*A Look at the Australian Curriculum Version 9*

# Times Tables

2023

## Where are the Tables in The Australian Curriculum V 9?

As states transition to version 9 of the curriculum you might wonder where 'tables', that is multiplication facts, fit. While under version 8.4 of the curriculum multiplication facts were found in **Year 3 and 4**, under version 9 of the Australian Curriculum they are first mentioned in **Year 2**.

Note that you will find basic Number Facts in the **Algebra** Strand not the Number Strand in version 9 of the Australian Curriculum.

### Year 2

**AC9M2A03**

> *Recall and demonstrate proficiency with multiplication facts for twos.*

- Recall implies that you remember a fact and retrieve it from long term memory.
- Teachers are encouraged to link multiplication by two with dividing by two.
- One strategy that is mentioned is doubling and halving.
- A strategy is a means to an end. Eventually students are expected to ***recall*** the facts.

Note, when referring to a basic fact generally it means multiplying a single-digit number by a single-digit number, however Year 3 specifically mentions multiplying by ten.

### Year 3

**AC9M3A03**

> *Recall and demonstrate proficiency with multiplication facts for 3, 4, 5 and 10.*

These facts are then related to the associated division facts.

Specific mention is made of language such as groups, multiples and looking for patterns.

Reference is made to practising these facts. Regular practise via warm-ups and games will help students develop recall. I discourage drills that pit one student against another and potentially humiliate students.

## Year 4

**AC9M4A02**

By the end of Year 4 students are expected to:

> *Recall and demonstrate proficiency with all multiplication facts up to 10 x 10 and the related division facts.*

Later these facts are combined with various strategies to perform efficient mental calculations. Note that basic facts are a part of developing mental strategies.

The content elaborations mention using arrays. I would use arrays earlier in Year 2 and 3 but Curriculum writers don't have the luxury of being able to provide every minute detail in their descriptions.

Reference is made to doubling, halving and the commutative property all of which can be explained using an array.

Another property specifically mentioned is the distributive property. This involves splitting an unknown fact into parts to make the calculation easier.

For example, 7 x 9 may be thought of as 5 x 9 and 2 x 9, both facts that may be recalled and then added that is 45 + 18 = 63. Using a pattern is probably preferable that is 7 x 9 is 7 x 10 – 7.

Remember though that the aim is to develop ***recall***, not use strategies to reconstruct basic multiplication facts all the time. These strategies will be used later when performing calculations beyond the basic facts.

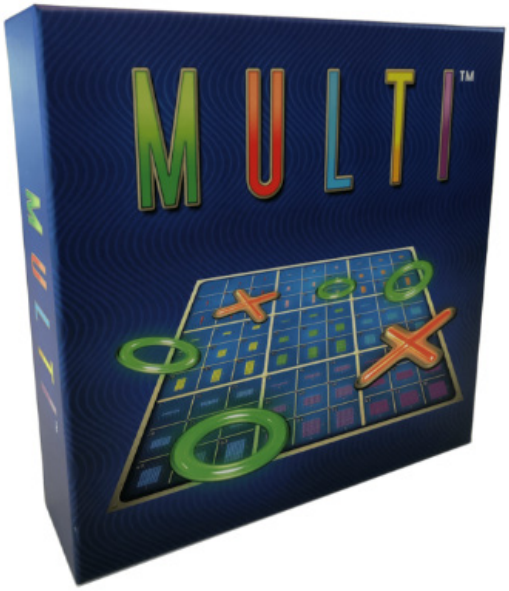
The distributive property will come in handy when performing calculations like 15 x 8, which is 10 x 8 and 5 x 8. Why not ask your students to calculate 15 x 8 and then draw diagrams to explain how they performed the calculation. You may be surprised at the variety of methods they employ.

I would like to thank the writers of version 9 of the curriculum for mentioning "playing instructive card games that involve recall … of the multiplication facts and related division facts." **COMBO** is one such card game.


> *Card games (like my game "COMBO") are explicitly mentioned in the Version 9 Curriculum*

Purchase COMBO

There are many other great games for developing basic fact knowledge. Here are two you might like to look at


Numero Class Set on the shop

Julie and Paul talking Numero Videos (Youtube)

Purchase Multi from MAWA's Mathsstore

## NUMERO

Numero® is more than just a card game.

It is an invaluable resource for maths educators. Numero® has been designed for use by students of all ages, and assists in developing understanding of numeracy concepts and problem-solving skills.

There is a series of videos on Youtube starring Julie and Paul that go through everything you'd want to know about getting started with Numero. Scan the QR code above.

