



INDEPENDENT JEWISH DAY SCHOOL
an ACADEMY

Maths at IJDS

Intent

At the Independent Jewish Day School, children experience a progressive and systematic mathematics curriculum that provides a high standard of education. Children build on prior learning and become fluent in the fundamentals, allowing them to access increasingly complex problems where they are challenged to reason and problem solve. New material is taught using the CPA approach (concrete-pictorial-abstract) which allows children to develop and deepen their understanding of abstract topics. By adopting a mastery approach to teaching maths, children have access to the same curriculum content and it is our belief that all children have the potential to succeed. Our aim is for all children to reach their age-related expectations and to prepare them for the world around them.

Implementation

Our long term planning follows the National Curriculum 2014 and follows the sequence as outlined by White Rose Maths. To ensure full coverage, our medium term and weekly planning is taken from White Rose Maths' Primary Schemes of Learning. Maths Shed may be used to supplement resources. We begin every lesson with a focus on prior learning. Here, we recap content from the previous year, the previous term, the previous block and the previous lesson. Key vocabulary is taught and discussed in every lesson; children are expected to use this key vocabulary when formulating answers in lessons. Lessons use the concrete, pictorial and abstract approach (CPA) to guide children through their understanding of mathematical processes. Children are exposed to a range of fluency and reasoning and problem solving activities throughout the week. Interventions are used to support children to ensure children are ready for their next lesson. Working Walls are used to provide scaffold and support and are up to date with models that relate to the current learning. Maths resources are accessible and available always, providing our pupils with the scaffolding required to access the learning at all levels. Decisions about when to progress should always be based on the security of pupils' understanding and their readiness for the next stage. Pupils who grasp concepts rapidly are challenged through being offered rich and sophisticated problems (breadth and depth), before any acceleration through new content. Those who are not sufficiently fluent with earlier material consolidate their understanding, including through additional practice, before moving on.

The teaching of mathematics at IJDS provides opportunities for:

- group work
- paired work
- whole class teaching
- supported groups with a TA or class teacher
- booster groups
- individual work

We see assessment as an integral part of the teaching process and strive to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus benefiting the pupils and ensuring confidence and progress. We celebrate mistakes and position them as learning opportunities; we create a culture where it is okay to get things wrong.

Information for assessment is gathered in a variety of ways:

- Talking to the children
- Pre learning tasks
- Observing and marking work
- Self and peer assessment
- Application lessons
- Statutory and non-statutory formal assessments (termly)

Impact

As a result of our maths teaching at Independent Jewish Day, you will see resilient and confident learners who are not afraid to make mistakes.

Our curriculum ensures pupils:

- Have a sense of the size of a number and where it fits into the number system.
- Know by heart and develop rapid recall of number facts such as: number bonds, multiplication tables, doubles and halves.
- Use what they know by heart to figure out numbers mentally, developing an understanding of number patterns and relationships.
- Calculate accurately and efficiently, both mentally and in writing, drawing on a range of calculation strategies,
- Make sense of number problems and recognise the operations needed to solve them.
- Explain their methods and reasoning using correct mathematical terms.
- Judge whether their answers are reasonable and have strategies for checking them where necessary.
- Suggest suitable units for measuring and make sensible estimates of measurements.
- Collect and display data in graphs, diagrams, charts and tables and be able to explain and make predictions from these.

- Develop spatial awareness and an understanding of the properties of 2d and 3d shapes.