

16.1 Creating a Chart

Syllabus 2026 - 2028

WHAT YOU NEED TO KNOW

- Select data to produce a graph or chart, using contiguous data, non-contiguous data and specified data ranges
- Select the graph or chart type

Graphs and charts

A **graph** or **chart** shows data as a picture, so that patterns, comparisons and trends are easier to see than in a table of numbers. Charts are created from a **spreadsheet** or table of data and are then placed in a document or presentation.

Selecting the data

Figure 80: Selecting data for a chart

Contiguous: one block (A1:B5)

Month	Sales	Costs	Profit
Jan	40	25	15
Feb	55	30	25
Mar	35	28	7
Apr	60	32	28

Non-contiguous: Ctrl + select (A1:A5, D1:D5)

Month	Sales	Costs	Profit
Jan	40	25	15
Feb	55	30	25
Mar	35	28	7
Apr	60	32	28

Select the headings too, so that the series and categories are labelled. A specified range means exact cells.

Selection	Meaning	How
Contiguous data	Cells next to each other, in one block	Click and drag, or click the first cell then Shift+click the last
Non-contiguous data	Separate blocks that are not next to each other	Select the first block, hold Ctrl and select the next
Specified data range	Exact cells given in the task, for example B2:B8	Type the range or select exactly those cells

- Include the **row and column headings** so the categories and series are named automatically
- Do **not** include totals, unless the question asks for them
- Check the chart afterwards, because the wrong selection gives the wrong chart

Choosing the chart type

Figure 81: Choosing the chart type



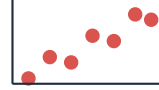
Column / bar
compare values
between categories



Line
show change
over time



Pie
show parts of
a whole (%)



Scatter
show a link between
two sets of numbers

Chart type	Best used for	Example
Column or bar	Comparing values between categories	Sales in each region
Line	Showing a trend or change over time	Temperature each month
Pie	Showing the share of a whole, with one data series that makes 100%	How a budget is spent
Scatter	Showing a relationship between two sets of values	Hours studied against test marks

EXAM TIP

Give a **reason** for the chart type: 'a line chart is suitable because it shows how sales change over several months'. A pie chart is only suitable when parts add up to a **whole** and there are few categories.

Key terms

Term	Meaning
Graph or chart	A picture that shows data.
Data series	A set of related values plotted on the chart.
Category	A group that values are compared between.
Contiguous	Cells that are next to each other.
Non-contiguous	Cells that are not next to each other.
Data range	A block of cells, such as A1:B5.
Pie chart	A circle divided into sectors.
Scatter graph	A chart of points showing a relationship.

Practice questions

Answer each question in full sentences. Command words used: State (give a short answer), Describe (say what it is like), Explain (give reasons), Analyse (break it down and examine it), Suggest (apply your knowledge to a situation), Compare and contrast (similarities and differences), Evaluate (weigh up and reach a judgement).

No.	Question	Marks
1	State two types of chart and one use of each.	[2]
2	Describe how non-contiguous data is selected to create a chart.	[3]
3	Explain why a pie chart is not suitable for showing the temperature each month.	[3]
4	Suggest a suitable chart type for comparing the marks of five learners, giving a reason.	[3]
5	Compare and contrast a column chart with a line chart.	[4]

Total: 15 marks