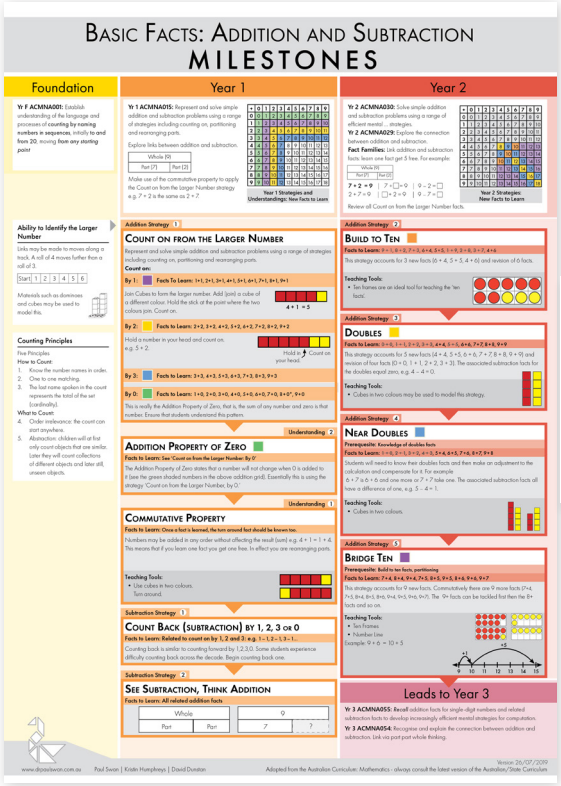
## Multi (available from MAWA)

MULTI™ is a beautiful combination of mathematical structure and Tic Tac Toe tactics leading to a fantastic 2-player game experience!

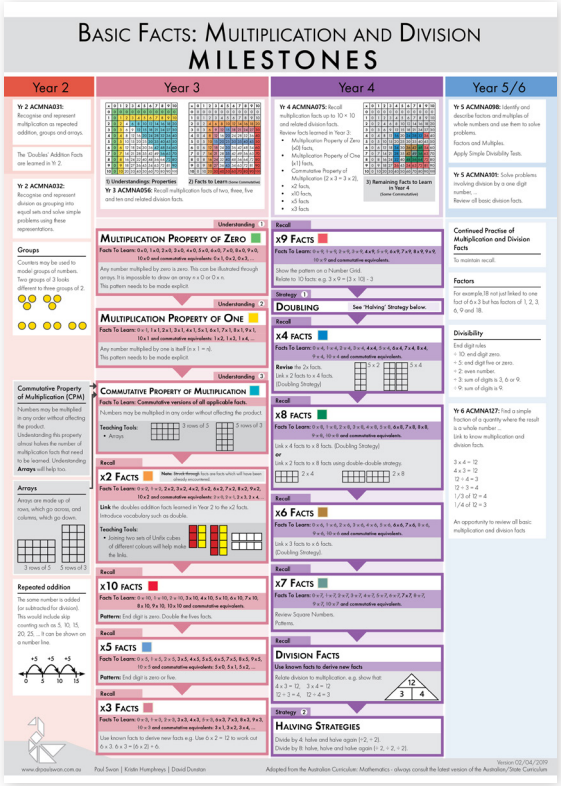
# More about Basic Facts: Milestones

These free planning documents go into basic facts in more detail (AC version 8.4)

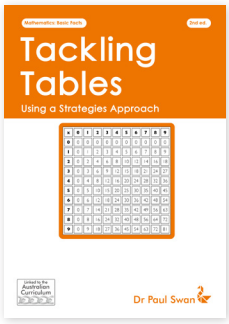
## Addition / Subtraction Basic Facts



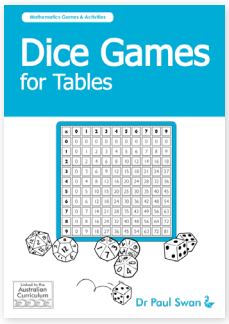

## Multiplication / Division Basic Facts




## Titles (purchase from www.drpaulswan.com.au/shop)




**Tackling Tables**
eBook $22 | Book $30.80

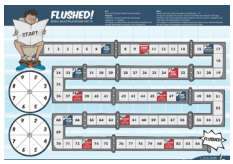



**Dice Games for Tables**
eBook $22 | Book $34

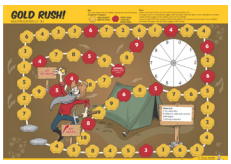

**eBooks: Networking Tables Series (Covers 2x to 9x tables)**
eBook $10 ea.

## Downloadable Games

Downloadable games are $5 for a class license and $15 for a school wide license




**Flushed**
Download $5/$15




**Gold Rush**
Download $5/$15

## Games


**COMBO Card Game**
(DPS3002) $5.50 ea.

**Multispin & Spindiv**
(DPS2034 & DPS2038) $39.60 set of 8 A4 games.


**Race Car Rally**
(DPS2036) $55 set of 8 A3 games.