

Box Plot Mark Scheme

1		
	Correct Lower and upper bound plotted	[1]
	Correct IQR plotted	[1]
	Correct median plotted.	[1]
2		
	Correct Lower and upper bound plotted (15 and 57)	[1]
	Correct IQR plotted (LQ = 19, UQ = 43)	[1]
	Correct median plotted. (Median = 30)	[1]
3(a)		
	Boys Box Plot correct	[1]
	Girls Box plot correct	[1]
3(b)	The interquartile range of both sets of data are similar.	[1]
	The median for the girls suggests that they, on average, scored better than the boys.	[1]

Turn over ►

4(a)	<table border="1"> <thead> <tr> <th>Class</th> <th>8A</th> <th>8B</th> </tr> </thead> <tbody> <tr> <td>Median</td> <td>55</td> <td>45</td> </tr> <tr> <td>Inter-Quartile Range</td> <td>20</td> <td>20</td> </tr> <tr> <td>Range</td> <td>60</td> <td>50</td> </tr> </tbody> </table>	Class	8A	8B	Median	55	45	Inter-Quartile Range	20	20	Range	60	50	
	Class	8A	8B											
	Median	55	45											
	Inter-Quartile Range	20	20											
Range	60	50												
Both Median Correct	[1]													
Both IQR correct	[1]													
Both Ranges correct	[1]													
4(b)	Class 8b, because they had a smaller range	[1]												
5(a)	A	[1]												
5(b)	The lower quartile is the same as the smallest piece of data.	[1]												
5(c)	Set B had a smaller range. Set A had a smaller interquartile range.	[1] Range must be compared												
	Sets A and B had the same highest data entry. Set B has a higher median	[1] Highest data entry or median compared												
6	A box plot is a time-consuming method for representing such a small set of data. Because of the small set of data, the box plot won't be useful for comparing with other sets of data.	[1] Size of data set mentioned												
	It is however easy to draw the box plot, because each result is one of the 5 parts required.	[1] Ease of creation												
	A box plot allows you to easily identify outliers. Such as 170 cm which seems to be an outlier in the data set.	[1] Ease of use and outliers mentioned												
7(a)														
	Box plot drawn correctly as shown	[1]												
7(b)	Neither the lowest nor highest amounts will change, meaning the range will not be changed	[1] Range unchanged												
	These values are lower than the LQ. Will increase the IQR	[1] IQR increases												

END