

# Take 5 (Keys)

CALCULATOR	Mathematics Education Innovation
Choose 3 digit keys and 2 operation keys e.g.  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	1 2 3 4 5 5 6 6 7 8 9 9 10 11 12 13 14 15 16 17 18
What if you 'Take 4' and use 2 digits and 2 operations?	19 20

## Aim of the game

To create calculations to equal all the numbers from 1 to 20 but using only 3 digit keys and 2 operation keys. You can always use the equals key!

# How to play

Choose three numbers to use and 2 operation keys  $(+, -, \times \text{ or } \div)$ .

Using just those keys, create calculations that equal the numbers from 1 to 20.

e.g. using 5, 6, 8, + and - you could make the answers 1, 2 and 3 like this:

$$6 - 5 = 1$$

8 - 6 = 2

8 - 5 = 3

What will you do to get the answer 4? Could you use + and - in the same calculation?

$$6 + 8 - 5 = \dots$$
?

You could draw a table to record your calculations

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

#### Using the calculator?

Does it matter which order you enter the calculations?

Does 6 + 8 - 5 = give the same answer as 8 - 5 + 6 =?

What if you chose  $\times$  and  $\div$  as your operation keys?

Does the order you enter the calculation matter?

## Top Tip

In year 6, children may learn about BODMAS or BIDMAS which helps them to remember the order of operations

B - brackets

O/I – indices (powers)

*D* and *M* – division and multiplication

A and S – addition and subtraction

