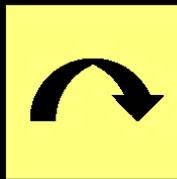
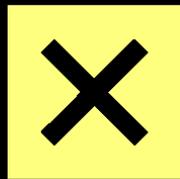


Support Booklet for

Turn Tables



www.multisensorymatters.com

Student Name:

Coach Name(s):

Start Date:

What does the student want to achieve from this programme?

Target End Date:

Using Turn Tables

Why and Who?

- Using Turn Tables Individual game, along with this support booklet is intended to increase confidence and understanding of times tables.
- It is recommended to be used in a one-to-one situation, where a teaching assistant, parent or coach (such as an older student) is working closely on a regular basis with a student who needs help.
- The more often the student and coach practise together each week, the quicker the student will build confidence and understanding and be able to use their times tables in all of their mathematics across the curriculum.
- This program was originally designed for children who have arrived at secondary school without a secure understanding of times tables. However it can be used successfully by anyone who needs to consolidate their times tables knowledge.
- If using this program with younger children, then start with the times tables they are learning at school in order to consolidate these before moving on. The order suggested later is usually the order in which times tables are taught – but not always!

What?

There are 121 times tables facts to learn. These are:

0 x any number from 0 to 10, (11 facts)

1 x any number from 0 to 10 (11 facts)

2 x any number from 0 to 10 (11 facts)

3 x any number from 0 to 10 (11 facts)

4 x any number from 0 to 10 (11 facts)

5 x any number from 0 to 10 (11 facts)

6 x any number from 0 to 10 (11 facts)

7 x any number from 0 to 10 (11 facts)

8 x any number from 0 to 10 (11 facts)

9 x any number from 0 to 10 (11 facts)

10 x any number from 0 to 10 (11 facts)

The Turn Tables cards have a 0 x ... card in each of the times tables. The fact that these have no diagram is very powerful in helping students understand 0 x anything or anything x 0 is zero, which is a common error.

Please note the cards do not have an actual 0 times table set. There are 110 Turn Tables cards.

When students realise that say, 2×3 is the same as 3×2 they are making a huge step forward in terms of understanding the concept, but also halving the work they have to do! It is not necessary to deal with times tables as separate groups. They are broken down into different coloured groups on the cards for easy identification. They are referred to separately in the diagnostic process to help identify where problems lie. The coach and student can mix up sets to work with for example, some people use the 10 and 5 sets because $\times 5$ is just $\times 10$ then halve it, so they are linked. **The more a student can build on previous knowledge to work out what they need to know the better. They should not be expected to learn the**

times tables by rote or 'parrot fashion' as some people's brains do not function like this. With practice, their speed of calculation and therefore recall will improve.

How?

The Multisensory Approach is the Important Bit! A multisensory approach has long been recognised as providing a successful diet for dyslexic students but it is worth remembering that what is successful for dyslexic students is most definitely worthwhile for all our students. The approach uses several senses to access the brain at once:

- ✓ They use the eyes, the **visual** channel, to see the multiplication diagram, giving students a concrete idea to hold on to;
- ✓ They use the voice to say the multiplication fact, so using the **auditory** channel to hear the students own representation of the multiplication fact; and
- ✓ They use the **kinaesthetic** channel to touch and turn the cards, giving students tactile memories of the process.

The recommended order for teaching the times tables is: 0, 1, 10, 2, 5, 4, 9, 3, 6, 7, 8. There will be more information and tips for doing this later in the booklet.

You will need a pack of the Turn Tables cards, which include instructions for the individual game (and also another game called the pairs game which is not referred to in this booklet).

You will also need a stopwatch. If you have access to a computer go to <http://www.online-stopwatch.com> for this facility or perhaps use a mobile phone.

Warning!

This booklet begins with a diagnostic test to help identify problem areas. Only ask the student to complete this if they are totally happy to do so. If they show any hesitation about it do not ask them and just skip this part. You can soon work out where problems lie by working through the cards. You do not want to further shatter their confidence before the process has even started, after all they may have "failed" repeatedly at times tables in the past and this time has to be different.

If the student you are working with is entitled to extra time or an amanuensis (a scribe) in tests, then these access arrangements should be carried out appropriately.

