Unit 11. Commutativity

National Curriculum Requirement

Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot

Notes

The idea that addition is commutative commutative whilst subtraction is not is quite a difficult concept for young children, and perhaps, the most important aspect of this work is that of ensuring pupils do not write down a subtraction sum in the wrong order. It is important that the pupils understand that the number being taken away is below the number from which it is being taken if one is working in columns and after this number in the line of working using equals signs format.

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The Order of Adding and Subtracting

If we add together 2 and 3 like this 2 + 3, we get the answer 5 and if we add 2 and 3 like this 3 + 2, we still get the answer 5. Try these to see if the order of adding makes a difference:

15 + 2

	T	U
	1	5
+	2	0
	3	5

2 + 15

	T	U
+		

7 + 12

	T	U
+		

12 + 7

	T	U
+		

14 + 16

	T	U
+		

16 + 14

	T	U
+		

5 + 18

	T	U
+		

18 + 5

	T	U
+		

Does the order in which you add the numbers make a difference to the answer?

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The order in which we do takeaway sums **does matter** and

5 - 3 is not the same as as 3 - 5.

Tick the sums right or wrong to show which are being done correctly and which incorrectly. The first two have been done for you:

23 - 11

	T	U
	2	3
-	1	1



24 - 19

	T	U
	1	9
-	2	4



31 - 17

	T	U
	1	7
-	3	1

51 - 23

	T	U
	5	1
-	2	3

26 - 24

	T	U
	2	6
-	2	4

43 - 31

	T	U
	4	3
-	3	1

45 - 37

	T	U
	3	7
-	4	5

38 - 25

	T	U
	3	8
-	2	5

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Use the words:

same, take, true, does, add, not, matter

to fill in the gaps:

When we numbers, the order in which we do this does matter. If we add 2 and 5, we get the answer if we do 2 + 5 or 5 + 2.

But this is not when we away because 5 - 2 is not the same as 2 - 5.

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