

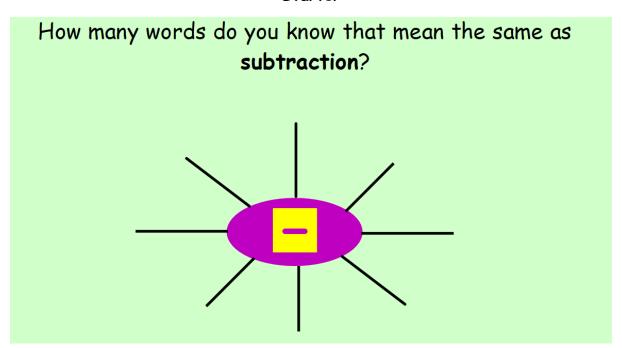
Lesson 2- Consolidation

Subtraction using the column method

This week we will be consolidating the methods we use for the 4 operations (addition, subtraction, multiplication and division).

In today's work, you will focus on subtraction.

Starter



Let's have a look at our school's calculation policy on subtraction- This is how we should be setting it out.

Formal written compact method (without having to regroup)

Formal written compact method (with regrouping)

4 757 896 - 1 325 156 =

4 757 896 - 1 325 156 3 432 740 4 127 826 - 1 325 156 =

4127 826 - 1 325 156 2 802 670

Steps to success

- 1. Make sure you put the larger number on top.
- 2. Column by colum subtract.
- 3. If the top number is smaller than the bottom number-you will need to regroup.
- 4. Remember that you can only regroup from the number next door.

Answer the following questions. Make sure you read the questions carefully as sometimes you will be required to answer some question on addition as well as subtraction.

Task 1

- 1) 423963 56784 =
- 2) 400020 50649 =
- 3) 60000 956 =
- 4) 9010060 8497 =
- 5) 341.06 84.5 =
- 6) 6835.24 945.671 =

Task 2



Welcome to The Sweet Factory! Sammy is going to give you a tour of the magnificent factory.

Before you enter the factory, Sammy needs you to calculate how many sweets have been made. The factory has been running for four years. Below is a table showing how many of each type of sweet was made in each year the factory has been open.

	Raspberry ZigZags	Strawberry Whirls	Chocolate Swirvels	Hazelnut Chewies
Year 1	5,681	4,612	7,384	1,823
Year 2	11,274	9,381	8,133	15,730
Year 3	25,252	28,736	27,632	22,527
Year 4	35,581	46,935	44,194	37,659

Sammy takes you in to the reception. He is worried about whether he can afford to keep the factory running and needs you to help him with his calculations.

Last year, the factory made £23,480. This year we have struggled and the factory has only made £8,210.

2. Use the column method to calculate the difference in earnings of the factory from last year to this year.



Task 3

It's time to start your tour of the factory. The first room Sammy takes you to is the Bubblegum room. The bubblegum machine makes 3 different flavours.



3. Each week, the machine makes 12,864 of the grapefruit flavour, 8,231 of the apple flavour and 23,489 of the peach flavour. Round each flavour to the nearest 10, 100 and 1,000 to estimate how many bubblegums are made each week.

Task 4

Next up, the Melting room! This room is the home of the magnificent melting machine which is full of gooey chocolate. The machine melts hundreds of bars of chocolate each day.



On Mondays, the machine makes 15,682ml of melted chocolate. On Tuesdays, the machine makes 12,532ml of melted chocolate.

True or False? 4a.15,682ml + 12,532ml gives the same answer as 15,682ml - 12,532ml. 4b. 15,682ml – 12,532ml gives a different answer to 12,532ml + 15,682ml. Explain your answer.

Task 5

You've now come to the end of the tour, but there is one more task Sammy needs you to complete. His step-counting watch has broken and he wants to know how many footsteps you have both done whilst walking around the factory.

The table shows the amount of footsteps you and Sammy have taken in different parts of the factory.

	Entering the factory	Reception	Bubblegum room	Melting room	Candy room	
You	1,294	2,521	52,573	3,863	42,485	
Sammy	1,376	2,650	51,129	3,872	43,763	

6. Co	alcula	te wh	o wal	ked th	ne mo	st ste	ps ove	erall.							
6a. V	Vho w	alked	the n	nost s	teps?										
6b. V	Vhat is	s the (d the r differe alked	nce b			e amo	unt of	i steps	s you	walke	d and	d the d	amou	nt of
6b. V	Vhat is	s the (differe	nce b			e amo	ount of	steps	s you	walke	d and	d the d	amou	nt of
6b. V	Vhat is	s the (differe	nce b			e amo	ount of	f steps	s you	walke	d and	i the d	amou	nt of
6b. V	Vhat is	s the (differe	nce b			e amo	unt of	f steps	s you	walke	d and	d the d	amou	nt of
6b. V	Vhat is	s the (differe	nce b			e amo	ount of	fsteps	s you	walke	d and	i the d	amou	nt of