Diagnostic Test

Ask the student to do this under test conditions for 15 minutes. It's the only horrible test they'll ever have to do in this programme! It doesn't matter if they get none of them correct. It will help work out where on the programme they need to start. Keep a note of the time they stop writing if it is less than 15 minutes.

| | | | | | |
|-----------|-----------------|-----------|-----------------|------------|------------------|
| 1 | $1 \times 4 =$ | 38 | $7 \times 5 =$ | 75 | $9 \times 2 =$ |
| 2 | $7 \times 6 =$ | 39 | $8 \times 1 =$ | 76 | $8 \times 6 =$ |
| 3 | $0 \times 3 =$ | 40 | $7 \times 8 =$ | 77 | $10 \times 3 =$ |
| 4 | $10 \times 8 =$ | 41 | $5 \times 0 =$ | 78 | $4 \times 7 =$ |
| 5 | $8 \times 9 =$ | 42 | $3 \times 3 =$ | 79 | $2 \times 0 =$ |
| 6 | $1 \times 1 =$ | 43 | $1 \times 9 =$ | 80 | $1 \times 8 =$ |
| 7 | $5 \times 7 =$ | 44 | $2 \times 1 =$ | 81 | $8 \times 4 =$ |
| 8 | $1 \times 3 =$ | 45 | $1 \times 7 =$ | 82 | $10 \times 7 =$ |
| 9 | $5 \times 9 =$ | 46 | $10 \times 2 =$ | 83 | $9 \times 1 =$ |
| 10 | $2 \times 5 =$ | 47 | $4 \times 6 =$ | 84 | $2 \times 9 =$ |
| 11 | $8 \times 10 =$ | 48 | $7 \times 10 =$ | 85 | $9 \times 5 =$ |
| 12 | $2 \times 3 =$ | 49 | $0 \times 1 =$ | 86 | $6 \times 6 =$ |
| 13 | $6 \times 8 =$ | 50 | $9 \times 10 =$ | 87 | $6 \times 9 =$ |
| 14 | $5 \times 6 =$ | 51 | $1 \times 2 =$ | 88 | $5 \times 1 =$ |
| 15 | $2 \times 2 =$ | 52 | $5 \times 4 =$ | 89 | $10 \times 10 =$ |
| 16 | $3 \times 9 =$ | 53 | $4 \times 3 =$ | 90 | $4 \times 2 =$ |
| 17 | $10 \times 1 =$ | 54 | $7 \times 7 =$ | 91 | $3 \times 10 =$ |
| 18 | $0 \times 4 =$ | 55 | $6 \times 5 =$ | 92 | $9 \times 3 =$ |
| 19 | $2 \times 8 =$ | 56 | $6 \times 10 =$ | 93 | $3 \times 7 =$ |
| 20 | $2 \times 7 =$ | 57 | $4 \times 1 =$ | 94 | $10 \times 4 =$ |
| 21 | $4 \times 10 =$ | 58 | $10 \times 9 =$ | 95 | $6 \times 0 =$ |
| 22 | $3 \times 1 =$ | 59 | $3 \times 4 =$ | 96 | $1 \times 10 =$ |
| 23 | $2 \times 4 =$ | 60 | $2 \times 10 =$ | 97 | $6 \times 4 =$ |
| 24 | $1 \times 5 =$ | 61 | $7 \times 9 =$ | 98 | $9 \times 9 =$ |
| 25 | $5 \times 2 =$ | 62 | $7 \times 2 =$ | 99 | $4 \times 5 =$ |
| 26 | $5 \times 8 =$ | 63 | $3 \times 8 =$ | 100 | $5 \times 3 =$ |
| 27 | $9 \times 0 =$ | 64 | $0 \times 7 =$ | 101 | $1 \times 6 =$ |
| 28 | $8 \times 8 =$ | 65 | $2 \times 6 =$ | 102 | $4 \times 8 =$ |
| 29 | $9 \times 6 =$ | 66 | $6 \times 3 =$ | 103 | $3 \times 2 =$ |
| 30 | $5 \times 5 =$ | 67 | $3 \times 5 =$ | 104 | $9 \times 7 =$ |
| 31 | $5 \times 10 =$ | 68 | $6 \times 1 =$ | 105 | $0 \times 8 =$ |
| 32 | $4 \times 4 =$ | 69 | $9 \times 8 =$ | 106 | $3 \times 6 =$ |
| 33 | $6 \times 7 =$ | 70 | $4 \times 9 =$ | 107 | $7 \times 3 =$ |
| 34 | $10 \times 6 =$ | 71 | $7 \times 4 =$ | 108 | $8 \times 5 =$ |
| 35 | $7 \times 1 =$ | 72 | $10 \times 5 =$ | 109 | $9 \times 4 =$ |
| 36 | $6 \times 2 =$ | 73 | $8 \times 7 =$ | 110 | $8 \times 2 =$ |
| 37 | $8 \times 3 =$ | 74 | $10 \times 0 =$ | The End | |

