INTRODUCTION

The program provides learning experiences and assessment opportunities for students who have difficulties to learn and recall number facts. Students are encouraged to use their own suitable computation methods to arrive at the correct answers.

Core Content: level 2 and 3.
Multiplication facts, recall 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s based on linear strategy (number lines, repeated addition and skip counting).

Mental Computation strategies.
Work out basic facts by repeated addition, skip counting, doubles, near doubles, turnarounds, groups of, rows of, jumps of.

Combination of multiplications and additions or subtractions.
Multiplying two factors and adding on a single digit number (1 to 5) or subtracting a single digit number from the product is a prerequisite to the competence of handling money.

Computation methods.

- Mental computation - place the LUK tiles one by one on the correct answer in the LUK box.
- Written recordings - write the answers and then place the tiles in the correct spaces matching the answer with the appropriate numbers.

The mental computation (with no written records) enables faster recall of number facts, as the student is not distracted by writing the numbers. The use of mental computation keeps the student on track and encourages fluency.

Some students are dependent on written recordings, as they can refer back to the written answer when looking for the correct space in the LUK box. The LUk program helps to develop short term memory, based on visual skills, such as focusing, scanning and figure ground.

The levels outlined on the following pages indicate progression of increasing complexity.

CONTENT

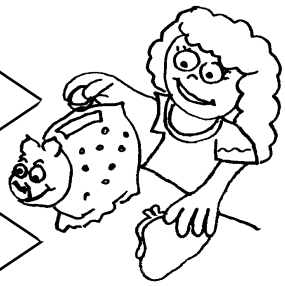
Page	Task		Activity
7	Multiply, add on or subtract.	x2, x3	Skip count by 3s or 2s, add on 1 or subtract 1.
8	Multiply and add on.	x4	Skip count by 4s, add on 1, 2 or 3.
9, 10	Multiply, add on or subtract.	x4	Skip count by 4s or 2s, add on or subtract 1, 2 or 3.
11	Multiply and add on.	x5	Skip by 5s, add on 1, 2, 3 or 4.
12, 13	Multiply, add on or subtract.	x5	Skip by 5s, add on or subtract 1, 2 or 3.
14, 15, 16	Multiply and add on.	x10	Skip by 10s and add on ones.
17	Multiply, subtract or add on.	x6	Count by 6s, subtract 1 or 2 add on 1, 2 or 3.
18, 19	Multiply, subtract or add on.	x6	Count by 6s, subtract 1, add on 1, 2, 3 or 4.
20	Multiply, subtract or add on.	x6	Count by 6s, subtract 1, add on 1, 2 or 3.
21, 22	Multiply, subtract or add on.	x7	Count by 7s, subtract 1 or 2, add on 1 or 2.
23	Multiply, subtract or add on.	x7	Count by 7s, subtract 1 or 2, add on 1, 2, 3 or 4.
24, 25, 26	Multiply, subtract or add on.	x8	Count by 8s, subtract 1, 2 or 3, add on 1, 2, 3 or 4.
27, 28, 29	Multiply, subtract or add on.	x9	Count by 9s, subtract 1 or 2, add on 1 or 2.
30	Multiply by 2, 3, 4, 5, add on.	x2, x, 3, x4, x5, x7, x8	Count by 2s, 3s, 4s, and 5s.
31, 32	Multiply by 2, 3, 4, 5, add on.	x2, x3, x4, x5	Mixed number facts.
33	Multiply by 2, 3, 4, 5, 6 add or subtract.	x2, x3, x4, x5, x6	Mixed number facts.
34	Multiply, add or subtract.	x4, x6, x7, x8, x9, x10	Mixed number facts.
35	Multiply $2, add $1.	x2	Count by 2s and add on.
36	Multiply $5 and add on.	x5	Count by 5s and add on ones.
37	Multiply $5 and add on.	x5	Count by 5s and add on.
38	Multiply the dollars.	x2, x3, x4, x5	Mixed number facts.
IX, X	List of LUK patterns page by page.		

x3

Multiply, add on.

Skip count by 3s and add on 1 or 2.

