

**East Renfrewshire Council: Education Department
Practitioner Moderation Template**

School Code	T
Practitioner Code	T10
Curriculum Area(s)	Math and Technologies
Level	2nd
Stage(s)	P6
Specific subject (if applicable)	ICT and Maths

Experiences and Outcomes:

Having discussed the variety of ways and range of media used to present data, I can interpret and draw conclusions from the information displayed, recognising that the presentation may be misleading.

MNU 2-20a

I can display data in a clear way using a suitable scale, by choosing appropriately from an extended range of tables, charts, diagrams and graphs, making effective use of technology.

MTH 2-21a

As I extend and enhance my knowledge of features of various types of software, including those which help find, organise, manage and access information, I can apply what I learn in different situations.

TCH 1-03a / TCH 2-03a

Throughout all my learning, I can use search facilities of electronic sources to access and retrieve information, recognising the importance this has in my place of learning, at home and in the workplace.

TCH 2-03b

Learning Intentions:

- LI 1: To discuss the variety of ways data can be organised.
- LI 2: To research for information
- LI 3: To present data appropriately.
- LI 4: To use a software programme.
- LI 5: To interpret information from a diagram.

Success Criteria:

- SC 1: I can discuss different ways of organising information.**
- SC 2: I can use the internet to research theme parks.**
- SC 3: I can use information to create a diagram.**
- SC 4: I can use excel to work out calculations.**
- SC 5: I can explain my results.**

Briefly outline the context and range of quality learning experiences that have been provided making reference to the chosen design principles.

Breadth, Depth, Challenge & Enjoyment, Differentiation

Context: Pupils were learning about data handling in math which coincided with financial education week. The theme park task was an opportunity for children to explore finance and excel in a challenging but enjoyable way.

Depth: Three separate tasks offered pupils the opportunity to reinforce the skills required with excel.

Breadth: Children were given the opportunity to explore a wide range of maths and ICT skills throughout the project.

Challenge: Pupils were able to challenge themselves with the amount of support they required. This was differentiated on the pupil hand-out as good, great or excellent skills. Pupils were able to experiment with their graphs and use a variety of features of excel to personalise their graph.

Differentiation: The amount of teacher and peer support given to aided less- able pupils.

Enjoyment: Pupils found the task fun and enjoyable and were enthusiastic throughout as this was based on their ideas and designs.

Record the range of assessment evidence that was gathered to meet the success criteria (Say, Write, Make, and Do) considering breadth, challenge and application.

SAY:

Pupils discussed what makes a good theme park, why people would visit and how money would be made by the owners.

Pupils presented their final data to the class.

Write:

Pupils made a mind map of what makes a good theme park and wrote an evaluation of their results.

Make:

Children made a blueprint of their first ideas.

Children used an excel spreadsheet to make and design a theme park. They individualised their layout .

Pupils made their themepark using word ; shapes, copy and paste from online or from lego.

Do:

Children researched theme parks using google.

Children inputted data into an excel spreadsheet that they had created. They used a formula to calculate totals and created a diagram using the chart function.

Practitioner Moderation Template

Learner Evidence

Did the learner successfully attain the outcomes? YES/NO

Briefly outline the oral/written feedback given to the pupil on progress and next steps, referring to the learning intention and success criteria.

Teacher: Continuous, oral feedback given on a variety of ways of displaying information obtained and ways to create a diagram during group work and class discussion. Oral feedback was given during the ICT tasks and next steps were given to encourage pupils to display their information in a variety of ways. Written feedback was given on pupils printed work for them to read.

Peer: 2 stars and a wish was offered during the evaluation process where pupils – how to improve and pupils offered reasons why they would visit each o there theme parks.

Self: continuous via traffic light, twitter wall and thumbs up.
: Written conclusion was a way of pupils self –assessing that they had understood the learning intentions of the task.

Pupil Voice:

What have you learned? How did you learn? What skills have you developed?

I used google to research theme parks and found out lots of different features of theme parks and why people would visit them.

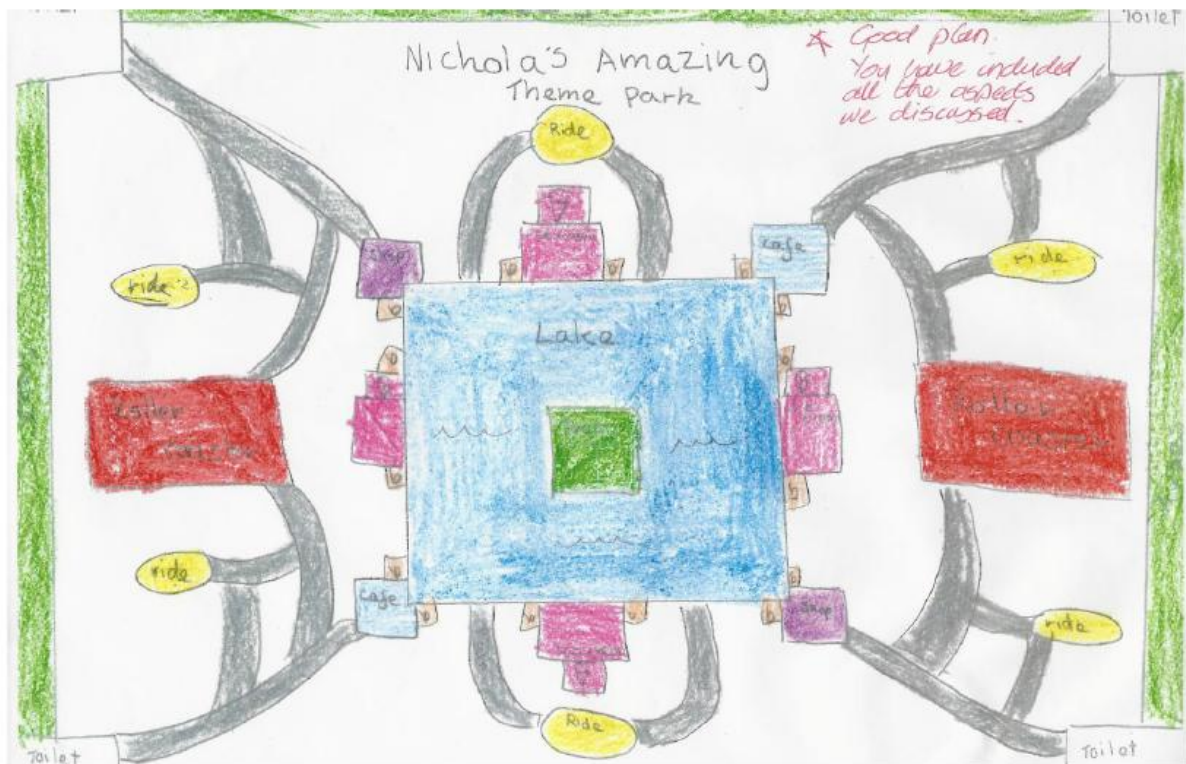
I learned how to use the calculator function in excel to total my figures and I became more confident at creating the graphs.

