.Your 8 x reference table

(although you'll be faster learning these facts off by heart!)

1 x 8 = 8
2 x 8 = 16
3 x 8 = 24
4 x 8 = 32
5 x 8 = 40
6 x 8 = 48
7 x 8 = 56
8 x 8 = 64
9 x 8 = 72
10 x 8 = 80
11 x 8 = 88
12 x 8 = 96
15 x 8 = 120
20 x 8 = 160

8 x 4 =	8 x 11 =	8 x 20 =	8 x 5 =
11 x 8 =	8 x 2 =	8 x 2 =	10 x 8 =
8 x 3 =	7 x 8 =	8 x 15 =	2 x 8 =
1 x 8	8 x 0 =	8 x 4 =	6 x 8 =
8 x 5 =	8 x 3 =	8 x 8 =	8 x 10 =
12 x 8 =	8 x 20 =	8 x 0 =	8 x 9 =
7 x 8 =	1 x 8 =	1 x 8 =	1 x 8 =
10 x 8 =	2 x 8 =	8 x 12 =	8 x 15 =
3 x 8 =	8 x 8 =	3 x 8 =	3 x 8 =
8 x 6 =	4 x 8 =	4 x 8 =	8 x 7 =
8 x 1 =	12 x 8 =	5 x 8 =	9 x 8 =
0 x 8 =	0 x 8	7 x 8 =	8 x 6 =
8 x 11 =	8 x 15 =	8 x 11 =	12 x 8 =
20 x 8 =	8 x 5 =	8 x 10 =	8 x 12 =
8 x 7 =	5 x 8 =	10 x 8 =	8 x 1 =
8 x 10 =	11 x 8 =	11 x 8 =	8 x 11 =
8 x 15 =	6 x 8 =	0 x 8 =	5 x 8 =
15 x 8 =	9 x 8 =	15 x 8 =	15 x 8 =
8 x 8 =	8 x 10 =	20 x 8 =	8 x 6 =
8 x 0 =	8 x 1 =	8 x 8 =	8 x 8 =
8 x 2 =	8 x 7 =	8 x 7 =	20 x 8 =
6 x 8 =	20 x 8 =	8 x 3 =	8 x 4 =
8 x 9 =	8 x 9 =	8 x 9 =	11 x 8 =

WARM- UP:

LI: can I improve my recall of 8x tables facts?

Print this sheet if you can.

Otherwise, get someone to call out each equation so you can write the answer.

Same deal as with the 6x tables speed test:
1. Set a timer for 2 minutes and do as much as you can
2. Check your accuracy (mark your columns!)
3. **Aim for improvement with each column you do.**

Dear People – my time with you this term concerns learning about **statistics**

Statistics are a set of data (information)and numbers that are collected about a particular event or subject. They always involve counting. Statistics are:

- represented using charts, graphs and tables
- used to spot patterns and trends when you study them
- used to predict what people may do next, or what people may **need** to do next. They often help important people how to plan for the future

Statistics may sounds monstrous, but they can actually be quite fun!

The first thing we are going to learn about is 'averages' – this basically means 'fair shares'.
Mathematicians call this type of average 'the mean'.

To calculate 'fair shares', we have to find an 'average'.

(we are finding what mathematicians call 'the mean'.)

When you are asked to find **'the mean'**, this is what you need to do.

'Averages' (or 'means') are calculated using a formula.
A formula is basically a **recipe** you need to follow.

THE RECIPE:

1. Add all the numbers together,

2. Divide them by how many numbers there are!

Here are some numbers: 2, 3, 4, 5, 6

To find their average *(mean)* we:

1. add the numbers together: 2 + 3 + 4 + 5 + 6 which equals 30

2. divide that total (30) by however many numbers we have added – there were five numbers so we divide 30 by 5 to get our average *(mean)*

3. 30 divided by 5 = 6

4. so 6 is the average *(mean)*

TASK 1

Find the mean in each set of data by adding the scores and then dividing by the number of scores:

a 13, 4, 7, 11, 5

$$= \frac{13 + 4 + 7 + 11 + 5}{5}$$

$$= 40 \div 5$$

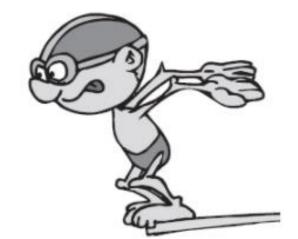$$= \underline{\hspace{3cm}}$$

b 9, 13, 5

c 3, 5, 9, 2, 6

TASK 2 – use a calculator for this one!

Look at the following diving scores:

Marita 7.2	Ben 9.4	Ari 4.6	Mia 7.6

a Calculate the mean.

b Who was closest to the mean?

EXTENSION!

The table below shows the number of goals scored over a 5 week period by 3 football teams:

	6/3	13/3	20/3	27/3	3/4	Total	Mean
Fantastic Footballers	2	0	2	8		16	
Serious Socceroos	3	2	4	1			3
Dangerous Dribblers	0	0	0	0	15		3

a   Complete the table by filling in the missing information.

b   Which team has scored the most goals?

c   Which team has the highest mean?

d   You're thinking of joining either the Serious Socerooos or the Dangerous Dribblers. They both have a mean of 3 goals per game. Which team do you think would be more competitive and why?