Grouping Continuous Data using Equal Class Intervals

Example

Draw a **Frequency Table** and a **Frequency Diagram** for the data below.

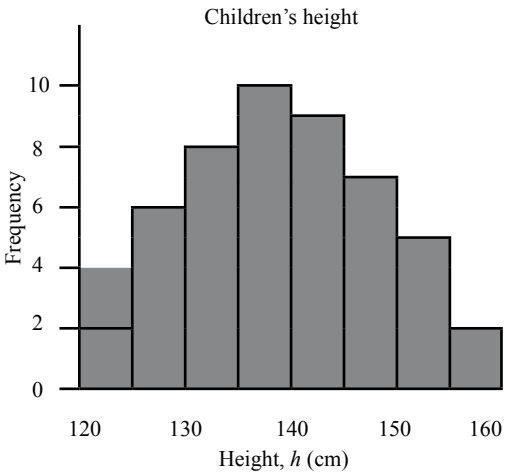
Here are the heights, in cm, of 51 Year 7 pupils.

121 143 147 141 152
130 148 136 141 125
146 134 129 153 145
138 144 139 149 159
127 134 129 151 142
135 132 141 136 124
154 140 139 128 142
134 132 144 122 139
120 136 134 151 138
126 146 156 132 149
135

Frequency Table for Continuous Data

Class Interval Height, h(cm)	Frequency
$120 \leq h < 125$	4
$125 \leq h < 130$	6
$130 \leq h < 135$	8
$135 \leq h < 140$	10
$140 \leq h < 145$	9
$145 \leq h < 150$	7
$150 \leq h < 155$	5
$155 \leq h < 160$	2

Frequency Diagram for Continuous Data



Questions

1). Here are the heights (in cm) of 32 pupils in a Year 8 class.

134 152 138 128 152 142 150 142 144 139 141 135 147 149 128 145 141
156 148 141 136 143 148 150 136 146 140 141 149 136 142 152

a). Draw a frequency table. (Decide on appropriate **equal class interval** sizes. Tally the data).
b). Show this information in a frequency diagram.

2). In P.E., 40 Year 9 pupils did the long jump. Here are their distances (in cm).

220 269 253 243 247 282 257 230 284 219 225 236 264 248 285 246 276
240 217 268 234 254 263 246 266 252 243 256 246 253 231 273 263 273
253 241 213 254 227 228

a). Draw a frequency table. (Decide on appropriate **equal class interval** sizes. Tally the data).
b). Show this information in a frequency diagram.

3). 50 Year 11 pupils measured the length of their middle fingers in mm. Here are the results.

66 78 74 83 68 84 75 81 84 71 79 79 83 80
74 92 87 69 75 71 86 94 83 76 66 86 71 84
79 71 84 81 80 78 72 68 94 78 72 84 73 87
73 86 79 87 82 71 70 75

a). Draw a frequency table. (Decide on appropriate **equal class interval** sizes. Tally the data).
b). Show this information in a frequency diagram.

