



All Saints' maths teaching sequence

Our maths lessons are taught daily, following the national curriculum and supported by the White Rose Maths Hub schemes of learning. We teach with the aim that the children become fluent, confident mathematicians, who can use maths in everyday life and problem solve independently. During every maths lesson we aim that through our questioning and expectations that children become confident in their talk as mathematicians and that they explain in full sentences using mathematical vocabulary. We teach maths using the Chris Quigley approach of Basic (Concrete) Advancing (Pictorial) and Deep (Abstract) allowing children to incur a depth of understanding in maths. All children, regardless of ability, are given opportunities to access problem solving and reasoning challenges for all objectives.

Maths timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
Prior learning recap	Fluency style questions based on last week's learning	Fluency style questions based on yesterday's learning	Fluency style questions based on yesterday's learning	Oral fluency questions based on this week's learning	Fluency style arithmetic questions based on all previous learning
New skill & Concept	Teach new skill (I do, we do, you do) Independent practise & bonus challenges	Teach new skill (I do, we do, you do) Independent practise & bonus challenges	Teach new skill (I do, we do, you do) Independent practise & bonus challenges	Teach reasoning question style linked to this week's learning. Independent reasoning challenges	Revisit of how to solve different style reasoning questions, using all previously taught skills
Fluency of basic skills	Outside of timetabled maths time– to be completed whole class using concrete objects to model. Practise of basic skills – daily focus on one basic skill but recapped weekly				

Fluency & understanding recap

10-15 minutes, 3 times a week of practise of the previous day's learning (10.45-11am). Questions cover the skill or new concept that had been taught the previous day or the previous week. They should include mostly arithmetic style questions that can be solved 'brain only' (mentally) or with just simple jottings/written calculations, which has been taught to them. Questions should be presented in the same style (but different numbers will be used) as the previous day's new skill to decide whether the skill has been embedded. The reasoning behind this daily recap is that research has proven that one of the most successful ways to embed knowledge in the long term memory is to 'force' brains into regular retrieval of knowledge.

New skills & concept

The first three days of the week focus on teaching a new skill or concept of the same skill, for example the skill of division by 2 may be taught on the Monday, on the Tuesday this may be taught again (with larger numbers if felt necessary) and on the Wednesday with the addition of a context, e.g. measure. The concept of 'I do, we do, you do' means the children first watch the teacher model a full method correctly (I do), they then help with the second attempt (we do) at this stage the teacher may pick up misconceptions or purposefully model misconceptions and at the third stage (you do) the children practise independently but still within the whole group, which is fully guided by the teacher. Independent application/ practise will then take place and feedback will be given.

Reasoning and problem solving

On the fourth day children apply their now embedded skill into reasoning and problem solving. They work with the teacher to decipher how to use the skill they have learnt to solve a problem where that skill is required to be used. They are taught a range of problem solving strategies and are exposed to a wide range of question styles. We predominantly teach problem solving using the RUCSAC analogy R – read, U – underline, C – calculate, S – solve, A answer, C – check.

Supporting teaching and learning in maths

All children are encouraged and challenged by all adults within the learning environment. Children have access to concrete resources to assist with their learning including dienes, multilink, counting bears, numicon and counting sticks in 1s, 2s, 3s, 5s and 10s. Same day intervention is used to ensure that any child who has not embedded that day's skill have the chance to 'catch up' before being taught a new skill. Greater depth learners are challenged through mastery style questioning taken from the national strategy – mathematical challenges for more able pupils