DR BAKER'S YEAR 5 MATHS
THURSDAY 26TH MARCH

WELCOME TO DAY 4

"Morning. Did you find the missing numbers in yesterday's problem questions? In the easier one the one in the question was 2 and the one in the answer was 1. In the harder one the missing number was 3. Today to start off with, it is times tables again. Answers only in your books please."

1. 5 x 9
2. 2 x 8
3. 10 x 11
4. 6 x 3
5. 4 x 8
6. 3 x 7
7. 7 x 8
8. 4 x 7

9. 12 x 6
10. 9 x 3
11. 7 x 11
12. 12 x 12
13. 8 x 6
14. 10 x 12
15. 3 x 3

TASKS FOR TODAY

Today we are going to do an investigation. I would like most of you to do the first one which is on the next slide but if you are really stuck there is an easier one on the slide after that. Before you get going here are some tips that might help you,

Remember that when we are doing an investigation there is no right or wrong answer. We are just investigating i.e. trying to see what happens. So just try things and see what happens. Try for as long as you have to do maths today. If you want to try it on scrap paper first and then write up in your book that is fine.

These investigations are going to involve prime numbers and square numbers. Hopefully you remember what square numbers are from earlier in the week but if you have forgotten, look back at your earlier work.

You should also remember what prime numbers are but I am sure some of you have forgotten! They are numbers that only have 1 and themselves as factors (or put another way are not in another times table). Here are the first few: 2,3,5,7,11,13,17,19.

To test if a number is prime we have to divide it by numbers lower than it and show that none divide into it without a remainder.

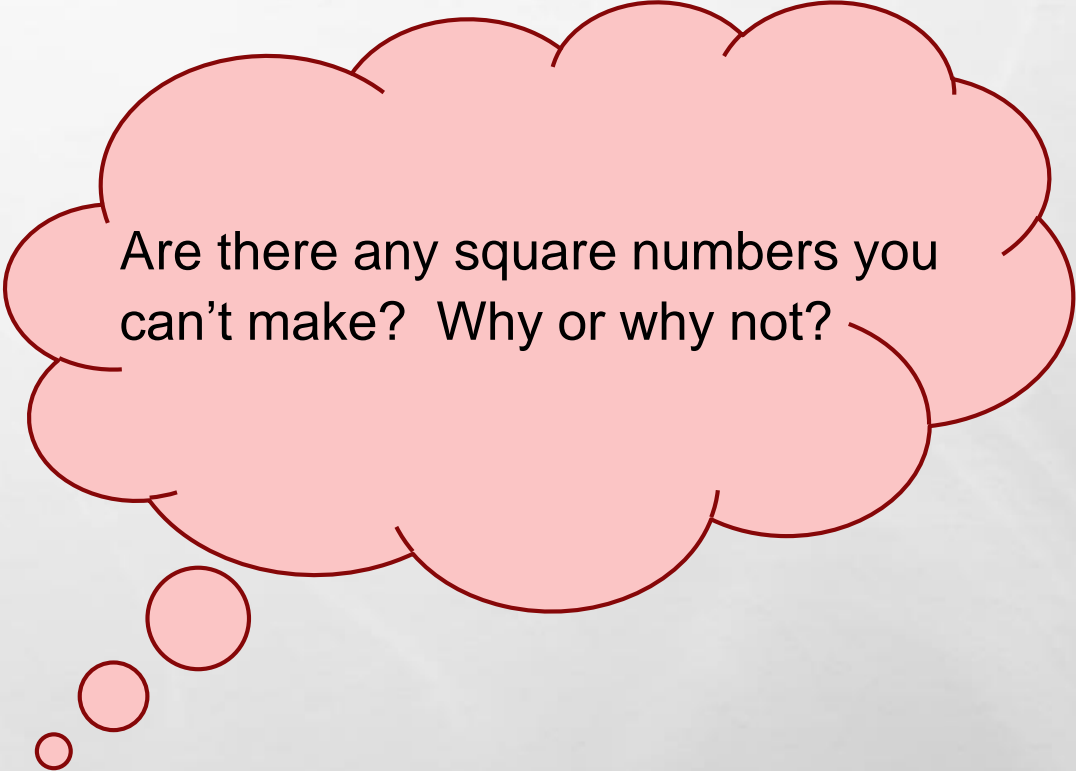Right, that should be all the information you need. Now off you go.

