

## Modelling Mario

### Task 9

(14 marks)

Create a spreadsheet to help the Teacher keep track of race results and lap times for Mario Kart. This should enable the Teacher to decide who receives the trophies at the presentation.

Your spreadsheet must be able to work out:

- the total points for each race
- calculate the average lap time for the Time Trial event
- calculate the fastest and slowest lap time for the Time Trial event

**NB If you do not cover all these three areas you will lose 1 data entry mark**

Include any features you think will be helpful to your Teacher in using the spreadsheet, such as working out totals or displaying these comparisons.

- Complete the spreadsheet using basic and /or advanced skills
- Check it for accuracy or implausible data
- Screenshot or printout your spreadsheet in data **and** formula view
- Write an explanation of the data, formulas functions or any other features you have used.

## Practise Exercise 1

### Load up Excel

1. Add the following extra sheets and rename them appropriately

**MENU Vs Match Time Trials Summary Points**





2. Click on 'Vs Match' Sheet and type in the results of the 'Vs Match' challenge. (Your worksheet should look similar to the example below)

The screenshot shows an Excel spreadsheet titled 'Mario\_Example - Microsoft Excel' with the user 'SJohnson'. The spreadsheet is set to the 'Vs Match' sheet. The data is organized as follows:

	Race 1			Race 2			Race 3			Race 4			Race 5			Finish
	Character	Pos.	Points	Character	Pos.	Points	Character	Pos.	Points	Character	Pos.	Points	Character	Pos.	Points	Total Points
1st	Mario	1st	15	Mario	8th	4	Mario	1st	15	Mario	2nd	12	Mario	3rd	10	41
2nd	Luigi	2nd	12	Luigi	1st	15	Luigi	3rd	10	Luigi	1st	15	Luigi	2nd	12	54
3rd	Bowser	5th	7	Bowser	3rd	10	Bowser	9th	3	Bowser	3rd	10	Bowser	1st	15	42
4th	Yoshi	7th	5	Yoshi	9th	3	Yoshi	2nd	12	Yoshi	5th	7	Yoshi	8th	4	19
5th	Donkey Kong	3rd	10	Donkey Kong	12th	0	Donkey Kong	8th	4	Donkey Kong	8th	4	Donkey Kong	6th	6	20
6th	Daisy	8th	4	Daisy	2nd	12	Daisy	5th	7	Daisy	10th	2	Daisy	10th	2	20
7th	Toad	6th	6	Toad	5th	7	Toad	10th	2	Toad	4th	8	Toad	7th	5	26
8th	Peach	12th	0	Peach	10th	2	Peach	4th	8	Peach	7th	5	Peach	4th	8	15
9th	Wario	4th	8	Wario	4th	8	Wario	7th	5	Wario	12th	0	Wario	11th	1	17
10th	Koopa	10th	2	Koopa	6th	6	Koopa	11th	1	Koopa	6th	6	Koopa	9th	3	17
11th	Baby Mario	11th	1	Baby Mario	7th	5	Baby Mario	12th	0	Baby Mario	11th	1	Baby Mario	12th	0	7
12th	Baby Peach	9th	3	Baby Peach	11th	1	Baby Peach	6th	6	Baby Peach	9th	3	Baby Peach	5th	7	14

A 'MENU' button is located to the right of the table, and a small empty box is visible below it.

3. Click on 'Time Trial' Sheet and type in the names of everyone in your class.  
Type in the results of the 'Time Trial' challenge. (As they appear on the board)

**Time Trials**

Course	Name	Time
Mario Circuit	Waqas	00:01:30
	Anisha	00:01:38
	Jason	00:02:16
	Cameron	00:02:22
	Owen	00:01:45
	Jennifer	00:02:31
	Chelsey	00:02:35
	Robyn	00:02:20
	George	00:01:57
	Jack	00:03:03
	Josh	00:02:59
	Joe	00:02:28
	Aaron	00:02:31
	Kieran	00:02:17
	Selina	00:03:05
	Hannah	00:03:06
	Danisha	00:01:34
	Brandon	00:01:16
	Zara	00:01:07
	Kirandip	00:02:15
	Paul	00:02:49
	Hannah	00:01:46
	Hayden	00:02:42
	<b>Fastest Time</b>	<b>00:01:07</b>
	<b>Slowest Time</b>	<b>00:03:06</b>
	<b>Average Time</b>	<b>00:02:15</b>

