Pie Charts Mark Scheme

1(a)

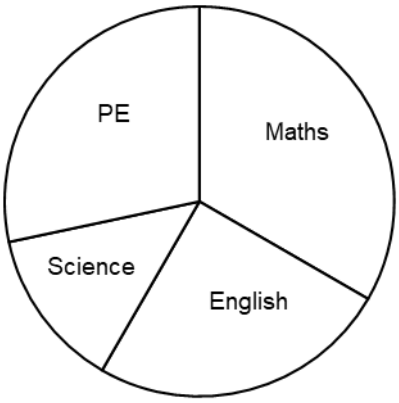
Subject	Frequency	Angle
Maths	20	**120°**
English	15	**90°**
Science	8	**48°**
PE	17	**102°**
Total	**60**	**360°**

[1] Any two values correct

[1] Any four values correct

[1] All six values correct

1(b)



[3] Correct pie chart

2(a)	Chocolate	[1] Correct answer
2(b)	Crisps and sweets	[1] Correct answer
2(c)	No because the total number of people asked is not known	[1] No with valid reason
3(a)	$\frac{90}{360} \times 40$	[1]
	10	[1]
3(b)	$\frac{54}{360}$	[1] Award mark for $54°$ seen
	0.15	[1]

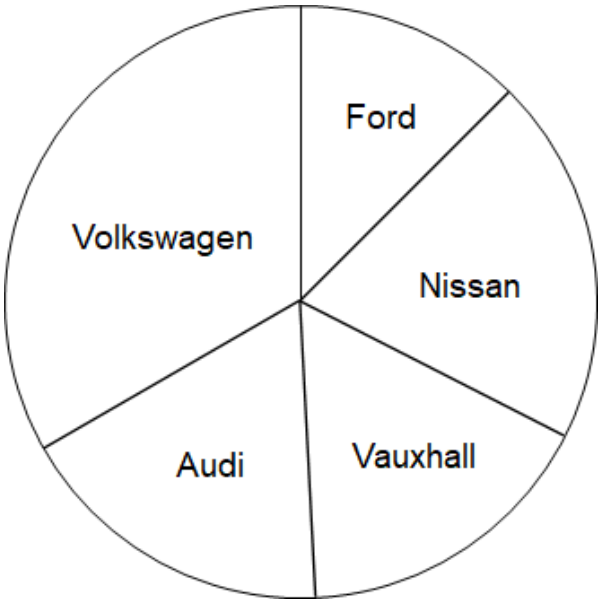
4(a)

Make of car	Frequency	Angle
Ford	15	45°
Nissan	**24**	72°
Vauxhall	20	**60°**
Audi	**21**	63°
Volkswagen	**40**	**120°**

[1] Any two values correct

[1] Any three values correct

[1] All five values correct

4(b)		[3] Correct pie chart
5	$40-59$ males $\approx 108°$, $\frac{108°}{360} = 0.3$ $0.3 \times 250 = 75$ men	[1] Number of men in the $40-59$ age group
	$40-59$ females $\approx 72°$, $\frac{72°}{360} = 0.2$	[1] Same number of women in age group
	$\frac{75}{0.2} = 375$ female members in total	[1] Total number of women

END