Answers

Student and coach should mark the test together using the answers here.

| | | | | | |
|-----------|--------------------|-----------|--------------------|------------|----------------------|
| 1 | $1 \times 4 = 4$ | 38 | $7 \times 5 = 35$ | 75 | $9 \times 2 = 18$ |
| 2 | $7 \times 6 = 42$ | 39 | $8 \times 1 = 8$ | 76 | $8 \times 6 = 48$ |
| 3 | $0 \times 3 = 0$ | 40 | $7 \times 8 = 56$ | 77 | $10 \times 3 = 30$ |
| 4 | $10 \times 8 = 80$ | 41 | $5 \times 0 = 0$ | 78 | $4 \times 7 = 28$ |
| 5 | $8 \times 9 = 72$ | 42 | $3 \times 3 = 9$ | 79 | $2 \times 0 = 0$ |
| 6 | $1 \times 1 = 1$ | 43 | $1 \times 9 = 9$ | 80 | $1 \times 8 = 8$ |
| 7 | $5 \times 7 = 35$ | 44 | $2 \times 1 = 2$ | 81 | $8 \times 4 = 32$ |
| 8 | $1 \times 3 = 3$ | 45 | $1 \times 7 = 7$ | 82 | $10 \times 7 = 70$ |
| 9 | $5 \times 9 = 45$ | 46 | $10 \times 2 = 20$ | 83 | $9 \times 1 = 9$ |
| 10 | $2 \times 5 = 10$ | 47 | $4 \times 6 = 24$ | 84 | $2 \times 9 = 18$ |
| 11 | $8 \times 10 = 80$ | 48 | $7 \times 10 = 70$ | 85 | $9 \times 5 = 45$ |
| 12 | $2 \times 3 = 6$ | 49 | $0 \times 1 = 0$ | 86 | $6 \times 6 = 36$ |
| 13 | $6 \times 8 = 48$ | 50 | $9 \times 10 = 90$ | 87 | $6 \times 9 = 54$ |
| 14 | $5 \times 6 = 30$ | 51 | $1 \times 2 = 2$ | 88 | $5 \times 1 = 5$ |
| 15 | $2 \times 2 = 4$ | 52 | $5 \times 4 = 20$ | 89 | $10 \times 10 = 100$ |
| 16 | $3 \times 9 = 27$ | 53 | $4 \times 3 = 12$ | 90 | $4 \times 2 = 8$ |
| 17 | $10 \times 1 = 10$ | 54 | $7 \times 7 = 49$ | 91 | $3 \times 10 = 30$ |
| 18 | $0 \times 4 = 0$ | 55 | $6 \times 5 = 30$ | 92 | $9 \times 3 = 27$ |
| 19 | $2 \times 8 = 16$ | 56 | $6 \times 10 = 60$ | 93 | $3 \times 7 = 21$ |
| 20 | $2 \times 7 = 14$ | 57 | $4 \times 1 = 4$ | 94 | $10 \times 4 = 40$ |
| 21 | $4 \times 10 = 40$ | 58 | $10 \times 9 = 90$ | 95 | $6 \times 0 = 0$ |
| 22 | $3 \times 1 = 3$ | 59 | $3 \times 4 = 12$ | 96 | $1 \times 10 = 10$ |
| 23 | $2 \times 4 = 8$ | 60 | $2 \times 10 = 20$ | 97 | $6 \times 4 = 24$ |
| 24 | $1 \times 5 = 5$ | 61 | $7 \times 9 = 63$ | 98 | $9 \times 9 = 81$ |
| 25 | $5 \times 2 = 10$ | 62 | $7 \times 2 = 14$ | 99 | $4 \times 5 = 20$ |
| 26 | $5 \times 8 = 40$ | 63 | $3 \times 8 = 24$ | 100 | $5 \times 3 = 15$ |
| 27 | $9 \times 0 = 0$ | 64 | $0 \times 7 = 0$ | 101 | $1 \times 6 = 6$ |
| 28 | $8 \times 8 = 64$ | 65 | $2 \times 6 = 12$ | 102 | $4 \times 8 = 32$ |
| 29 | $9 \times 6 = 54$ | 66 | $6 \times 3 = 18$ | 103 | $3 \times 2 = 6$ |
| 30 | $5 \times 5 = 25$ | 67 | $3 \times 5 = 15$ | 104 | $9 \times 7 = 63$ |
| 31 | $5 \times 10 = 50$ | 68 | $6 \times 1 = 6$ | 105 | $0 \times 8 = 0$ |
| 32 | $4 \times 4 = 16$ | 69 | $9 \times 8 = 72$ | 106 | $3 \times 6 = 18$ |
| 33 | $6 \times 7 = 42$ | 70 | $4 \times 9 = 36$ | 107 | $7 \times 3 = 21$ |
| 34 | $10 \times 6 = 60$ | 71 | $7 \times 4 = 28$ | 108 | $8 \times 5 = 40$ |
| 35 | $7 \times 1 = 7$ | 72 | $10 \times 5 = 50$ | 109 | $9 \times 4 = 36$ |
| 36 | $6 \times 2 = 12$ | 73 | $8 \times 7 = 56$ | 110 | $8 \times 2 = 16$ |
| 37 | $8 \times 3 = 24$ | 74 | $10 \times 0 = 0$ | The End | |

