

25.06.20

WALT draw pie charts

Notes and Guidance

Pupils will build on angles around a point totalling 360 degrees to know that this represents 100 % of the data within a pie chart.

From this, they will construct a pie chart, using a protractor to measure the angles. A “standard” protractor has radius 5 cm, so if circles of this radius are drawn, it is easier to construct the angles.

Mathematical Talk

How many degrees are there around a point? How will this help us construct a pie chart?

If the total frequency is _____, how will we work out the number of degrees representing each sector?

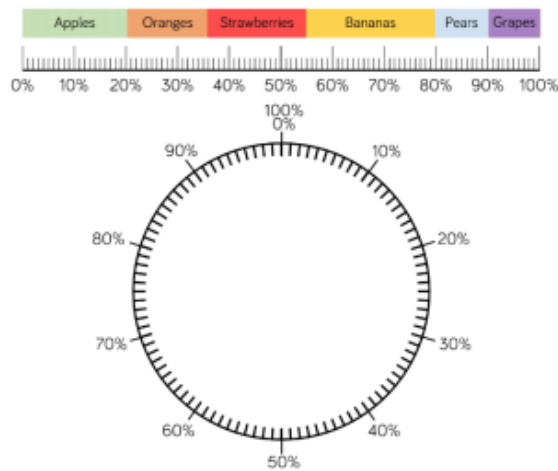
If 180° represents 15 pupils. How many people took part in the survey? Explain why.

Watch - https://www.youtube.com/watch?v=p_nPxTRuLxo

How to draw a pie chart

Varied Fluency

Construct a pie chart using the data shown in this percentage bar model.



A survey was conducted to show how children in Class 6 travelled to school.

Draw a pie chart to represent the data.

Type of transport	Number of children	Convert to degrees
Car	12	$12 \times 10 = 120^\circ$
Bike	7	
Walk	8	
Bus	5	
Scooter	4	
Total	36	360°

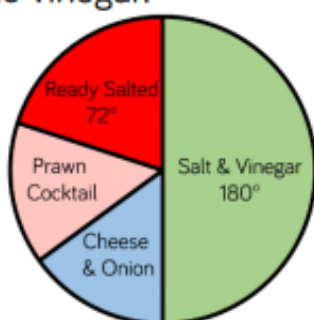
15

A restaurant was working out which Sunday dinner was the most popular. Use the data to construct a pie chart.

Dinner choice	Frequency	Convert to degrees
Chicken	11	
Pork	8	
Lamb	6	
Beef	9	
Vegetarian	6	
Total	40	

Miss Jones is carrying out a survey in class about favourite crisp flavours. 15 pupils chose salt and vinegar.

How many fewer people chose ready salted?



A survey was conducted to work out Year 6's favourite sport. Work out the missing information and then construct a pie chart.

Favourite sport	Number of children	Convert to degrees
Football	10	
Tennis	18	
Rugby		$\times 6 = 90^\circ$
Swimming	6	$6 \times 6 = 36^\circ$
Cricket		$\times 6 = 42^\circ$
Golf	4	$4 \times 6 = 24^\circ$
Total	60	360°

