

# Dry Erase Stepping Stones Boards

If children are confident with their times tables, they can improve their understanding of maths and become more able to MULTIPLY and DIVIDE and, therefore, more likely to understand FRACTIONS.

Tables are a critical skill, especially when they are used with  $\times$  and  $\div$  families;  
eg  $7 \times 6 = 42$ ,  $6 \times 7 = 42$ ,  $42 \div 6 = 7$ ,  $42 \div 7 = 6$  and with associated extended families;  
eg  $70 \times 60 = 4200$ ,  $6 \times 0.7 = 4.2$ ,  $420 \div 60 = 7$ ,  $4.2 \div 7 = 0.6$

Many children are also visual / concrete learners, yet are expected to learn their tables in an abstract manner – Stepping Stones is an ideal support for these children.

You will notice they use the full potential of the base 10 number system, by going only to 10 steps, so that;

- the 6 times table starts at 6, lands on 60, and halfway is 30
- the 7 times table starts at 7, lands on 70, and halfway is 35

So by extension, the 23 times table would start at 23 ( $1 \times 23$ ), land on 230 ( $10 \times 23$ ), and halfway would be 115 ( $5 \times 23$ ) – so we know a lot of the 23 times table before we start!!

Stepping Stones numbers are arranged to line up vertically. For instance, all the 42's are directly above each other, (dyslexic children often appreciate this structure) so that  $6 \times 7$  is the same as  $7 \times 6$ .

They can also be used for DIVISION;

eg for  $42 \div 6$ , go to the 6 times table, find where the 42 is, and count how many 6's fit into 42 (7!).  
& for  $42 \div 7$ , go to the 7 times table, find where the 42 is, and count how many 7's fit into 42 (6!).

Remainders can also be found (a key skill at later stages, when children are expected to know decimal remainders for division);

e.g. for  $45 \div 6$ , go to the 6 times table, find where 45 is, and count how many 6's fit in (7),  
Answer=7 and remainder 3.

Blank grid side.

The teacher reads out or shows a series of random numbers, to be put into the two rows, from 1 – 10, eg. 2, 6, 7, 1, 3, 8, 5, 9, 4 across the top and then down the side eg. 4, 7, 8, 2, 3, 1, 5, 9, 6.

This creates a multiplication grid for the children to fill in their answers

Children can also be timed as a means of measuring their fluency (accuracy + speed) and incur a 5 or 10 second penalty for each incorrect answer. A record can be kept of their progress.

For children just starting to learn their tables not necessarily all tables to 10 need be used in the first instances. For children who are competent with their at tables, the teacher need not be restricted to tables to 10 eg the tables along the top could be 4, 12, 8, 9, 5, 2, 15, and the numbers down the side being 3, 5, 6, 8, 12, 20 etc.

This is a fun way for children to practise their multiplication skills.

“The dry wipe board produced by Eduk8 Worldwide Ltd is an ideal format for the stepping stones.”  
Tom Renwick, Independent Maths Advisor.