Identifying Where to Start (Part One)

Refer to the marked test on the previous page, to decide how well the student did on each of the times tables. Mark on the grids below whether the student got them right or wrong (the numbers in the column on the left hand side of the grids are the question numbers). Complete the grids in the order shown by the arrows.

Start

| 0 times table | | ✓ or x |
|---------------|-------------------|--------|
| 3 | $0 \times 3 = 0$ | |
| 18 | $0 \times 4 = 0$ | |
| 27 | $9 \times 0 = 0$ | |
| 41 | $5 \times 0 = 0$ | |
| 49 | $0 \times 1 = 0$ | |
| 64 | $0 \times 7 = 0$ | |
| 74 | $10 \times 0 = 0$ | |
| 79 | $2 \times 0 = 0$ | |
| 95 | $6 \times 0 = 0$ | |
| 105 | $0 \times 8 = 0$ | |
| Total correct | | |



| 1 times table | | ✓ or x |
|---------------|--------------------|--------|
| 6 | $1 \times 1 = 1$ | |
| 17 | $10 \times 1 = 10$ | |
| 22 | $3 \times 1 = 3$ | |
| 35 | $7 \times 1 = 7$ | |
| 39 | $8 \times 1 = 8$ | |
| 44 | $2 \times 1 = 2$ | |
| 57 | $4 \times 1 = 4$ | |
| 68 | $6 \times 1 = 6$ | |
| 83 | $9 \times 1 = 9$ | |
| 88 | $5 \times 1 = 5$ | |
| Total correct | | |



| 10 times table | | ✓ or x |
|----------------|----------------------|--------|
| 11 | $8 \times 10 = 80$ | |
| 21 | $4 \times 10 = 40$ | |
| 31 | $5 \times 10 = 50$ | |
| 48 | $7 \times 10 = 70$ | |
| 50 | $9 \times 10 = 90$ | |
| 56 | $6 \times 10 = 60$ | |
| 60 | $2 \times 10 = 20$ | |
| 89 | $10 \times 10 = 100$ | |
| 91 | $3 \times 10 = 30$ | |
| 96 | $1 \times 10 = 10$ | |
| Total correct | | |