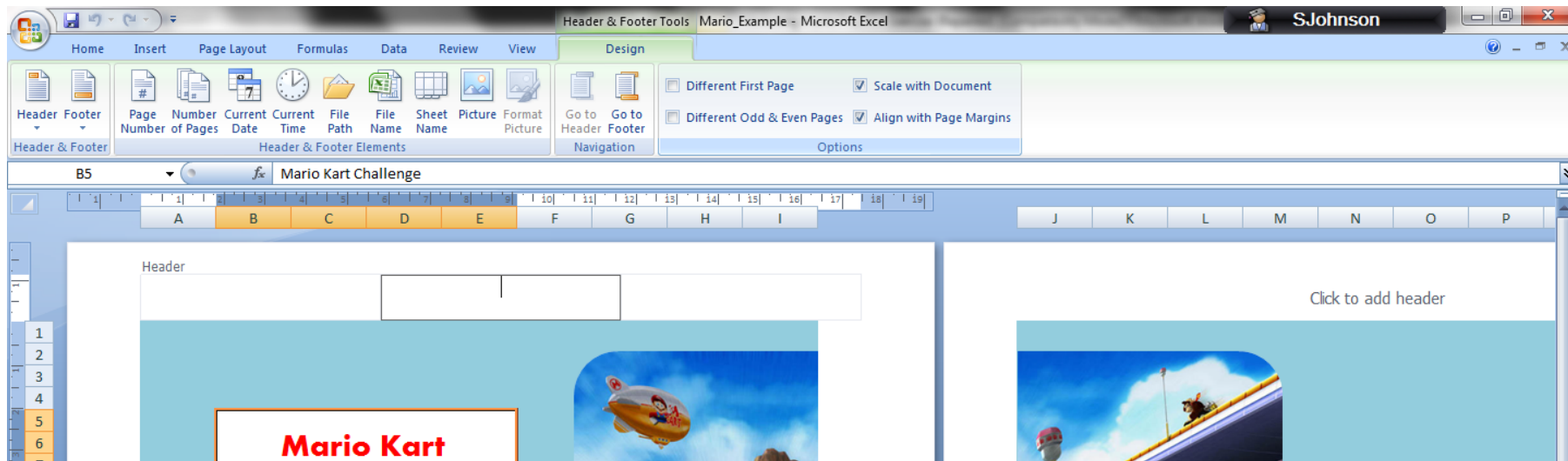
**Callout 1:** Add the following sub-headings to your table:  
 - **Fastest Time**  
 - **Slowest Time**  
 - **Average Time**

**Callout 2:** Use the correct formula to work out the Fastest, Slowest and Average lap times.

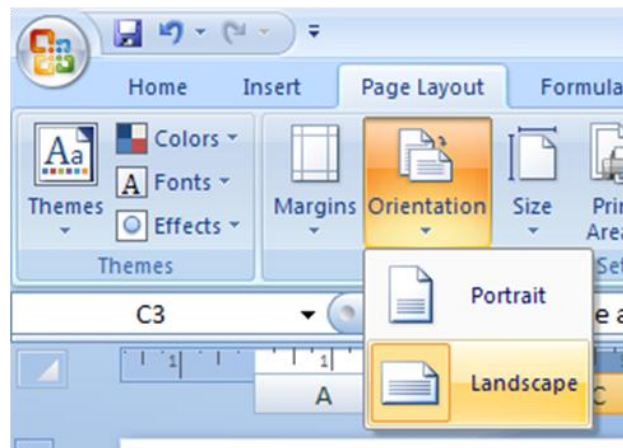
## Tidying up the presentation

Whilst waiting for the Time Trial Results....

1. Add colour to your worksheet and include more images.
2. Add headers and footers → Click on INSERT... Click on HEADERS & FOOTERS...  
In the Header type in Event Options .... Also add YOUR Name. In the Footer, type in ICT GCSE.



3. Click on PAGE LAYOUT... Click on ORIENTATION and select LANDSCAPE



4. Repeat Tasks 2 and Task 3 (On previous page) for each sheet

5. PRINT SCREN THE 'VS MATCH' AND 'TIME TRIALS' SHEETS IN DATA VIEW AND FORMULA VIEW

For FORMULA view:

Click on FORMULAS and select SHOW FORMULAS

The screenshot shows the Microsoft Excel interface with the 'Formulas' ribbon selected. The 'Show Formulas' button is highlighted, and an arrow points to it from the instruction text. Below the ribbon, the spreadsheet data is as follows:

	A	B	C	D	E	F	G	H	I
23			Kirandip	0.00156017361111111					
24			Paul	0.00195197916666667					
25			Hannah	0.00122185185185185					
26			Hayden	0.0018727662037037					
27			Fastest Time	=MIN(D4:D26)					
28			Slowest Time	=MAX(D4:D26)					
29			Average Time	=AVERAGE(D4:D26)					
30									
31									
32									
33									
34									
35									