

Multiplication Grids

This resource is based on strategies suggested by Dr Steve Chinn. Two multiplication grids are included; one completed and the other blank. The 1x, 2x, 5x and 10x tables are all shaded as these are the ones that most students tend to learn first. The completed grid can be used to support students who have difficulties with tables to enable them to learn new procedures. It also shows which tables the student may already know. Dr Chinn recommends that students be shown how they can use these tables to construct the more difficult tables, for example, to find 8×6 , the students can either calculate $(10 \times 6) - (2 \times 6)$ or $(5 \times 6) + (2 \times 6) + (1 \times 6)$ or another combination they prefer. To do this, they should first be encouraged to complete the 'known' tables in the shaded parts. They need not complete the unshaded parts, unless they need to calculate that multiplication. They would therefore only complete the parts of the table that they needed for a particular task. This is something they could be coached to practice for use in exams, so that if they were allowed extra time, they could spend some of it constructing the table. As an exercise, students could be asked to complete the whole table under times conditions, and their level of accuracy and speed could be recorded to assess progress. The grids can also be used to demonstrate the commutative principle, and reduce the number of 'facts' to be learnt, and also for students to discover patterns in the tables.

	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

