

# Maths

## Maths at Red Gates

Math at Red Gates is a core subject that is sectioned into three strands: Number, Using and Applying and Shape. To support students in developing their understanding of each area, a range of strategies are used not only to promote understanding but also their communication of learning. Each pathway follows a termly themed topic that is intended to enhance engagement, but teachers will also consider the individual interests of pupils to make learning more authentic and student focused. The school offers a wealth of opportunities for math learning to take place outside of the classroom and develop a depth of understanding. Students can explore mathematical concepts in areas such as soft play, light and sound rooms, ICT room, cooking room, bike area, climbing frame and playgrounds. Also, each class has a set of numicon that promotes the concrete to abstract understanding of numbers and number bonds as well as Attention Autism and Number Rhymes that promote shared attention, turn taking, communication and math concepts.

### EYFS

In EYFS, math learning takes place in an exploratory, fun and play based structure. The purpose behind most math learning in EYFS is to promote communication, build independence and prepare pupils for their school career. As such many math lessons utilize a variety of carousel stations with resources that linked to pupils' interests. Cross curricular links are made continuously throughout the day such as transitioning through the school, counting outside at play and singing number rhymes in soft play. To promote communication, appropriate augmentative and alternative communication is used to support each pupil. Attention Autism, numicon and number rhymes on the IWB are regularly used to appeal to the various learning styles of individual children.

### LISS

Math learning in LISS pathway balances pupil's opportunities to develop academically as well enhance their mathematical life skills. Children learn through participation in practical, everyday situations such as tuck shop, community visits and inclusion. To make real-life application to math's learning, a cross curricular approach is encouraged, for example measurement in cooking and number in PE. While many math's lessons are structured around a termly theme, pupils are also encouraged to develop their independence and social skills through regular math's choosing sessions and math based games. As with other pathways, Attention Autism, number rhymes and Numicon are used regularly. LISS Pathway children are encouraged to communicate throughout their learning.

### Sensory

In the Sensory Pathway, maths is often integrated with other subjects and taught on a very sensory level. Numicon, paired and small group sessions, concentrating on the 'concrete' phase is often repeated regularly. Repetition enhances learning and provides an opportunity for generalisation. Practical maths skills are taught through real-life experiences (counting plates for snack), play and interactive people games. Pupils create photo/symbol lists for shopping trips, follow recipes (sequence) and measure in cooking. Teachers develop a variety of cross-curricular sensory-based learning, which includes maths concepts. This may include stories, song rhyme and IT/Apps. While math learning follows the topics, often pupil's interests also drive the planning into to make the learning more engaging. **Big and small, shape**

### ASD

Math in the ASD pathway follows a structured, clear and predictable routine to ensure pupils are able to access their learning. Each child has the opportunity to daily TEACCH sessions which promote the communication of key math concepts and support mathematical independence in a predictable setting. Math lessons can be introduced through Attention Autism to encourage concentration skills in an engaging delivery. To promote life skills, math also makes cross- curricular links such as visits to the shops, nature walks or following a recipe. Numicon is used to introduce the concrete concept of numbers as well as number bonds. Makaton is used to reinforce vocabulary and encourage both greater comprehension and communication.