Do You Have Big Feet?

Let's ask this in a nicer way:

Does foot length increase with height?
Do boys have bigger feet than girls?

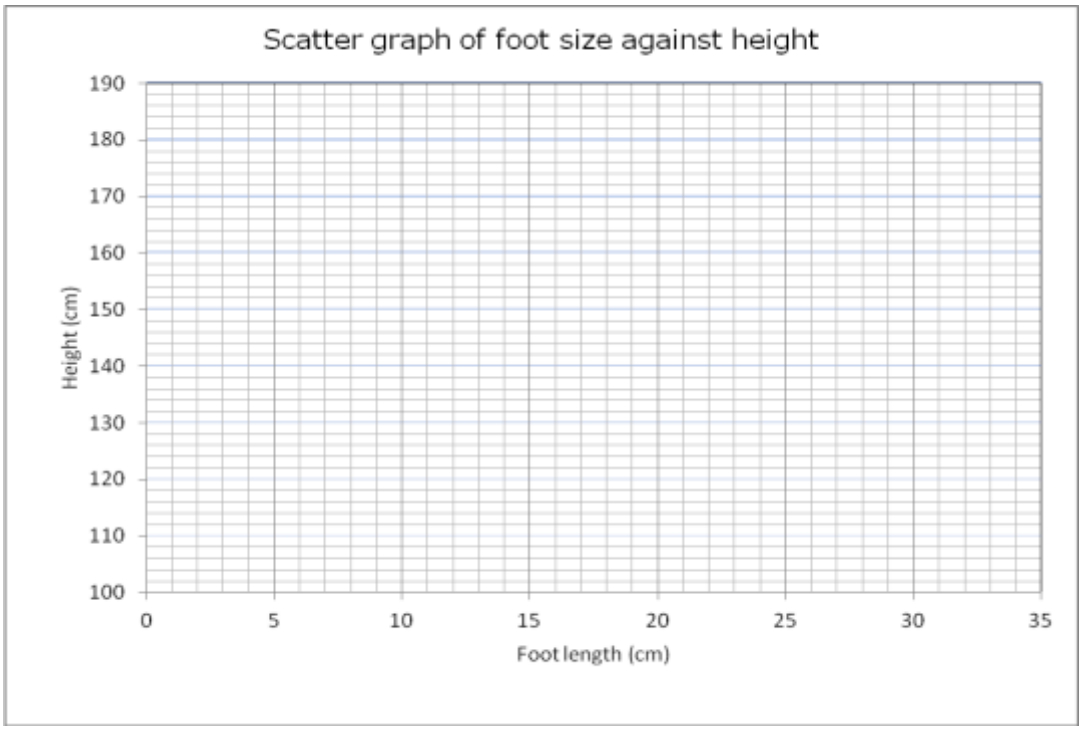
Let's use some data from *CensusAtSchool* to find out.

TASK A
On page 2 table 1 has 60 randomly selected pupils' data on height, foot length and gender.

Draw a scatter graph with the X-axis representing foot length and the Y-axis showing height.

Mark boys and girls with different symbols or in different colours on your graph.

Note your graph needs a title, labels for the axes and a key.



TASK B

1. Look carefully at your graph and write a few conclusions.
2. Identify any pupils who have particularly big or small feet for their height?
3. Are there differences between boys and girls? What are they?
4. Do the taller pupils have bigger feet?
5. Write down some questions of your own to ask.
6. Is there positive, negative or no correlation?
7. Draw in a line of best fit?
8. Measure your right foot and use the line of best fit to predict your height. How accurate is this prediction?
9. Explain why the prediction is not exactly your height.

Do You Have Big Feet?

Gender	Height (cm)	Foot (cm)
F	160	25
M	111	15
F	160	23
F	152	23.5
F	146	24
F	157	24
M	136	21
F	143	23
M	147	20
M	133	20
F	153	25
M	148	23
M	125	20
F	150	20
M	183	28
M	184	25
M	125	18
F	140	20
M	170	27.5
F	168	25.5
M	131	23
M	149	23
F	156	21
F	130	19.5
F	142	22
F	159	24
F	145	21.5
F	162	25
M	149	22
F	169	24.5

Gender	Height (cm)	Foot (cm)
M	126	20
M	150	24
M	170	26
F	141	21
F	123	20
F	122	19
M	125	20
F	133	20
M	165	25
F	131	20
F	134	17
M	158	25
F	170	25
F	125	15
F	135	21
F	138	19
M	134	20.5
M	145	22
F	171	25
F	181	24
F	139	19.5
M	147	25
M	134	19
F	164	24
M	127	19.5
F	138	23
M	180	24
M	159	26
F	151	23.5
M	165	29

Table 1

TASK C

How does this data compare with your own classes data?