### My mathematical journey

## What do I need to remember from before?

Bar charts and pictograms (KS2)

Median (NP1)

Mean (NP2)

Range (NP2)

## What will I learn about in this unit?

Presenting and analysing sets of discrete data using charts and summary statistics – mean, mode, median, and range

Comparing data sets through charts and summary statistics

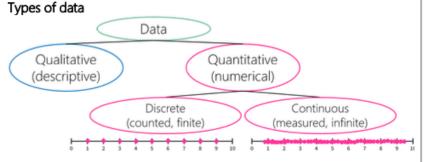
Knowing the ways statistics can be used to tell a story

#### Where does this lead?

Presenting, analysing and comparing sets of continuous data, or bivariate data using charts and summary statistics (SP2, SP4, SP6)

Advanced statistical analysis (GCSE Statistics; A Level Statistics)

## Key words and symbols: what I need to say and write accurately



**Bias**: when one answer is more likely than another because of the people we ask

**Set notation**: a set of numbers can be written inside curly brackets, e.g. {1,3,3,5}

 $\overline{x}$  is a symbol for the mean of a data set

Measures of location (trying to capture where the data set is)

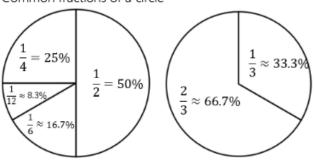
Mean total shared equally Median middle data point

Mode most frequent data point Measures of spread (trying to capture how wide the data set it)

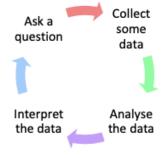
> Range spread of all data points

## Fingertip facts: what I need to learn by heart

Common fractions of a circle



## The statistical enquiry cycle



## My mathematical journey

# What do I need to remember from before?

Reading tables (SP1)

Interpreting graphs and charts (SP1)

Mean (SP1)

# What will I learn about in this unit?

Drawing and reading scatter graphs

Identifying and interpreting correlations

Drawing and using lines of best fit

Drawing and reading time series graphs

### Where does this lead?

Advanced data analysis (SP4, SP5)

Data analysis in geography, science, psychology, business, economics and more

Correlation and regression analysis (A Level Maths)

### Key words and symbols: what I need to say and write accurately

key words and symbols. What i need to say and write accurately	
Word	Explanation
variable	a quantity that can change in value
univariate data	data with one variable
bivariate	data with two variables
correlation	a mutual relationship between two variables, e.g. if one increases, so does the other
outlier	a value on a scatter graph that doesn't fit with the pattern of the others
line of best fit	a line on a scatter graph that shows the direction of increase/decrease and goes through the middle of the points
interpolation	making a prediction by reading values from a line of best fit inside the range of known data
extrapolation	making a prediction by reading values from a line of best fit outside the range of known data
trend	a general pattern in some data (e.g. a general decrease over time)

## Fingertip facts: what I need to learn by heart

#### Types of linear correlation

