

# Mobile Numbers

Age 5 to 11  
Challenge Level ★



So many of us are using mobile phones and you have numbers like that one above. (+44 instead of the first 0 when you are phoning the UK from abroad.)

Some numbers are easy to remember!

Some seem to have a pattern about them!

Let's have a look at how we might invent some mobile phone numbers that would be easy to remember.

We could start with a number and have a simple rule that gives us the next number, like starting with 3 and adding 2 each time:

1 3 5 7 etc.

and when the number is bigger than 9 we could just write down the units figure. For example:

1 3 5 7 9 1 3 5 7 9 1 3

Here are some suggestions about how you could go on with this idea: but we could start with any of the numbers, 1 ... 9.

A. Try adding on 2 each time as in the example above, but starting with any number, 1 ... 9 and see what you get.

What do you notice? Talk to someone else about your ideas!

Try adding on 3 each time instead - starting with 1 then 2 then 3 ... (For example starting with 5 it would be 5 8 1 4 7 0 3 6 9 2 5 8.)

B. We could try adding on a 4 each time, and so on.

C. We could multiply instead. Suppose we've done multiplying by 2, 3, 4 and 5 and we come to 6. Starting with

1 we'd have: 1 6 6 6 6 6 6 6 6 6

2 we'd have: 2 2 2 2 2 2 2 2 2 2

3 we'd have: 3 8 8 8 8 8 8 8 8 8

So carry on!

Again, what do you notice? Have a chat to someone else about it.