



HELLO!

Today we are going to revise statistics – tables, pictograms, line graphs & averages



Arithmetic Warm Up

Ameet receives £8 of pocket money each week. He is saving all of his money to buy a new shirt. Complete the table below:

Week	Total
Week 1	f8
Week 2	
Week 3	£24
Week 4	
Week 5	



Revision on statistics



Today we are going to revise

- Finding average using the mean
- Interpreting data in various forms: tables, pictograms, line graphs & averages



Revision: Tables and averages

Seb saved for a new skateboard that cost £40. The table below shows how much money he saved each week.



Explain how many columns and rows there are and what they tell us.

Week number Amount saved

1	2	3	4	5	6	7	8	9	10
£5	٤4	£2	٤4	£3	٤4	26	٤4	£3	£5





In which week did Seb have half his money saved?



- Mean
- Minimum
- Maximum





Question 1



Complete

.Megan goes on a walking holiday for five days.

The table shows how far she walked on the first four days.

Monday	Tuesday	Wednesday	Thursday
14km	23km	13km	13km

1. What do you notice?

2. What do you know?

3. Can you show your working

1. How could you <u>extend</u> the question?

Megan says,

'My average for the first four days is more than 15km.'

- Explain why Megan is correct.
- Friday is her last day.
 - She wants to increase her average to 17km.

How many kilometres must she walk on Friday?



Question 2



This table shows where 100 people went on holiday in 2007 and 2008.

	2007	2008
Spain	18	26
England	38	17
Scotland	21	13
Wales	19	28
USA	4	16

1. What do you notice?

What do you know?

3. Can you show your working out?

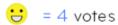
. How could you <u>extend</u> the question?

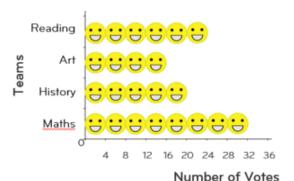
Look at the table.

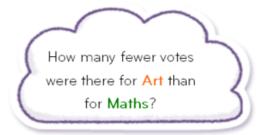
- 1. How many more people went to Wales than to Scotland in 2008?
- 2. Which country had the **greatest increase** in visitors from 2007 to 2008?

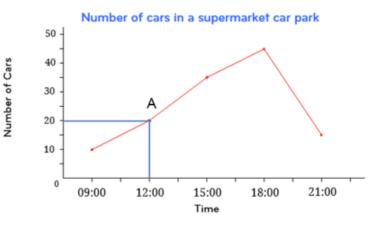


Revision: Pictograms and line graphs









Point A on the line shows that 20 cars were parked at 12:00.

How many cars were parked at 21:00? Use the line tool for accuracy.

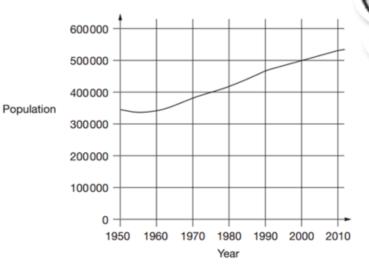




Complete

Question 3

This chart shows the population of Cornwall from 1950 to 2010.



- Look at the chart.
- 1. In which year did the population first reach 400,000?
- 2. How much did the population increase from 1950 to 2000?
- 3. What was the population of Cornwall in 2010?

- 1. What do you notice?
- 2. What do you know?
- 3. Can you show your <u>working</u> out?
 - How could you <u>extend</u> the question?



Let's review:



- Knows how to calculate mean
- Can interpret data in various forms: tables, pictograms, line graphs & averages

Draw a circle around the face which shows how you feel about what we've just been doing.





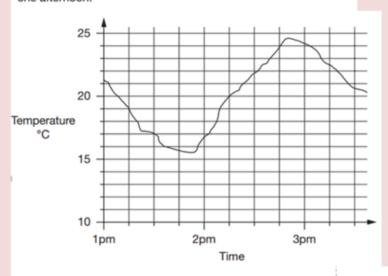




CHALLENGE



This graph shows how the temperature changed in Liam's room one afternoon.

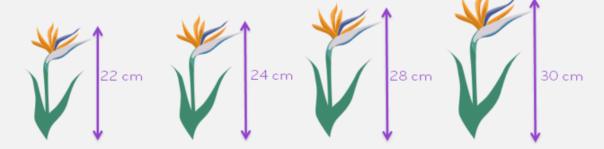


- 1. What do you notice?
- 2. What do you know?
- 3. Can you show your working out?
- 4. How could you <u>extend</u> the question?

- 1. Estimate the temperature at 3:15pm.
- 2 Estimate the time when the temperature was highest.
- How much did the temperature change from 2 pm to 2:30 pm? Give your answer to the **nearest degree**.



Calculate means



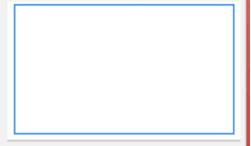
The mean is a way of finding an average.

The mean is found in two steps.

Step 1. Add all the values together.

Step 2. Divide by how many values there are.

Can you find the mean height for these plants?





Calculate means

Child	Number of lengths
Sam	15
Karen	18
Anna	21
Karl	21
Maajid	20



Find the mean number of lengths these children have swum.





All kinds of tables

The timetable for three trains is shown below.

What time does Train 115 arrive at Station B?

2. How long does it take Train 112 to get from Station A to Station D?



Station/Train	112	115	125
Station A	10.05	10.40	11.08
Station B		10.48	
Station C			11.20
Station D	10.35	11.20	11.40



All kinds of tables

Train 115 takes 12 minutes to get from Station B to Station C.
Complete the timetable to show the time it arrives at Station C.

Which train takes the longest time to travel from Station A to Station D?



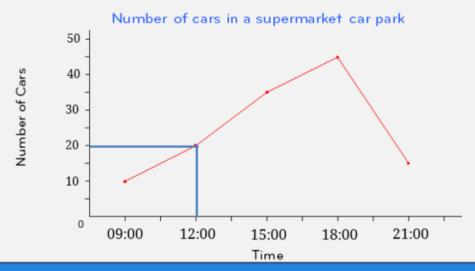
Station/Train	112	115	125
Station A	10.05	10.40	11.08
Station B		10.48	
Station C			11.20
Station D	10.35	11.20	11.40



Interpreting line graphs

Read from 12:00 on the horizontal axis to the line. Then across to 20 on the vertical axis.

The point on the line shows that 20 cars were parked at 12:00. How many cars were parked at 21:00?





Interpreting line graphs

Here is another example. Read from 2010 on the horizontal axis to the line. Then across to 150 on the vertical axis.

The point on the line shows that 150 apples were picked in 2010.

1. How many apples were harvested

2. Why might the number of apples have decreased in 2012?