I learned by listening to the lesson and used the powerpoint handout to help me.

I now feel able to use excel more often.

I was able to explain my graph to my class. I enjoyed the task very much. NS P6.

Learner Evidence



LI: To create a model of a theme park using a spreadsheet

- ✓ Spend up to **£500,000**
- ✓ Insert a **mixture** of attractions/facilities and **join them up with paths**

Roller Coaster (12 squares) = £50,000
Big Ride (6 squares) = £25,000
Cafe/Shop/Ice Cream Stand (4 squares) = £8,000
Toilets (4 squares) = £1,000
Bin (1 squares) = £50
Tree (1 squares) = £200
Path (1 squares) = £40
Lake (1 squares) = £1,000





Theme Park Plan **Name** Mrs Nelson **£25,350.00 in bank**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Roller	Roller	Roller	Roller	Roller	Roller			Ride	Ride		Ride	Ride					Ride	Ride	Ride
2	Roller	Roller	Roller	Roller	Roller	Roller	Path	Path	Ride	Ride	Path	Ride	Ride	Path	Path	Path	Path	Ride	Ride	Ride
3	Toilet	Toilet	Shop	Shop	Bin				Ride	Ride		Ride	Ride				Ice Cr	Ice Cr	Shop	Shop
4	Toilet	Toilet	Shop	Shop			Tree		Ride	Ride	Tree		Tree		Tree	Bin	Ice Cr	Ice Cr	Shop	Shop
5	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path
6	Ride	Ride						Bin	Lake	Lake	Lake	Lake	Bin	Ice Cr	Ice Cr	Ice Cr	Ice Cr	Bin	Shop	Shop
7	Ride	Ride					Cafe	Cafe	Lake	Lake	Lake	Lake	Cafe	Cafe		Ride	Ride	Ride	Shop	Shop
8	Ride	Ride					Cafe	Cafe	Lake	Lake	Lake	Lake	Cafe	Cafe		Ride	Ride	Ride		Bin
9	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path	Path
10	Toilet	Toilet						Tree	Path	Tree		Tree	Path	Tree		Toilet	Toilet		Shop	Shop
11	Toilet	Toilet		Ride					Path		Bin		Path		Toilet	Toilet		Shop	Shop	
12	Ride	Ride		Ride					Path			Ride	Ride	Ride						Bin
13	Ride	Ride		Ride				Roller	Roller			Ride	Ride	Ride			Ice Cr	Ice Cr	Ice Cr	Ice Cr
14	Ride	Ride		Ride				Roller	Roller										Ride	Ride
15	Shop	Shop		Ride	Path	Path	Path	Roller	Roller	Path	Path	Roller	Roller	Roller	Roller	Path	Path	Path	Ride	Ride
16	Shop	Shop	Bin	Ride				Roller	Roller			Roller	Roller	Roller	Roller				Ride	Ride
17																				
18																				

Roller Coaster = 12 sq
 Ride = 6 sq
 Cafe/Shop/Ice Cream = 4 sq
 Toilets = 4 sq
 Bin/Tree/Path/Lake = 1 sq

Map Prices + n/Tree

READY

Example of Theme park set up spending.

**Theme Park Attractions Bought
My Theme Park**

Item	Cost Per Attraction	No. in Park	Total Cost
Roller Coaster	£50,000.00	1	£50,000.00
Ride	£25,000.00	1	£25,000.00
Café	£8,000.00	1	£8,000.00
Shop	£8,000.00	0	£0.00
Ice Cream Stand	£8,000.00	0	£0.00
Toilets	£1,000.00	0	£0.00
Bin	£50.00	0	£0.00
Tree	£200.00	0	£0.00
Path	£40.00	7	£280.00
Lake	£1,000.00	0	£0.00

Total amount of money spent:	£83,280.00
Loan left in bank to spend:	£416,720.00

Good!

3. Running costs

1 Copy this spreadsheet: **2**

	A	B	C
1	Running costs		
2			
3	Item	Running cost	Number
4	Rollercoaster	£90.00	
5	Ride	£60.00	
6	Café	£40.00	
7	Shop	£40.00	
8	Ice cream stand	£40.00	
9	Toilets	£10.00	
10	Bin	£5.25	
11	Tree	£0.25	
12			Total

2. Running your theme park

To run your theme park the following costs will apply to each item that you have every day. How much will it cost to run your theme park for one day?

Good!

