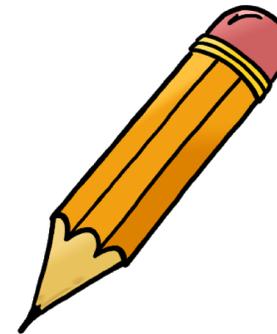# Year 6

Friday 12th June 2020
Maths

LO: **Calculator Crunch!**

For today's challenge you will need a calculator.

A scientific calculator would be best, but a digital one will be fine otherwise.

There are five calculator challenges on the following slides.

CALCULATOR CRUNCH

Be the BOSS!

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Type 5508 into your calculator and turn it upside down.

What are you? | 8 | 0 | 5 | 5 |

Your challenge is to find 10 different ways of creating 5508 using the calculator.

Be creative and find the most interesting way to write BOSS.

1		2	
3		4	
5		6	
7		8	
9		10	

Green	using only one of +, -, x and ÷
Amber	using a combination of + and – with x and ÷ using brackets (or careful use of order of calculations and =)
Red	using a mixture and possibly squares and square roots

Which calculation do you need to enter into the calculator to work out the missing number?

$$\boxed{} \div 7 = 56$$

$$\boxed{} - 18 = 52$$

$$43 + \boxed{} = 102$$

$$1920 = \boxed{} \times 5 \times 3$$

$$256 \times \boxed{} = 4352$$

Remember to show the calculations you've done, rather than just the number.

Extra: Are there any that you can solve in more than one way?

If you enjoyed this activity then you might like: **Funny Factorisation** from NRICH (nrich.maths.org/740)

Is once enough?

Estimate the sum of these groups of numbers.
Work it out using a calculator.
How can you be sure you have the right answer?

1	2	3	4	5
4.5	0.1	2005	10.3	233
3.5	0.5	2050	103	232
5.5	0.7	5002	301	323
6.5	0.9	2500	3.01	23.2
0.5	0.2	5020	30.1	22.3
2.5	0.4	5200	310	32.2
1.5	0.8	2500	130	32.3
Is it:	Is it:	Is it:	Is it:	Is it:
A. 25	A. 3.8	A. 25,272	A. 914.5	A. 898
B. 24.5	B. 3.7	B. 24,275	B. 1549	B. 897.8
C. 24.05	C. 3.5	C. 22,277	C. 887.41	C. 1106.8
D. 23.5	D. 3.6	D. 24,277	D. 887.31	D. 1898

CALCULATOR CRUNCH

Take 5!

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Choose 3 digit keys and 2 operation keys e.g.

| 5 | 6 | 8 | + | - |

You can always use the = key

Can you make all the numbers from 1 – 20 using only these keys?

You can use the keys as often as you want each time.

I used these keys:

Things to think about…

Can you use the difference between the numbers to help?

Can the way you made a number before help you this time?

Extra challenge

What if you 'Take 4' and use 2 digits and 2 operations?

1	
2	
3	
4	
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9	
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11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

CALCULATOR CRUNCH

Equivalence is Key!

MEI Mathematics Education Innovation

If I know that **482 x 75 = 36,150**

What do I need to insert in each row to make the expressions equivalent? For example:

4820 x 75 = 482 x 75   (x)   [10]

482 x 7.5 = 482 x 75   ◯   [ ]

4820 x 7.5 = 482 x 75   ◯   [ ]

48.2 x 7.5 = 482 x 75   ◯   [ ]

482 x 750 = 482 x 75   ◯   [ ]

48.2 x 75 = 482 x 75   ◯   [ ]

◯   is an operation

[ ]   is a number

What other expressions can you write that are equivalent to 48.2 x 7.5?

If you enjoyed this activity then you might like: **Multiply Multiples** (1, 2 and 3) from NRICH (nrich.maths.org/10421)