| 2 times table | | ✓ or x |
|---------------|--------------------|--------|
| 15 | $2 \times 2 = 4$ | |
| 25 | $5 \times 2 = 10$ | |
| 36 | $6 \times 2 = 12$ | |
| 46 | $10 \times 2 = 20$ | |
| 51 | $1 \times 2 = 2$ | |
| 62 | $7 \times 2 = 14$ | |
| 75 | $9 \times 2 = 18$ | |
| 90 | $4 \times 2 = 8$ | |
| 103 | $3 \times 2 = 6$ | |
| 110 | $8 \times 2 = 16$ | |
| Total correct | | |



| 5 times table | | ✓ or x |
|---------------|--------------------|--------|
| 10 | $2 \times 5 = 10$ | |
| 24 | $1 \times 5 = 5$ | |
| 30 | $5 \times 5 = 25$ | |
| 38 | $7 \times 5 = 35$ | |
| 55 | $6 \times 5 = 30$ | |
| 67 | $3 \times 5 = 15$ | |
| 72 | $10 \times 5 = 50$ | |
| 85 | $9 \times 5 = 45$ | |
| 99 | $4 \times 5 = 20$ | |
| 108 | $8 \times 5 = 40$ | |
| Total correct | | |



| 4 times table | | ✓ or x |
|---------------|--------------------|--------|
| 1 | $1 \times 4 = 4$ | |
| 23 | $2 \times 4 = 8$ | |
| 32 | $4 \times 4 = 16$ | |
| 52 | $5 \times 4 = 20$ | |
| 59 | $3 \times 4 = 12$ | |
| 71 | $7 \times 4 = 28$ | |
| 81 | $8 \times 4 = 32$ | |
| 94 | $10 \times 4 = 40$ | |
| 97 | $6 \times 4 = 24$ | |
| 109 | $9 \times 4 = 36$ | |
| Total correct | | |



| 9 times table | | ✓ or x |
|---------------|--------------------|--------|
| 5 | $8 \times 9 = 72$ | |
| 9 | $5 \times 9 = 45$ | |
| 16 | $3 \times 9 = 27$ | |
| 43 | $1 \times 9 = 9$ | |
| 58 | $10 \times 9 = 90$ | |
| 61 | $7 \times 9 = 63$ | |
| 70 | $4 \times 9 = 36$ | |
| 84 | $2 \times 9 = 18$ | |
| 87 | $6 \times 9 = 54$ | |
| 98 | $9 \times 9 = 81$ | |
| Total correct | | |



| 3 times table | | ✓ or x |
|---------------|--------------------|--------|
| 8 | $1 \times 3 = 3$ | |
| 12 | $2 \times 3 = 6$ | |
| 37 | $8 \times 3 = 24$ | |
| 42 | $3 \times 3 = 9$ | |
| 53 | $4 \times 3 = 12$ | |
| 66 | $6 \times 3 = 18$ | |
| 77 | $10 \times 3 = 30$ | |
| 92 | $9 \times 3 = 27$ | |
| 100 | $5 \times 3 = 15$ | |
| 107 | $7 \times 3 = 21$ | |
| Total correct | | |



| 6 times table | | ✓ or x |
|---------------|--------------------|--------|
| 2 | $7 \times 6 = 42$ | |
| 14 | $5 \times 6 = 30$ | |
| 29 | $9 \times 6 = 54$ | |
| 34 | $10 \times 6 = 60$ | |
| 47 | $4 \times 6 = 24$ | |
| 65 | $2 \times 6 = 12$ | |
| 76 | $8 \times 6 = 48$ | |
| 86 | $6 \times 6 = 36$ | |
| 101 | $1 \times 6 = 6$ | |
| 106 | $3 \times 6 = 18$ | |
| Total correct | | |

| 7 times table | | ✓ or x |
|---------------|--------------------|--------|
| 7 | $5 \times 7 = 35$ | |
| 20 | $2 \times 7 = 14$ | |
| 33 | $6 \times 7 = 42$ | |
| 45 | $1 \times 7 = 7$ | |
| 54 | $7 \times 7 = 49$ | |
| 73 | $8 \times 7 = 56$ | |
| 78 | $4 \times 7 = 28$ | |
| 82 | $10 \times 7 = 70$ | |
| 93 | $3 \times 7 = 21$ | |
| 104 | $9 \times 7 = 63$ | |
| Total correct | | |