3. Running costs

1 Copy this spreadsheet: **2** Type in the number of each item in your park.

	A	B	C	D
1	Running costs			
2				
3	Item	Running cost	Number	Running costs
4	Rollercoaster	£90.00		=B4*C4
5	Ride	£60.00		
6	Café	£40.00		
7	Shop	£40.00		
8	Ice cream stand	£40.00		
9	Toilets	£10.00		
10	Bin	£5.25		
11	Tree	£0.25		
12			Total	=SUM(D4:D11)

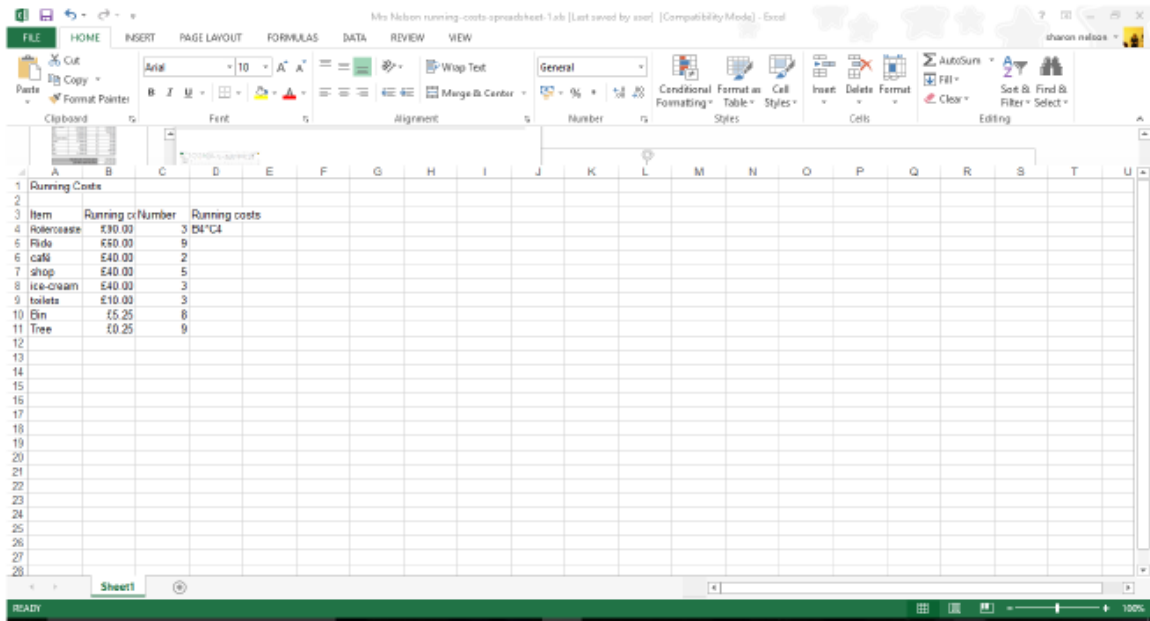
3 Put a formula in D4. Highlight from D4 to D11 then do Edit > Fill Down to replicate (copy) it.

4 Calculate the total running costs per day using an =SUM formula.

5 Write this figure on your sheet!

Practitioner Moderation Template

Learner Evidence



1 Running costs

2

3 Item Running cost Number Running costs

4 Rollercoaster £90.00 3 =B4*C4

5 Ride £60.00 9

6 Café £40.00

7 Shop £40.00

8 Ice cream stand £40.00

9 Toilets £10.00

10 Bin £5.25

11 Tree £0.25

12 Total =SUM(D4:D11)

3 Put a formula in D4. Highlight from D4 to D11 then do Edit > Fill Down to replicate (copy) it.

4 Calculate the total running costs per day using an =SUM formula.

5 Write this figure on your sheet!

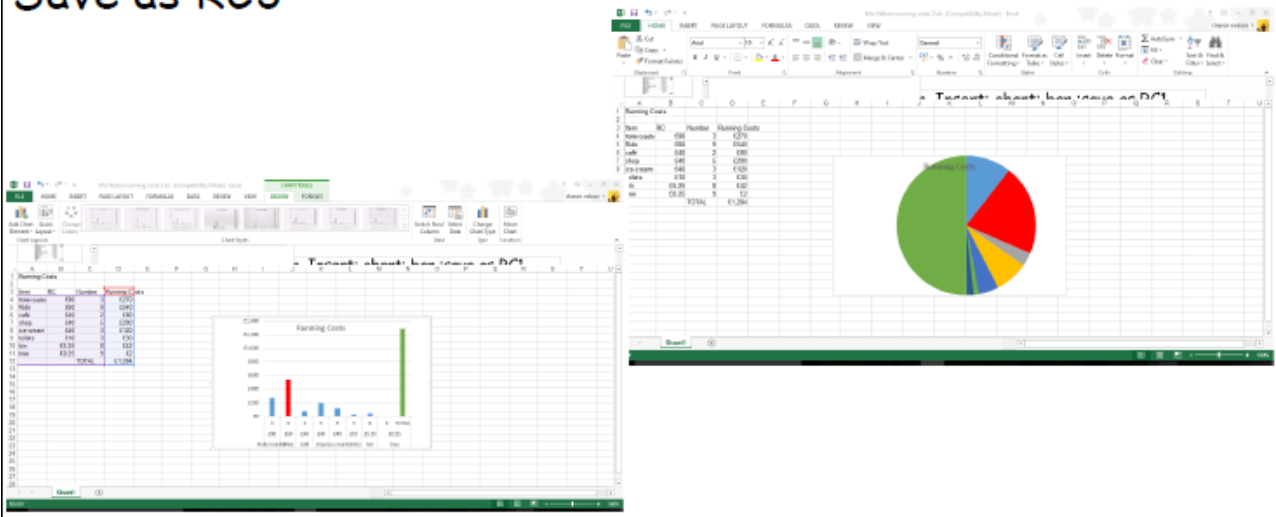
Practitioner Moderation Template

Learner Evidence

After adding in formula write the total onto your worksheet.

Item	RC	Number	Running Costs
rollercoaste	£90	3	£270
Ride	£60	9	£540
café	£40	2	£80
shop	£40	5	£200
ice-cream	£40	3	£120
toilets	£10	3	£30
bin	£5.25	8	£42
tree	£0.25	9	£2
TOTAL			£1,264

Next add in a graph. Insert: chart: bar :save as RC1
Insert: chart: pie save as RC2
Personalise your chart: change colour/ type / pattern
Save as RC3



