



The Averages - Teachers Notes

This resource is based on an article by the Mail Online, 14 October 2010.

This activity is designed to help learners:

- understand when to use mean, mode and median;
- calculate and interpret averages;
- collect, collate and process data;
- report and discuss results;
- draw conclusions.

Task B asks learners to write down an average description for their class or school. This data can be collected by completing the *SportAtSchool* online questionnaire www.sportatschool.org.uk/get-started and then requesting your class's data using the link <http://sportatschool.org.uk/getdata/requestdatamain>. You will need to have registered with *SportAtSchool* before you request your data. You will receive the data in a csv file that will open in Excel. Learners can also complete a hard copy of the questionnaire.

Below are the mean heights, foot lengths, vertical reaches and arm spans for year groups 7 to 11 by gender. These are provided for part 2 in Task B. The numbers in brackets are the samples sizes.

Note: The median is calculated for pulse rate as the data had a few very high values that distort the mean value.

	Average height (cm) <i>CensusAtSchool</i> 2010/2011	Average foot length (cm) <i>CensusAtSchool</i> 2010/2011	Average vertical reach (cm) <i>CensusAtSchool</i> 2004/2005	Average arm span (cm) <i>CensusAtSchool</i> 2010/2011
Year 7 girls	152 (3085)	23 (3085)	200 (1462)	147 (3085)
Year 7 boys	151 (2650)	23 (2650)	200 (1389)	153 (2650)
Year 8 girls	157 (3170)	23 (3170)	204 (3028)	153 (3170)
Year 8 boys	164 (2745)	24 (2745)	207 (2840)	155 (2745)
Year 9 girls	161 (3129)	23 (3129)	208 (2055)	156 (3129)
Year 9 boys	165 (2754)	25 (2754)	215 (1821)	166 (2754)
Year 10 girls	162 (1906)	23 (1906)	208 (3205)	159 (1906)
Year 10 boys	171 (1306)	26 (1306)	219 (2816)	167 (1306)
Year 11 girls	163 (671)	23 (671)	213 (276)	158 (671)
Year 11 boys	173 (566)	27 (566)	224 (249)	168 (566)