| 8 times table | | ✓ or x |
|---------------|--------------------|--------|
| 4 | $10 \times 8 = 80$ | |
| 13 | $6 \times 8 = 48$ | |
| 19 | $2 \times 8 = 16$ | |
| 26 | $5 \times 8 = 40$ | |
| 28 | $8 \times 8 = 64$ | |
| 40 | $7 \times 8 = 56$ | |
| 63 | $3 \times 8 = 24$ | |
| 69 | $9 \times 8 = 72$ | |
| 80 | $1 \times 8 = 8$ | |
| 102 | $4 \times 8 = 32$ | |
| Total correct | | |

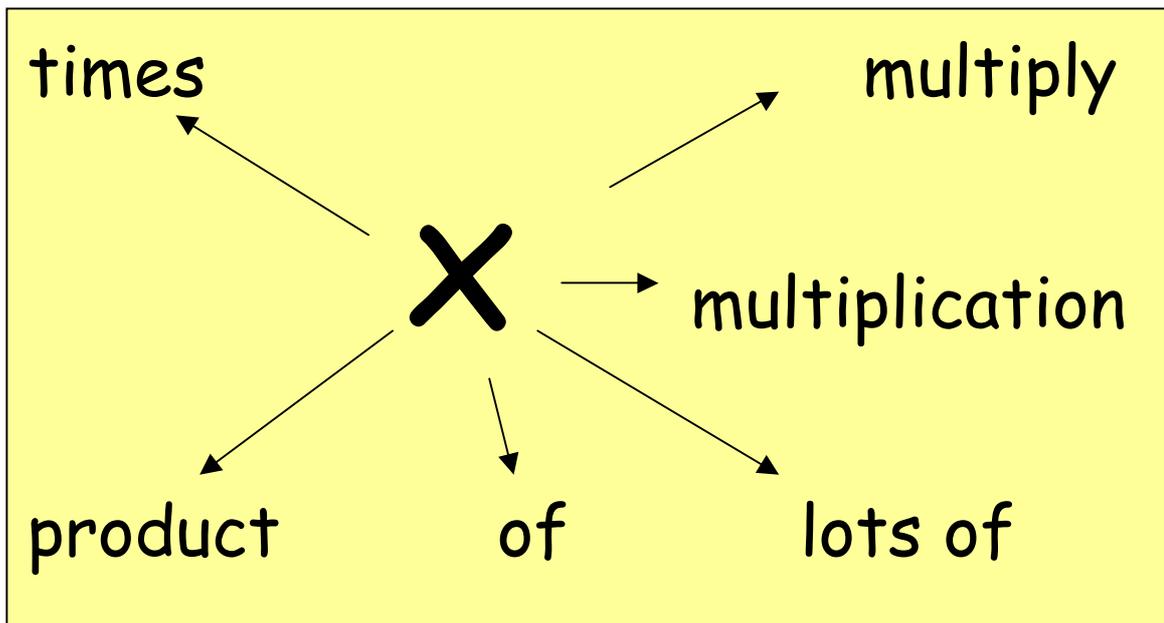
Finish

Identifying Where to Start (Part Two)

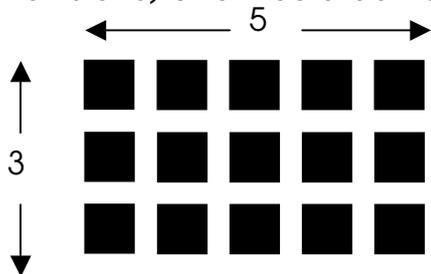
- 1) Starting at the grid with the zero times table and following the arrows, look at the total number of correct answers for each one.
- 2) Find the **first** grid with a total number of correct answers of 7 or less. This score shows that the student does not know the times table well enough and has made 3 or more errors. This times table is the place to start! Then work through then in the order suggested above (following the arrows). Use the tips below for help.
- 3) If all scores are 8 or more and the student took more than ten minutes of the time to complete the test: they understand the concept but playing the game will improve their speed of recall. Ask them which times tables they would like to improve accuracy/speed and start there.
- 4) If the student got scores of 8 or more and they finished the test in under ten minutes they may have just made some careless errors but clearly understand the concept. If this is the case then select the cards corresponding to the errors they made and play the game with them. This should iron out any problems.

