

Teaching The Fundamentals: Level 1 Pie Charts

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Pie Charts

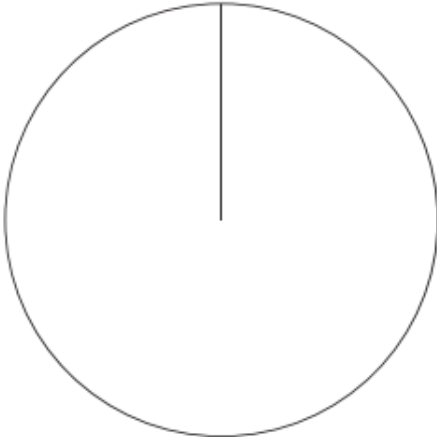
Pie chart questions can be asked in 3 ways.

All the data is given and they need to complete the pie chart.

John is a milkman.
The table shows information about the types of milk John delivers each day.

type of milk	number	angle
skimmed	20	60°
semi skimmed	55	165°
whole	45	135°

Draw a pie chart to show this information
Remember to label the chart. (3)



(Total for Question 4 is 3 marks)

Pie Charts

Not all the data is given and the learners need to complete the angles and the pie chart.

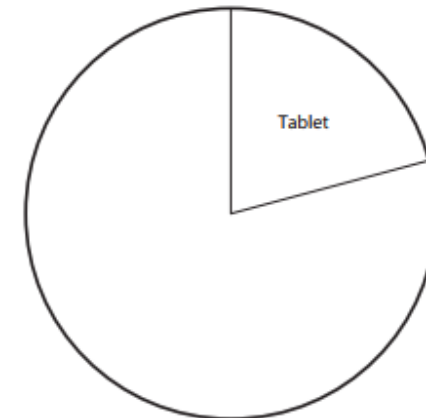
Jimmy works in a shop.
He has this information about the 72 items sold last week.

Item	Number sold	Angle size
Tablet	15	75
Phone	44	
Laptop	13	

Jimmy starts to display this information in a pie chart.

Complete the pie chart for Jimmy.

(3)



(Total for Question 5 is 3 marks)

Pie Charts

Extracting information from a pie chart.

Place the correct number in the space to complete the sentence.

(a) Angles around a point add up to degrees.

(1)

Shelley reads an article about holidays in 2018
She sees this pie chart.



The pie chart shows where 1800 people went on holiday in 2018

Shelley thinks that 540 of these people went abroad on holiday.

(b) Is Shelley correct?
Show why you think this.

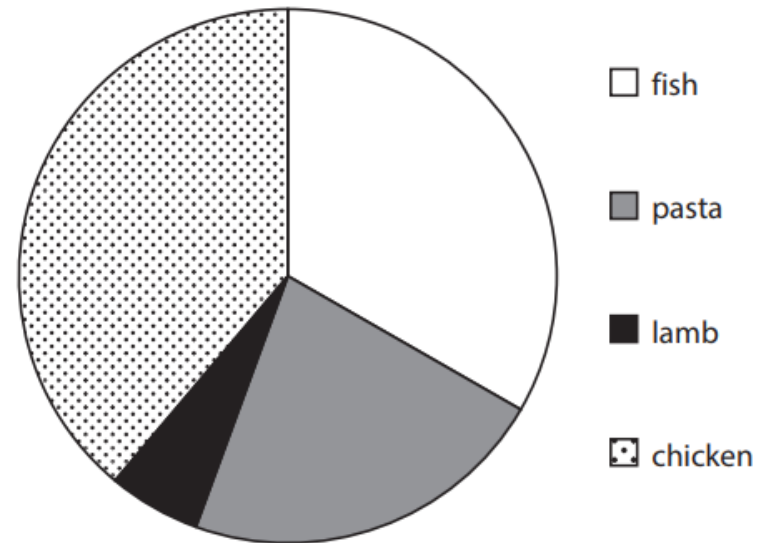
(3)

Pie Charts

Extracting information from a pie chart.

Sarah sees this poster about results of a survey about favourite meals in the school canteen.

Favourite meals of 180 students



She decides to write a comment about the results on social media.

How many students chose fish as their favourite meal?
You **must** show all your working.

(4)

Pie Charts

What do learners need to know?

- A pie chart helps organise and represent data as a percentage of a whole.
- Presenting data in a pie chart question requires the knowledge that the angles around a point equal to 360° and the ability to use proportion to work out the angle of each sector.
- Learners need to practice using a protractor.

Pie Charts

What do learners do wrong?

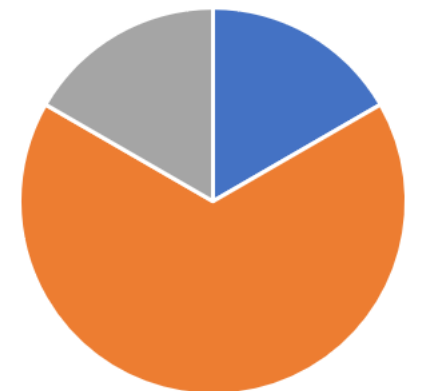
- There are instances where learners just conjecture the size of the angles which might imply incorrect calculations to find the correct angle. This is especially important in this question where we require working shown.
- Some of those who manage to work out the correct angles draw the sectors at a wrong angle. It is unclear whether this is due to not paying enough attention to detail or lack of familiarity with or access to a protractor.
- Some learners also either forget to label or mislabel the sectors. Centres are encouraged to spend more time practising creating charts to represent the data and emphasise the importance of including all essential elements (scale, labels, plotting/drawing). This also includes using protractors and rulers effectively (both real life and onscreen tools).

Pie Charts

Teaching Tips

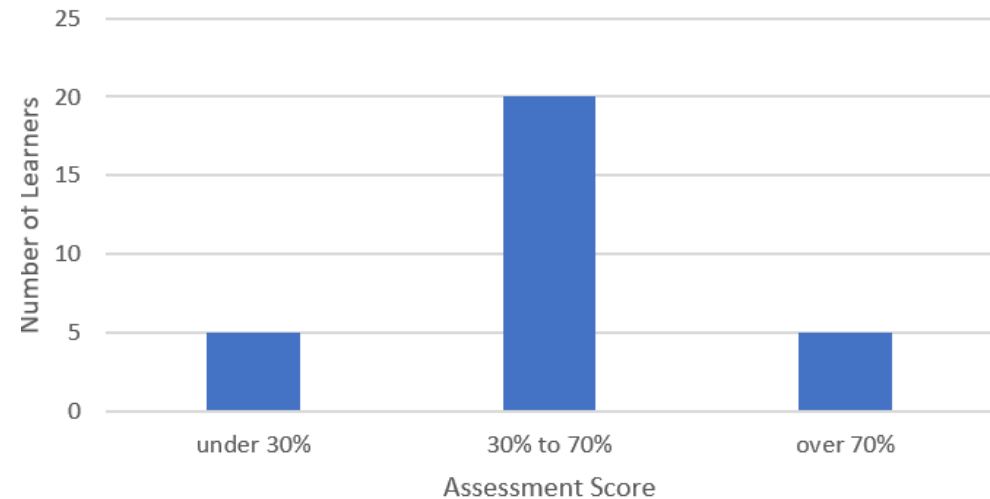
- There is value in comparing the effect of a pie chart vs a bar chart in displaying the same data.
- What do the two graphs below display?
- What are the benefits of each?

Functional Skills Assessments Scores Per Cohort



■ under 30% ■ 30% to 70% ■ over 70%

Functional Skills Assessment Scores per Cohort





Pearson