Practitioner Moderation Template

Learner Evidence

Theme Park Plan										Name										£130,080.00 in bank	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
1	Toilet	Toilet	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Toilet	Toilet	
2	Toilet	Toilet	Path					Ride	Ride	Ride	Ride	Ride	Ride				Path	Path	Toilet	Toilet	
3	Tree		Path	Path	Path		Bin	Path	Path	Path	Path	Path	Path	Bin			Path	Path	Ride	Ride	
4	Ride	Ride	Ride	Path	Path	Shop	Shop	Path	Bin	Ice Cr	Ice Cr	Bin	Path	Cafe	Cafe	Path	Path	Ride	Ride	Ride	
5	Ride	Ride	Ride	Path	Path	Shop	Shop	Path	Path	Ice Cr	Ice Cr	Path	Path	Cafe	Cafe	Path	Path	Ride	Ride	Ride	
6	Tree				Path	Path	Path	Lake	Lake	Lake	Lake	Lake	Lake	Path	Path	Path	Path	Roller	Roller	Roller	
7	Roller	Roller	Roller	Roller	Path	Bin	Path	Lake	Lake	Lake	Lake	Lake	Lake	Ice Cr	Ice Cr	Path	Roller	Roller	Roller	Roller	
8	Roller	Roller	Roller	Roller	Path	Ice Cr	Ice Cr	Lake	Lake	Tree	Tree	Lake	Lake	Ice Cr	Ice Cr	Path	Roller	Roller	Roller	Roller	
9	Roller	Roller	Roller	Roller	Path	Ice Cr	Ice Cr	Lake	Lake	Tree	Tree	Lake	Lake	Ice Cr	Ice Cr	Path	Roller	Roller	Roller	Roller	
10	Tree				Path	Bin	Path	Lake	Lake	Lake	Lake	Lake	Lake	Path	Bin	Path				Tree	
11	Tree				Path		Path	Lake	Lake	Lake	Lake	Lake	Lake	Path		Path	Path	Ride	Ride	Ride	
12	Ride	Ride	Ride	Path	Path		Path	Lake	Lake	Lake	Lake	Lake	Lake	Shop	Shop	Path	Path	Ride	Ride	Ride	
13	Ride	Ride	Ride	Path	Path	Cafe	Cafe	Path	Path	Ice Cr	Ice Cr	Path	Path	Shop	Shop	Path				Tree	
14	Tree				Path	Cafe	Cafe	Path	Bin	Ice Cr	Ice Cr	Bin	Path	Shop	Shop	Path				Tree	
15	Tree				Path		Bin	Path	Path	Path	Path	Path	Path	Bin		Path	Path			Tree	
16	Tree			Path	Path			Ride	Ride	Ride	Ride	Ride	Ride			Path	Path	Toilet	Toilet	Toilet	
17	Toilet	Toilet	Path	Path												Path	Path	Toilet	Toilet	Toilet	
18	Toilet	Toilet	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Tree	Toilet	Toilet	

★ You have included all the aspects of a theme park that we discussed.

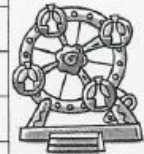
★ You have stayed within budget.

Next steps: How much will this cost you to run?

Theme Park Notes

★ well done
this
comulates
with excel
exact
document

Item	Cost per item	No. in park
Roller Coaster (12 sq.)	£50,000	2
Ride (6 sq.)	£25,000	6
Café (4 sq.)	£8,000	2
Shop (4 sq.)	£8,000	2
Ice cream stand (4 sq.)	£8,000	4
Toilets (4 sq.)	£1,000	4
Bin (1 sq.)	£50	12
Tree (1 sq.)	£200	50
Path (1 sq.)	£40	83
Lake (1 sq.)	£1,000	42



Total money spent by each visitor = £ 106

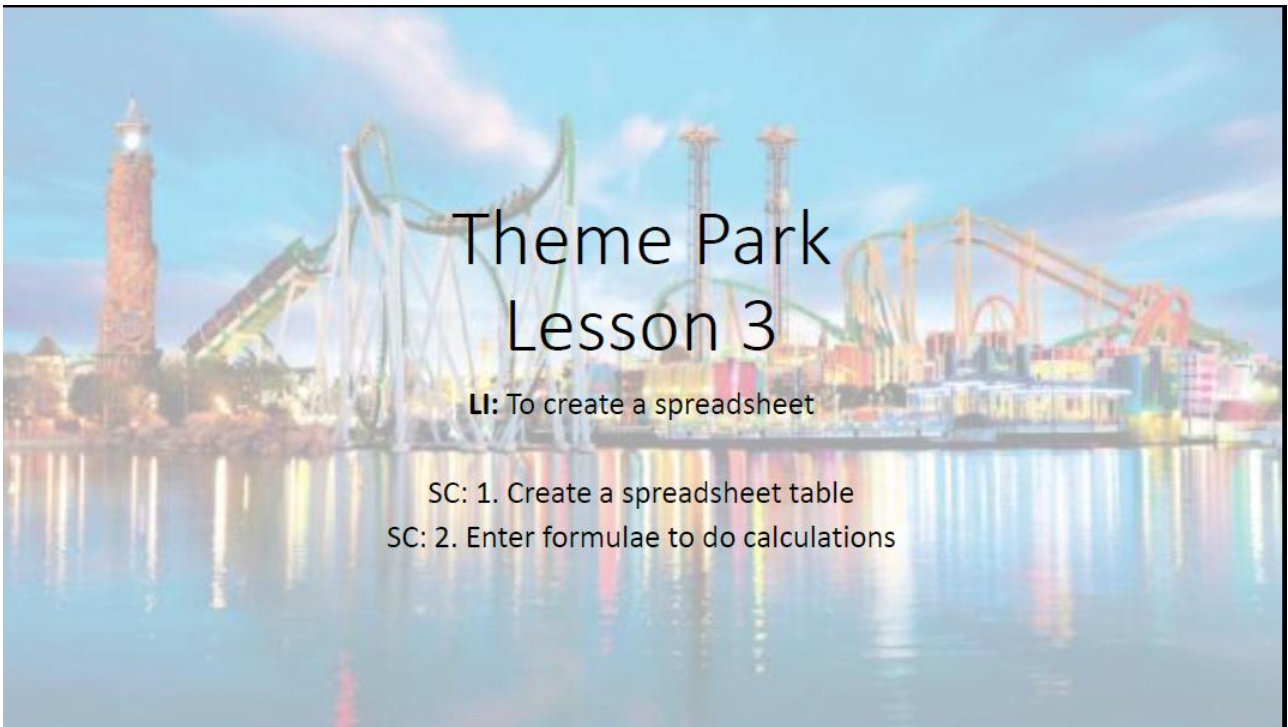
Total running costs per day = £ 976

Total profit after two weeks = £ ~~13,664~~

★ you have amended
your figure after
using the correct
formula in the excel document

