

Principles of Teaching Multiplication Times Tables at St Mary's Catholic Primary

We accept that times tables are a vital basic building block of deep mathematical thinking. We teach tables directly. Success in learning and applying mathematical concepts such as multiplication and division calculations, algebra and area, amongst others, is much more easily achieved if the children have a clear understanding of tables. We want all of our children to achieve fluency when using and applying tables.

Tables will be taught using a concrete, pictorial, abstract (CPA) approach.

Every class will spend some time using their class table each day.

All classes will have access to hundred squares, counting sticks, large number lines and materials to make arrays as a minimum provision of resources to aid in teaching of times tables.

Teachers will assess the ability of children to count, add and use 'odd' and 'even' as prior learning. Practical resources such as Numicon could be used to support children needing to reinforce or catch up on these areas.

Teachers will use prior learning of tables to support the children e.g. asking if previous tables have told them any facts (e.g. the 10 X table, or knowing that 8 X 5 is the same as 5 X 8).

Teachers will encourage children to spot and describe patterns in the times tables.

Children will be taught to see learning one times tables fact as learning four:

 $4 \times 5 = 20$

5 X 4 = 20

 $20 \div 4 = 5$

 $20 \div 5 = 4$

All classes in years 2-6 will have one focus times table each week. This will be displayed in the classroom and shared with parents on Dojo.

Each class will have a weekly times tables test based on that table. Scores will be recorded on spreadsheets in Google Drive.

There is a progression in the way we expect to teach and test tables. This will start with knowing a table in order, then out of order, then as division facts, with missing terms (e.g 4 X = 20) and finally using tens or decimals numbers. Children will be given opportunities to solve problems using times tables.

Parental Engagement

Regular workshops on tables at home or on using TT Rockstars will be held.

Parent/carer and child workshops will be held in school allowing children and their families to work together on tables skills or problem solving.

Use of TT Rockstars will be regularly monitored and children not accessing it at home may be offered the chance to practice in school.