Year 3 Unit 12d Extension Activity

We can subtract numbers using the expanded column method using partitioning with exchange

We can now add hundreds into the subtraction. Sometimes we will need to partition a hundred into ten groups of 10 to complete the subtraction like this:

	6	2	8			500		120	
-	4	5	3			600	+	20	+ 8
					-	400	+	50	+ 3
						100		70	5 = 175

As before we partition each number, now into hundreds, tens and units, so 628 becomes 600 + 20 + 8, and 453 becomes 400 +50 + 3.
We start this subtraction by taking the 3 units away from the 8, leaving 5. Then we realise that we cannot take 50 away from 20 as there are not enough tens in the top number. We therefore take a hundred from the hundreds column, changing 600 down to 500 and move the hundred we have taken into the tens column to make 120 altogether. This is called 'decomposition' as we break up, or partition the top number and move value from one column to another. Note that we have not changed the overall value of the top number; we started with 628 and now we have 500 + 120 + 8 which is still 628. Now we can subtract every column.

Now set these out and subtract them

319 – 292

678 - 193

569 – 296

349 - 163

332 - 261

368 - 177