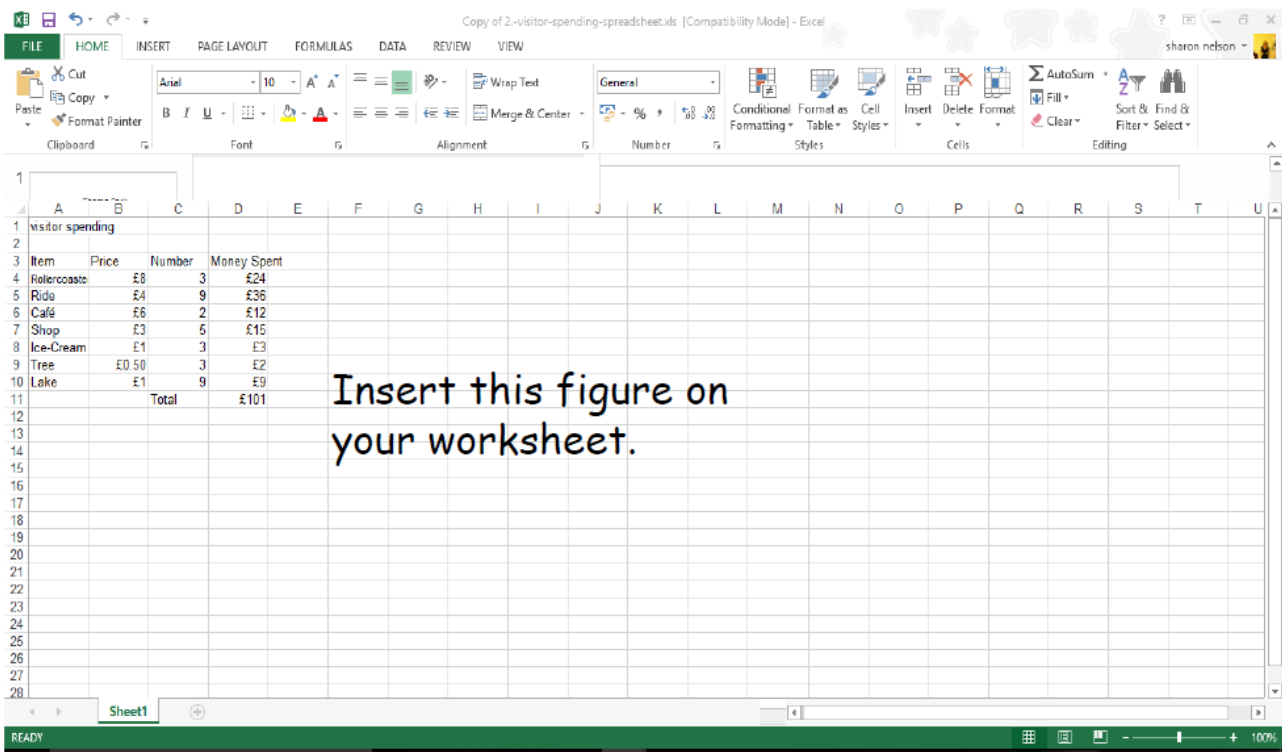
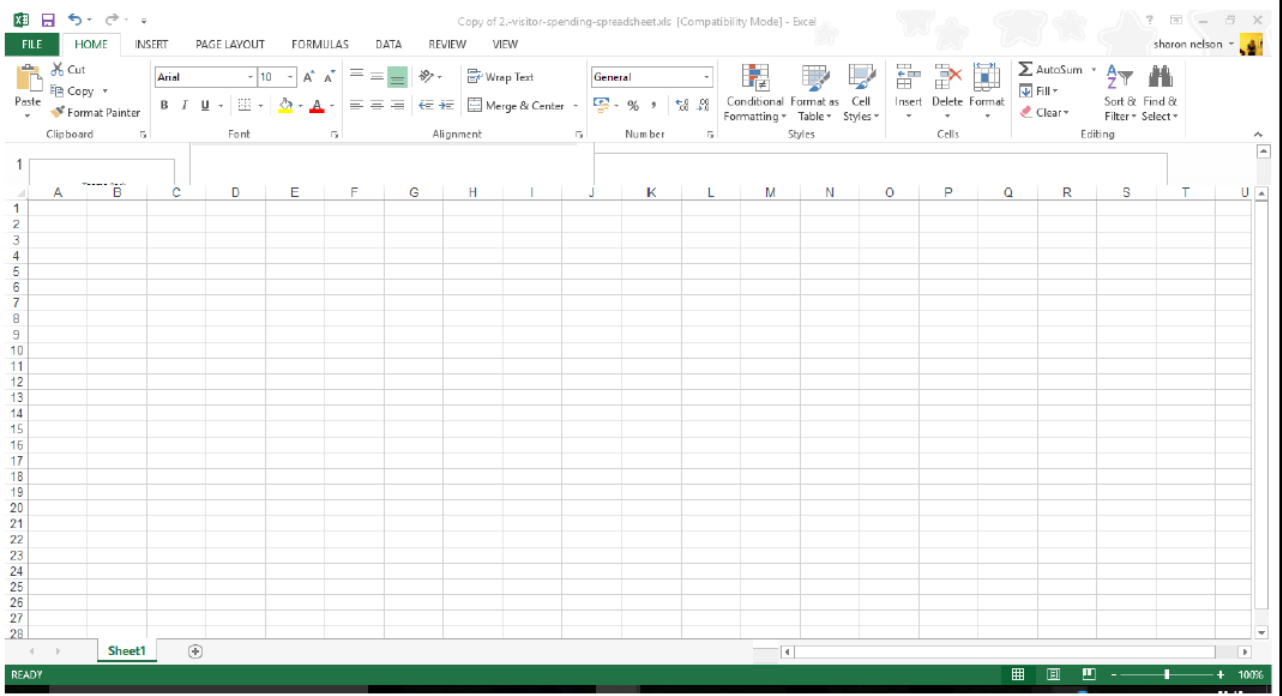


~~1865,311,680~~ 13,664



Visitor Spending.
We will assume that each visitor will have one shot on each attraction.

