Year 6 Maths: Statistics

What should I already know?

- How to draw, read and interpret line graphs
- How to read and interpret tables, including two-way tables
- How to read and interpret tables, including two-way tables

Key Knowledge

How to interpret and construct pie charts and line graphs and use these to solve problems.
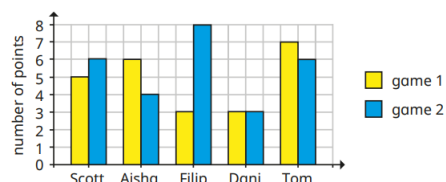
The table shows the populations in the UK and Australia from 1995 to 2020

	1995	2000	2005	2010	2015	2020
UK	58,000,000	58,900,000	60,300,000	63,300,000	65,400,000	67,900,000
Australia	18,000,000	19,000,000	20,200,000	22,100,000	23,800,000	25,500,000

Draw a line graph to represent the information.

Five children play two games.

Their scores for each game are recorded on a dual bar chart.

- Who scored the most points in game 1?
- Who scored the fewest points in game 2?
- Who scored the most points altogether in both games?
- How many children got a higher score on their second game?
- Which child scored the same on their first and second games?
- How many more points did Filip score on his second game than his first game?
- What is the difference between the total points scored in games 1 and 2?

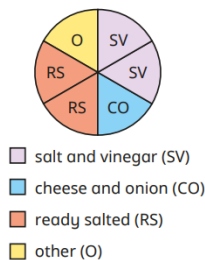What else can you find out?

Mo asked 180 people to name their favourite flavour of crisps.
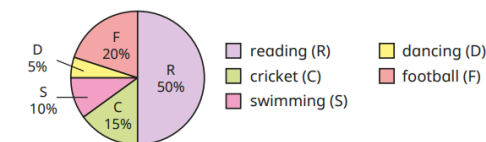
The results are shown in the pie chart.

- How many people chose ready salted?
- How many people chose a flavour other than salt and vinegar?
- How many more people chose salt and vinegar than cheese and onion?

What other questions can you ask?

- salt and vinegar (SV)
- cheese and onion (CO)
- ready salted (RS)
- other (O)

200 children in Key Stage 2 chose an after-school activity.

The pie chart shows the results.

- reading (R)
- cricket (C)
- swimming (S)
- dancing (D)
- football (F)

- How many children chose each activity?
- How many more children chose football than dancing?

Pie charts should also link to children's learning around percentages

Key Vocabulary and definitions

discrete data	information that is **counted** in **whole** numbers
continuous data	information that is **measured** that can be any value.
timetable	a plan of the times when particular events are to take place.
Two-way table	Tables that show more than one piece of information about each variable.
Mean/ average	The average of a data set found by adding the numbers together and then dividing by the sum of numbers.
intervals	A space in between two things.
interpret	To understand.
Line graph	A graph to show how data changes over time
table	A system used to organise data
Pie chart	Used to present discrete data. The size of each segment represents the proportion of the amount

How to calculate and interpret the mean as an average.

- Calculate the mean of the numbers.

| 0.145 | 0.05 | 0.28 | 0.205 |

The amount of money raised for charity by five children is shown in the table.

Child	Amount raised
Aisha	£24.55
Sam	£29.60
Tommy	£40
Filip	£21.20
Scott	£19.65

What is the mean amount of money raised by the children?

The mean number of goals scored in six football matches was 4

Use this information to work out how many goals were scored in the 6th match.

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