

## St. Andrew's Primary School

## **Progression in the teaching of Times Tables**



Times Tables are at the heart of mental arithmetic, which in itself helps form the basis of a child's understanding and ability when working with number. Once the children have learnt their times tables by heart, they are then able to work far more confidently and efficiently through a wide range of more advanced calculations.

At St. Andrew's Learning, we believe that through a variety of interactive, visual, engaging and rote learning techniques, most children can achieve the full times table knowledge by the time they enter Year 5.

| EYFS                                                                                 | Y1                                           | Y2                                                                             | Y3                                                             | Y4                                                                                                | Y5 and Y6                                                    |
|--------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| I can count in steps<br>of 1<br>I can count in steps<br>of 2<br>I can count in steps | Y1<br>I can count in steps<br>of 2, 5 and 10 | I know my 2 times<br>table<br>I know my 5 times<br>table<br>I know my 10 times | Y3<br>I know my 4 times<br>table<br>I know my 8 times<br>table | I know my 3 times<br>table<br>I know my 6 times<br>table<br>I know my 9 times                     | Y5 and Y6<br>Regular<br>consolidation of all<br>times tables |
| of 10<br>I can count in steps<br>of 5                                                |                                              | table                                                                          |                                                                | table<br>I know my 7 times<br>table<br>I know my 11 times<br>table<br>I know my 12 times<br>table |                                                              |
|                                                                                      |                                              |                                                                                |                                                                |                                                                                                   |                                                              |

## **Times Table Challenge**

Children from Year 2 – Year 6 will take part (3 times weekly) in quick times table recall tests from TTRockstars. This will be added to a system that will assess their speed and recall. Children and staff will use the heat maps on TTRockstars to set specific timestables for individuals and groups. This will be encouraged the children to learn their times tables and recall their timetables.

Year 4 children will take part in the Times table check yearly.

Times tables will be taught through Maths No Problem lessons as well as in other engaging ways throughout the school day. They may also be given as homework tasks.

|                                                                                                                         | Process of t                                                                                                                                                                                                                                                                                                                                                                  | eaching Times Tables                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                           |
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| Children will be taught the concept of multiplication using practical resources.                                        | Children will progress on to using number lines or pictures.                                                                                                                                                                                                                                                                                                                  | Children will count in multiple steps.                                                                                                                                                                                                                                                                                                                                                                                                            | Children will recite times tables by<br>rote.<br>Links will be made with 'grouping' and division<br>whilst times tables are being taught. |
| Concrete                                                                                                                | Pictorial                                                                                                                                                                                                                                                                                                                                                                     | Abstract                                                                                                                                                                                                                                                                                                                                                                                                                                          | Abstract                                                                                                                                  |
| During this stage children will use<br>practical equipment to and make equal<br>groups to help them count in multiples. | Children and draw their own pictures to<br>help them count in different multiples.<br>Possible representations including<br>number lines, equal groups, arrays.<br>They understand columns and rows and<br>how to arrange the equipment into<br>equal groups. Using arrays they can<br>spot the different facts it shows in order<br>to make connections.<br>2<br>2<br>2<br>3 | Children are able to count out loud<br>their times tables<br>They are able to produce sequences of<br>numbers<br>2, 4, 6, 8, 10<br>5, 10, 15, 20, 25, 30<br>They can also produce the number<br>sentences related to the times tables.<br>$1 \times 7 = 7$ $2 \times 7 = 14$ $3 \times 7 = 21$ $4 \times 7 = 28$ $5 \times 7 = 35$ $6 \times 7 = 49$ $8 \times 7 = 56$ $9 \times 7 = 63$ $10 \times 7 = 70$ $11 \times 7 = 77$ $12 \times 7 = 84$ | Children are fluent in their tables and can recite<br>them in any order making links to division.                                         |
| <b>T</b> I I I III I III III III III                                                                                    |                                                                                                                                                                                                                                                                                                                                                                               | They understand commutative facts<br>(for example 1 X 7 = 7 and 7 X 1 = 7)                                                                                                                                                                                                                                                                                                                                                                        | er times tables they have learnt. They will discuss                                                                                       |

Throughout all the stages, children will be encouraged to talk about the patterns that they notice and make connections to other times tables they have learnt. They will discuss the relationship between the numbers.

As they become more fluent, they will be able to recite the facts in any order, along with the related division facts.

Throughout the later stages, children will begin to make links to the division facts. They will also begin to notice other connections, for example if I know 9 x 3, I know 9 x 30 etc. They can create different fact families.

Children begin to solve problems that involve their times table facts.