1. 3 x 3 + 2 =
2. 11 x 3 =
3. 2 x 3 + 2 =
4. 4 x 3 =
5. 8 x 3 + 2 =
6. 3 x 3 + 1 =
7. 9 x 3 + 1 =
8. 2 x 3 =
9. 10 x 3 + 1 =
10. 8 x 3 + 1 =
11. 9 x 3 + 2 =
12. 9 x 3 =



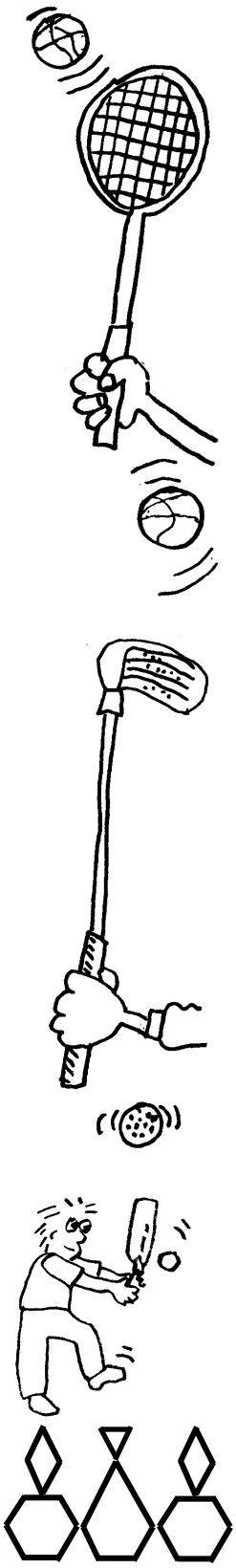
13. 8 x 3 =
14. 7 x 3 + 1 =
15. 6 x 3 + 2 =
16. 7 x 3 + 2 =
17. 5 x 3 =
18. 6 x 3 + 1 =
19. 5 x 3 + 1 =
20. 5 x 3 + 2 =
21. 4 x 3 + 1 =
22. 7 x 3 =
23. 6 x 3 =
24. 4 x 3 + 2 =

x8

Multiply, subtract or add on.

Count in 8s subtract 1, 2, 3, add on 1, 2, 3 or 4.

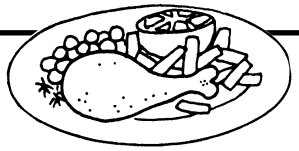
1. 2 x 8 – 1 =
2. 5 x 8 – 3 =
3. 2 x 8 +2 =
4. 5 x 8 =
5. 7 x 8 – 3 =
6. 8 x 8 – 2 =
7. 3 x 8 + 1 =
8. 4 x 8 + 1 =
9. 2 x 8 + 1 =
10. 4 x 8 – 2 =
11. 7 x 8 + 2 =
12. 3 x 8 + 2 = =
13. 6 x 8 + 3 =
14. 7 x 8 – 1 =
15. 4 x 8 + 3 =
16. 3 x 8 + 4 =
17. 8 x 8 + 3 =
18. 4 x 8 + 4 =
19. 5 x 8 + 4 =
20. 3 x 8 – 3 =
21. 9 x 8 – 1 =
22. 7 x 8 =
23. 3 x 8 – 2 =
24. 6 x 8 =

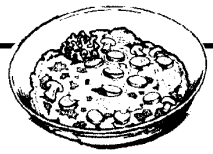


x 2, 3,4,5

Multiply the dollars.

Use turnaround strategy.





1	3 x $9 =$	13	3 x $3 =$
2	5 x $5 =$	14	7 x $5 =$
3	3 x $6 =$	15	1 x $23 =$
4	2 x $2 =$	16	2 x $5 =$
5	13 x $5 =$	17	11 x $5 =$
6	6 x $5 =$	18	4 x $5 =$
7	11 x $7 =$	19	3 x $4 =$
8	3 x $5 =$	20	9 x $5 =$
9	1 x $13 =$	21	1 x $19 =$
10	7 x $2 =$	22	4 x $2 =$
11	8 x $5 =$	23	10 x $7 =$
12	5 x $10 =$	24	6 x $4 =$