	A	B	C	D
1	Visitor spending			
2				
3	Item	Price	Number	Money spent
4	Rollercoaster	£8.00		=B4*C4
5	Ride	£4.00		
6	Café	£6.00		
7	Shop	£3.00		
8	Ice cream stand	£1.00		
9	Tree	£0.50		
10	Lake	£1.00		
11			Total	=SUM(D4:D10)



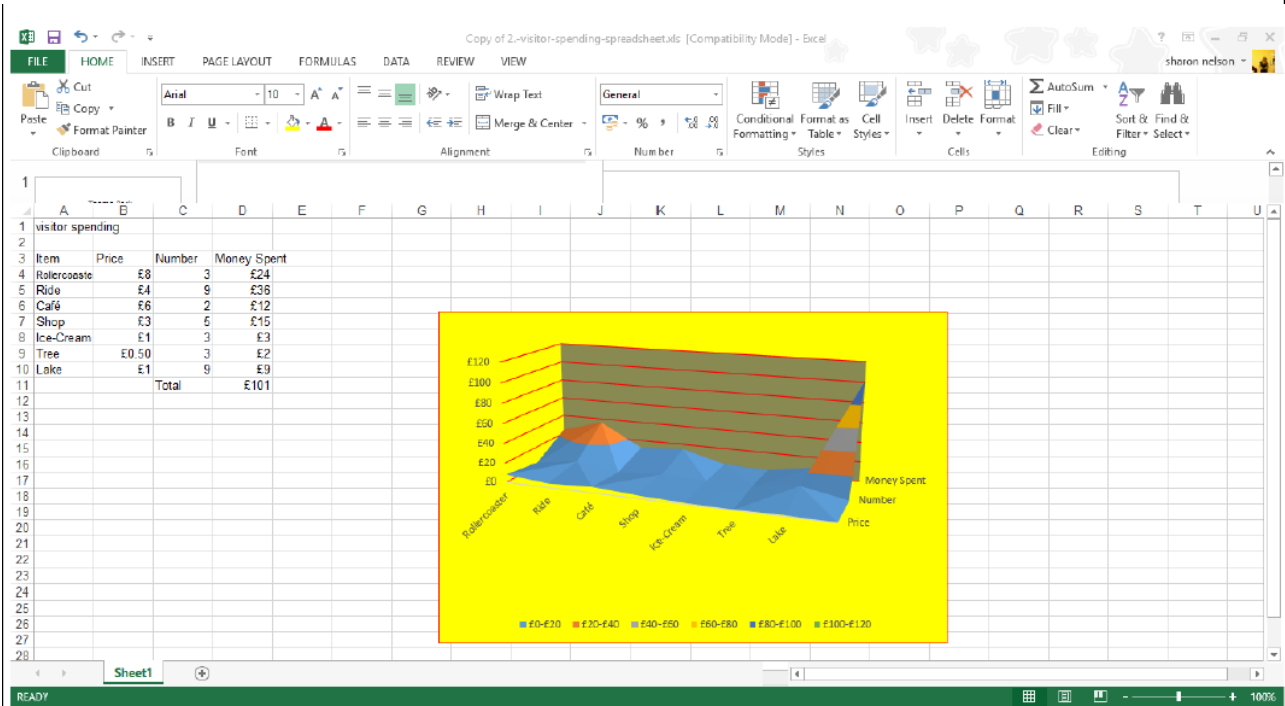
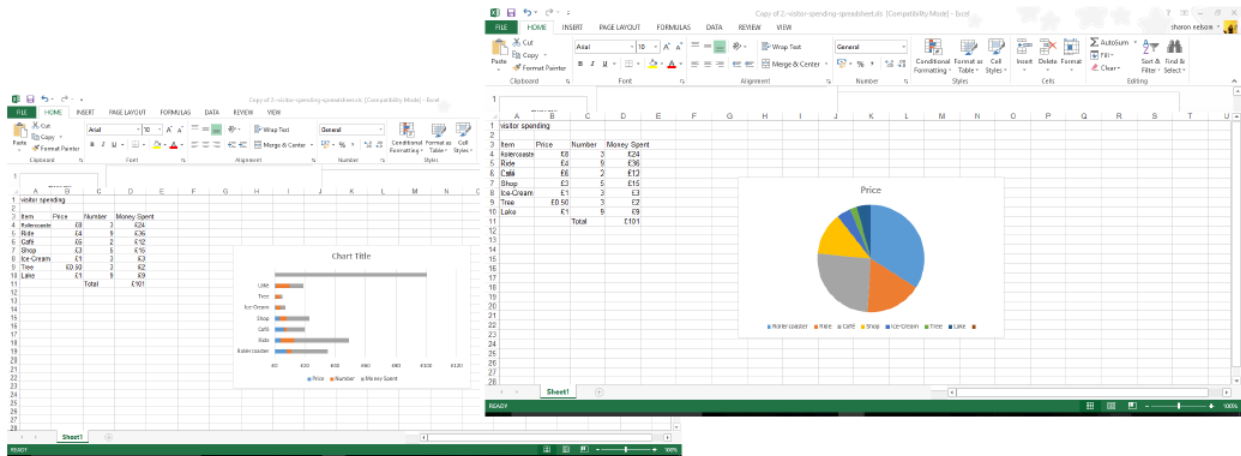
Practitioner Moderation Template

