

## Spreadsheet exercise 1

In order to complete this sheet you need to be able to use these functions:

- average
- min
- max
- if

Answer these questions first....

- When you write these functions Excel has to know that you are going to enter a function and are not writing a label (heading). What do you need to type in first – before you type anything else?
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- After *average, sum, max, min* or *if* there is a set of brackets (). What needs to go inside these?
- 

Start up Excel

In column A enter the names of 10 friends starting at A2.

In Row 1 type in these headings: Name, Maths, English, Science, Average, Result

In column B enter the scores that these friends got in a maths test. In column C put in the scores for English and in column C their scores for science.

So far the sheet should look something like this:

	A	B	C	D	E	F
1	Name	Maths	English	Science	Average	Result
2	Colin	45	50	56		
3	Fred	43	52	47		
4	Angela	47	48	37		
5	Michelle	65	60	70		
6	Jimmy	48	65	53		
7	Dave	43	55	58		
8	Sid	29	43	36		
9	Claudia	83	79	75		
10	Monica	76	85	81		
11	Phil	84	76	80		
12						

You are now going to enter a function in E2 that will calculate the average score for your first student (in my case Colin).

Once you have entered this and are sure that it has calculated correctly, copy the function down the column for the other students.'

You now need to work out whether the students have passed the term or not. In F2 you are going to type in the *IF* function to decide whether Colin has passed or failed. The pass mark is set at being an average of 55%. Enter the function to display the word "Pass" or "Fail" depending whether the average score is >55% or not.

Write down here what you are going to type into F2: \_\_\_\_\_

If you have worked this out correctly for your first student copy it down for the other 9 students.

Save the sheet as: **End of term scores**

Row 13 is going to be used to display the highest scores in a subject, row 14 the lowest and row 15 the average.

In A13 type in: Highest

In A14 type in: Lowest

In A15 type in: Average

What are you going to type into B13: \_\_\_\_\_

What goes into B14: \_\_\_\_\_, B15: \_\_\_\_\_

Type these functions into the cells: B13, B14 and B15. Do they work? Do they give you the scores you expect?

You should be seeing something like this:

	A	B	C	D	E	F
1	Name	Maths	English	Science	Average	Result
2	Colin	45	50	56	50.33333	Fail
3	Fred	43	52	47	47.33333	Fail
4	Angela	47	48	37	44	Fail
5	Michelle	65	60	70	65	Pass
6	Jimmy	48	65	53	55.33333	Pass
7	Dave	43	55	58	52	Fail
8	Sid	29	43	36	36	Fail
9	Claudia	83	79	75	79	Pass
10	Monica	76	85	81	80.66667	Pass
11	Phil	84	76	80	80	Pass
12						
13	Highest	84	85	81		
14	Lowest	29	43	36		
15	Average	56.3	61.3	59.3		
16						

Now tidy up the sheet. Colour in the background of the cells used as the headings in row 1 and the names and headings in column A.

Change the size and style of the fonts for these cells (row 1 and column A).

Change the style and size of the fonts of the scores the students obtained in the tests.

Change the style, size AND colour of the cells which contain anything displayed as a result of a function being carried out.

	A	B	C	D	E	F
1	<b>NAME</b>	<b>MATHS</b>	<b>ENGLISH</b>	<b>SCIENCE</b>	<b>AVERAGE</b>	<b>RESULT</b>
2	<b>COLIN</b>	<b>45</b>	<b>50</b>	<b>56</b>	<b>50.33333</b>	<b>Fail</b>
3	<b>FRED</b>	<b>43</b>	<b>52</b>	<b>47</b>	<b>47.33333</b>	<b>Fail</b>
4	<b>ANGELA</b>	<b>47</b>	<b>48</b>	<b>37</b>	<b>44</b>	<b>Fail</b>
5	<b>MICHELLE</b>	<b>65</b>	<b>60</b>	<b>70</b>	<b>65</b>	<b>Pass</b>
6	<b>JIMMY</b>	<b>48</b>	<b>65</b>	<b>53</b>	<b>55.33333</b>	<b>Pass</b>
7	<b>DAVE</b>	<b>43</b>	<b>55</b>	<b>58</b>	<b>52</b>	<b>Fail</b>
8	<b>SID</b>	<b>29</b>	<b>43</b>	<b>36</b>	<b>36</b>	<b>Fail</b>
9	<b>CLAUDIA</b>	<b>83</b>	<b>79</b>	<b>75</b>	<b>79</b>	<b>Pass</b>
10	<b>MONICA</b>	<b>76</b>	<b>85</b>	<b>81</b>	<b>80.66667</b>	<b>Pass</b>
11	<b>PHIL</b>	<b>84</b>	<b>76</b>	<b>80</b>	<b>80</b>	<b>Pass</b>
12						
13	<b>HIGHEST</b>	<b>84</b>	<b>85</b>	<b>81</b>		
14	<b>LOWEST</b>	<b>29</b>	<b>43</b>	<b>36</b>		
15	<b>AVERAGE</b>	<b>56.3</b>	<b>61.3</b>	<b>59.3</b>		

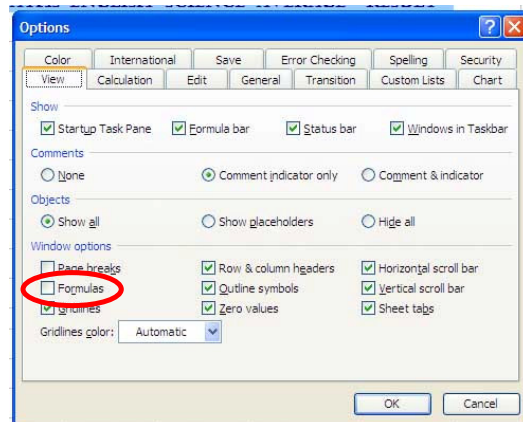
Finally, type your name into A17.  
Type your tutor group into A18.

Print a copy of the sheet.

Save the sheet with the same name as you did earlier.

Now, you are going to print out a copy of the sheet showing just the formulas.

On the menu bar click on *Tools* and then choose *Options* at the bottom of the list. You should now see this window. Click on the *Formulas* box so that a little tick appears and click *OK*.



The spreadsheet changes to show the functions that have been used to make the various numbers and words in columns E and F, rows 13, 14, 15 appear.

Print this sheet out.

Close Excel. If you get asked to save the changes say NO.

Put all three sheets you now have into your books.