

Mathematics

Identifying gifted pupils

- Pupils show their special talents in mathematics in a range of ways and at varying points in their development. Pupils who are gifted in mathematics are likely to:
- learn and understand mathematical ideas quickly;
- avoid tedious calculations;
- work systematically and accurately;
- be more analytical;
- think logically and see mathematical relationships;
- make connections between the concepts they have learned;
- identify patterns easily;
- apply their knowledge to new or unfamiliar contexts;
- communicate their reasoning and justify their methods;
- ask questions that show clear understanding of, and curiosity about, mathematics;
- take a creative approach to solving mathematical problems;
- sustain their concentration throughout longer tasks and persist in seeking solutions;
- be more adept at posing their own questions and pursuing lines of enquiry.

Some pupils who are gifted in mathematics perform at levels that are unusually advanced for their age. Sometimes gifted pupils reject obvious methods and answers as too easy, and opt for something more obscure. In these cases, formal testing alone is insufficient as a basis for identification. It is often helpful for teachers to provide enrichment and extension activities and to observe pupil responses to challenging activities.

When identifying pupils who are gifted in mathematics, it is important to judge whether they are likely to benefit from an enhanced or special programme. The pupils need to be able to keep up with their ordinary work.