Learner Evidence

Insert: chart: bar chart: save as VS1

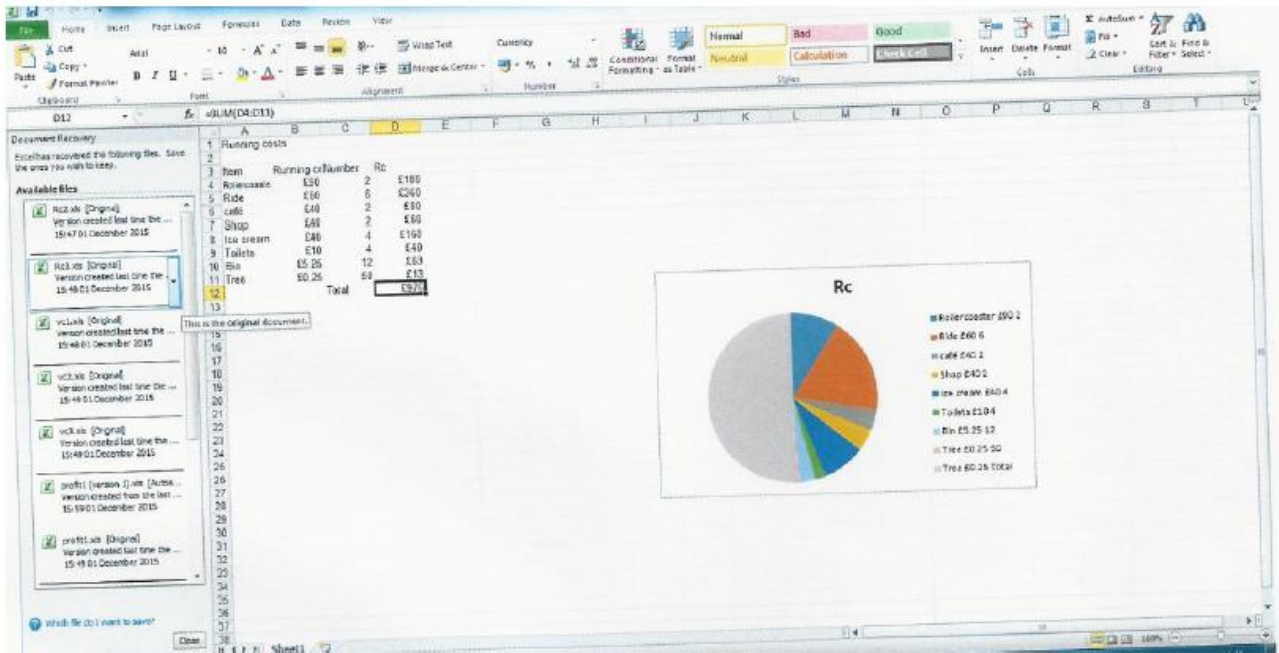
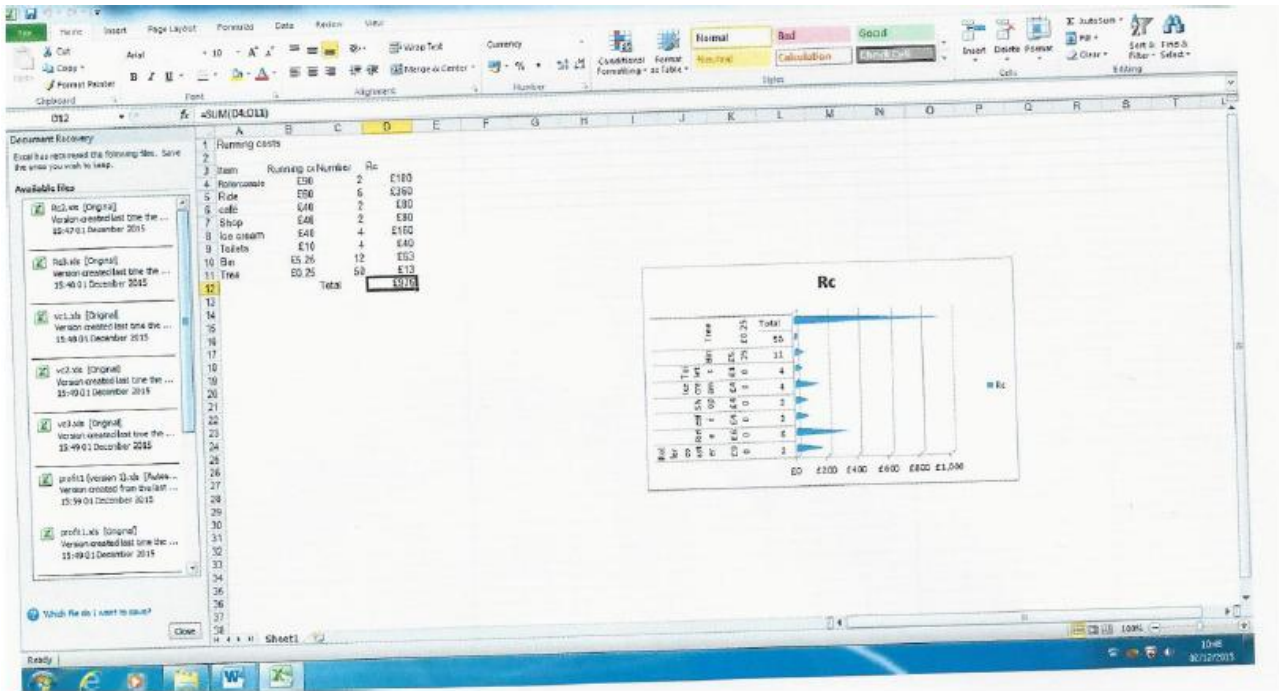
Right click: Change chart type : pie chart: save as VS2