SQUARES INVESTIGATION

How many of the square numbers can you make by adding two prime numbers together?

For example 4 = 2 + 2.

Have a go yourself. Think about things you could do that would make this task easier.

If you need a hint look at the hints slide at the back but try not to look unless you really have to.

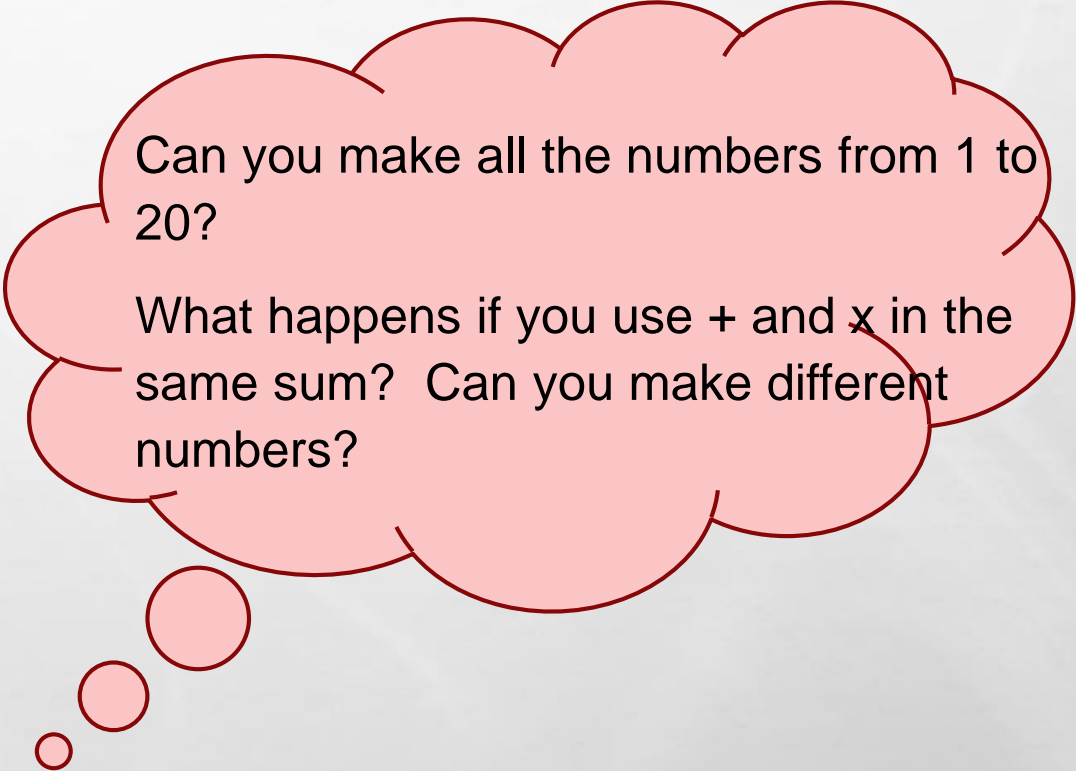Are there any square numbers you can't make? Why or why not?

PRIMES INVESTIGATION

Take the first 5 prime numbers (2,3,5,7,11).

How many different numbers can you make be adding them, taking them away or multiplying them? You can use more than 2 numbers in a sum. For example I could do

2 x 3 = 6

or 3 + 5 + 11 =19

or 7 – 3 = 4

Can you make all the numbers from 1 to 20?

What happens if you use + and x in the same sum? Can you make different numbers?

HINTS FOR SQUARES INVESTIGATION

If you are struggling with the squares investigation try listing out all the prime and square numbers first.

Is the fact that 2 is the only even prime number important?

You could try starting with a square number and taking a prime number away and seeing if you end up with a prime number.