Excel part 2: instructions

Tasks:

1. Enter data into a worksheet
2. Calculate new data
3. Format data
4. Calculate average values from data
5. Sort data

Submission:

Your Excel file must be submitted electronically via Blackboard:

- Name your excel file ***ICT Excel2 your name.xlsx***
- You must save your file in a format that we can open. To ensure that your file is compatible, we recommend that you check you can open your file in Excel prior to submitting it. If we cannot open it, we cannot mark it.
- The workbook should contain a single Excel worksheet, named **Exam results**, containing the exam result data and table of averages.

Detailed instructions:

The table below shows exam and coursework (c/w) marks, as percentages, for a group of twenty students. Each student has taken a maths unit and *either* a physics *or* a chemistry unit.

	Maths		Physics		Chemistry	
ID number	exam (%)	c/w (%)	exam (%)	c/w (%)	exam (%)	c/w (%)
1589	71	58			77	95
1985	68	70			57	50
2947	13	0			96	98
6458	28	8	70	67		
9152	10	21	73	4		
3745	81	68			52	50
2154	69	57			65	93
9375	75	49	97	82		
7658	41	26			42	60
7498	30	4	67	30		
2549	51	48	95	95		
3758	45	38			24	28
6485	55	44			69	78
9465	0	6	0	32		
6845	70	80	92	90		
1973	73	51			92	90
3197	36	15	61	17		
9731	70	0			0	38
6428	60	42	90	74		
6719	83	82	64	76		

1. Enter all the data from the table, including the column headings, into the worksheet of your Excel workbook (call this sheet **Exam results**).

2. For each of the units (i.e. Maths, Physics and Chemistry) add a third column, immediately to the right of the coursework columns, headed '**Total (%)**'. In these columns use the formula function to calculate the total unit marks for each student, displaying them to 1 decimal place. The total unit marks are calculated from the exam and coursework marks, with 80% of the total from the exam mark and 20% from the coursework mark.

**save time by copying and pasting formulae from one cell to another*

3. Use the 'Conditional Formatting' tool to highlight where re-sits will be necessary: in other words, format the three 'Total' columns so that any value less than 50% is automatically shown in bold, red font.

4. Add a final column on the right of the table of data, headed '**Overall (%)**'. In this column calculate each student's overall total, which is a simple average of their two unit totals. Display these values in bold, to 1 decimal place.

**save time by using the 'AutoSum Average' function which you can find in Formulas - AutoSum - Average and then 'dragging' this formula down into the rows below*

5. Below the table of data, create a second table like the one shown below:

Average Maths total (%)	
Average Physics total (%)	
Average Chemistry total (%)	
Average overall mark (%)	

6. In the right hand column of this table enter the appropriate values, shown to 1 decimal place, by using the 'Average' function to calculate the average maths, physics and chemistry unit totals. In the bottom row, calculate the average overall score for the entire group of students.

7. Finally, use Excel's 'Sort & Filter' tool to rearrange all of the data in your main table so that it is ordered according to the student ID number, in ascending numerical order (i.e. lowest number first).