Tips for Practising Times Tables

- ✓ Understand the language and symbols associated with multiplication:

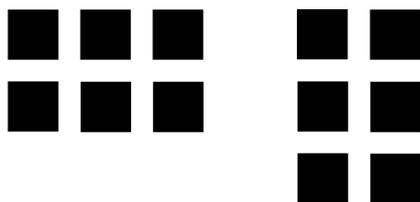


- ✓ Students have a much better chance of learning something if they understand and visualise where it has come from. Present multiplication as “lots of” a number to start with. Teach students to ‘read’ the multiplication sign as saying ‘lots of’ and visualising the grid diagram on the card. For example, 3×5 would be read as 3 lots of 5 (some children actually say 3 rows of 5) and would be visualised as:

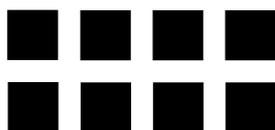


This helps with the teaching of the first multiplication table, the 0 times table, because they cannot draw ‘no rows’ of a number so the answer has to be 0. The use of other words for zero such as, none and nothing should be discussed at this point.

- ✓ Students do not always understand that 3×2 is the same as 2×3 for example. In order to overcome this teachers should go back to the diagrams on the cards



both together and ask the student to tell them what these diagrams have in common. They can then be asked to find another diagram to represent the same fact as this diagram does:



- ✓ Once the student masters the skill of doubling and the language of even numbers and multiples of two then they are well on their way to knowing the 2 times table. This can be extended to teach the four and eight times tables when their turn comes. The four times table is just a case of doubling the number and then doubling again. The eight is doubling, doubling then doubling again.
- ✓ Many learners can count in fives easily but they do not know their multiplication facts without actually going through the sequence from five upwards. The author has found most success with getting students to realise that these facts are just half the ten times table facts. This can be done visually using the diagrams on the cards.
- ✓ The nine times table has a beautiful pattern that stems from number bonds to nine: 09, 18, 27, 36, 45, 54, 63, 81, 90

This should be an easy table to learn but that is not always the case with some students because they forget these number bonds or mix up the order of the numbers. Two successful strategies for calculating this table. The first is to use the fact that nine is nearly ten so just think of ten times the number then subtract one lot of the number. For example:

$$9 \times 6 = (10 \times 6) - (1 \times 6) = 54$$

This needs practice because the student may make the mistake of just subtracting one at the end.

The second is the hands method. Students sit with their hands out in front of them, open with palms facing them. Each of the fingers (including thumbs) are numbered 1 to 10. If they want to calculate say, 2×9 , then put down the index finger on the left hand and then see what is remaining. The fingers up to the bent one are tens and after that they are units. So in the case of 2×9 then there is one ten and eight units so the answer is 18. This method needs practice especially because some students can't easily manipulate their fingers but it does appeal to them. They like the fact that they have a 'natural calculator.'

- ✓ Once students are confident with zero, one, ten, two, five and nine they will start to build up momentum. The three times table can be built up using double the number and add one lot of it. For example:

$$\begin{aligned} 3 \times 7 &= (2 \times 7) + (1 \times 7) \\ &= 14 + 7 \\ &= 21 \end{aligned}$$

- ✓ The six times table can be built up using five lots of the number plus one lot. For example:

$$\begin{aligned} 6 \times 7 &= (5 \times 7) + (1 \times 7) \\ &= 35 + 7 \\ &= 42 \end{aligned}$$

- ✓ The seven times table can be built up using five times the number plus two lots of it. For example:

$$\begin{aligned} 7 \times 8 &= (5 \times 8) + (2 \times 8) \\ &= 40 + 16 \\ &= 56 \end{aligned}$$

Practise, Practise, Practise!

The more efficient students are at calculating these facts, the easier they will find so much of the other work they have to do in maths and across the curriculum. Whilst we are not expecting them to be learned by heart, we can aim for a certain degree of automaticity. This can only be attempted once the concepts are understood and calculation strategies are in place. Work through the card games about and keep records to see the improvement made.

Enjoy playing with the cards and be enthusiastic about times tables because they are the building blocks for so much mathematics!

