking tasks and occasional inspirational comments and analyses are taken into account. These can be better indicators than test scores, which rely heavily on good language skills and test a limited range of intelligence.

Activities Beyond the Classroom:

Events -- these can be one-off Science Days or extended activities, often centred at museums and interactive science centres. e.g. The Life Centre in Newcastle .

This school also has a school-wide Science Week during which many different activities and competitions are organised for the pupils. e.g. The Big Bug Show, The Star Dome Planetarium, and a Forensic Science Competition.

Trips to University departments and the Great Yorkshire Show where students actively participate in presentations or listen to lectures are also regular activities.