WARM UP

Converting Measures

What is an average?

What do we use them for?

What are the different types?

Can I interpret the mean of a set of data?

The mean of a set of data is the total divided by the number of items in the set.

For example:

Crayon colour	Amount
Blue	14
Green	11
Red	10
Yellow	9

14 + 11 + 10 + 9 = 44

Different colours: 4

44 ÷ 4 = 11

The mean is 11

Can I interpret the mean of a set of data?

The mean of a set of data is the total divided by the number of items in the set.

For example:

The number of hours worked by a plumber each day:

11, 8, 5, 9, 6, 10, 7, 9, 4, 6

Total hours: 11 + 8 + 5 + 9 + 6 + 10 + 7 + 9 + 4 + 6 = 75

No. of days: 10

Mean: 75÷10 = 7.5 hours

What problems might you have working out the mean?

Can I interpret the mean of a set of data?

Work out the mean for each of these sets of data.

The ages of the five children in a family:

5 5 8 12 15

The number of buses stopping each hour at a bus stop:

1 3 5 5 4 2 3 4 5 4 2 3 2 1 1

The heights in metres of the nine members of a family:

1.3 1.6 1.2 1.9 1.1 0.9 1.7 1.2 1.7

Can I interpret the mean of a set of data?

WALK

RUN

SPRINT

Can I interpret the mean of a set of data?

Do you think calculating the mean age of the family is a good indicator of their actual age? Why?

When will the mean be useful in real life?

WARM UP

Miles and Kilometres

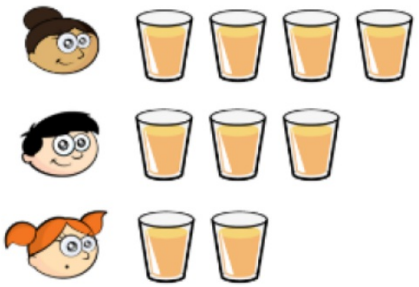
Can I interpret the mean of a set of data?

What is the mean?

How do you work it out?

Can I interpret the mean of a set of data?

Can I interpret the mean of a set of data?

No. of glasses of juice drunk by 3 friends	Total glasses of juice drank
	

Can I interpret the mean of a set of data?

No. of glasses of juice drunk by 3 friends	Total glasses of juice drank	If each friend drank the same no. of glasses
		

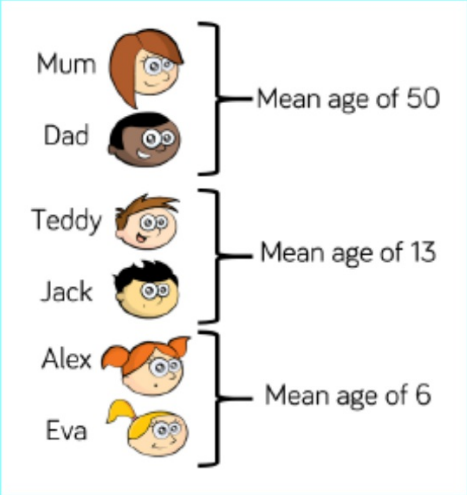
Can I use the mean to solve problems?

But what if you are given the mean...

Match number	Number of goals
1	8
2	4
3	6
4	2
5	1
6	

The mean number of goals scored in 6 football matches was 4.
Use this information to calculate how many goals were scored in the 6th match.

Can I use the mean to solve problems?



Work out the age of each member of the family if...

> Mum is 48 years old.

> Teddy is 4 years older than Jack and 7 years older than Alex.

Ext: what is the mean age of the whole family?

Can I use the mean to solve problems?

Let's put it in words only...

If a school has 6 classes and a total of 174 children, what would the mean class size be?

Can I use the mean to solve problems?

If a school has 4 classes and the mean class size is 26, how many children are there?

How many children could be in each class?

Can I use the mean to solve problems?

If the mean class size is 30 and there are 210 children, how many classes are there?

Can I use the mean to solve problems?

WALK: Continuing to find the the mean average of sets of data

RUN: Finding the mean average for sets of data but also use the mean to work out totals

SPRINT: and the number of items in a set of data

Three football teams each play 10 matches over a season. The mean number of goals scored by each team was 2.

How many goals might the teams have scored in each match?

How many solutions can you find?