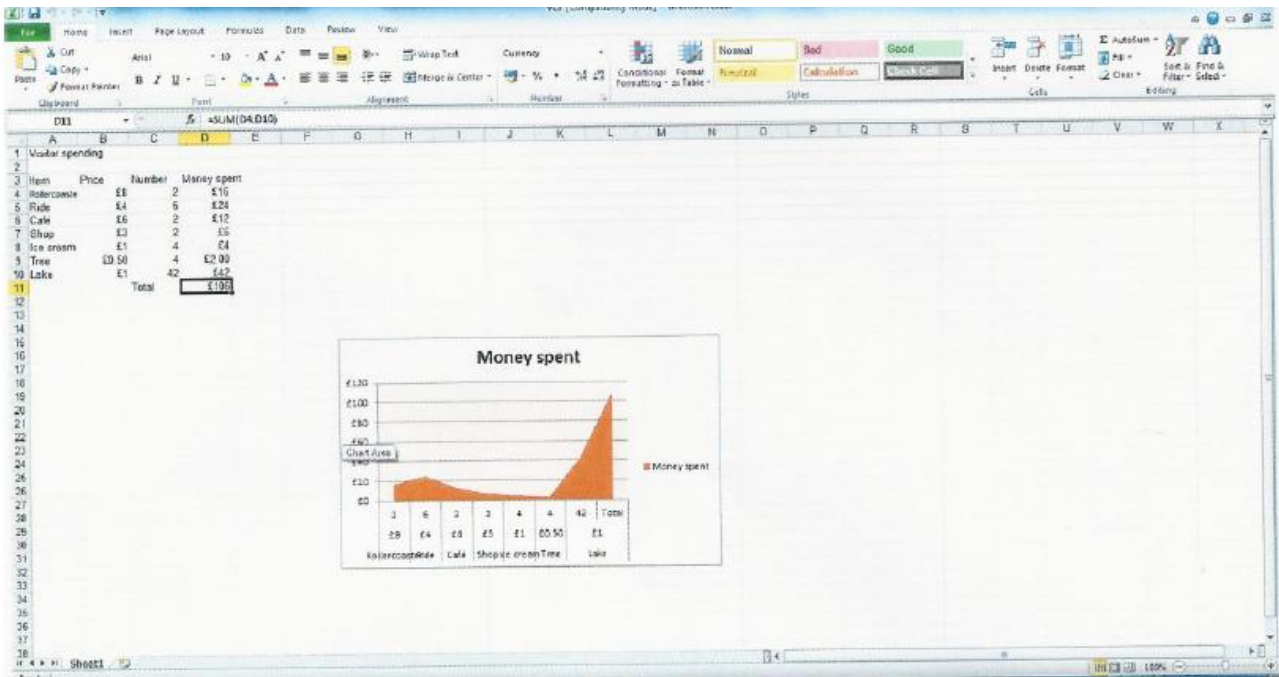
Right click. Change chart: personalise your chart: save as VS3



Practitioner Moderation Template

Learner Evidence





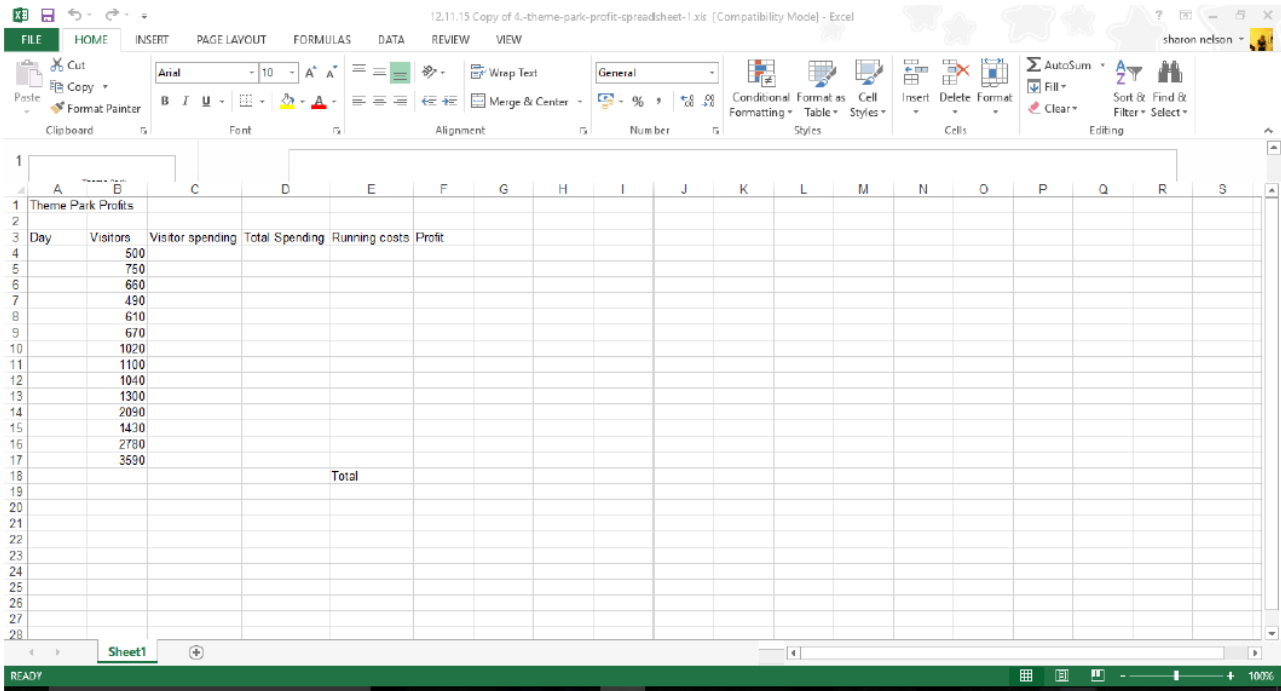
Theme Park Lesson 4

Profit calculation

LI: To create a spreadsheet

SC: 1. Create a spreadsheet table

SC: 2. Enter formulae to do calculations



Good!

4. Theme park profits

- 1 Copy this spreadsheet:
- 2 Highlight from A4 to A17 then do Edit > Fill Series > OK to quickly create a series of numbers.
- 3 Type in the total money spent by each visitor: $=B4 * C4$
- 4 Type in the total running costs per day:
- 5 Do Edit > Fill Down to replicate (copy) the formulae and numbers down each column.
- 6 Calculate the total profit using an $=SUM$ formula.
- 7 Write this figure on your sheet!

Day	Visitors	Visitor spending	Total spending	Running costs	Profit
1	500		$=B4 * C4$		$=D4 - E4$
2	750				
3	660				
4	490				
5	610				
6	670				
7	1020				
8	1100				
9	1040				
10	1300				
11	2090				
12	1430				
13	2780				
14	3590				
		Total		$=SUM(E4:E17)$	

Practitioner Moderation Template

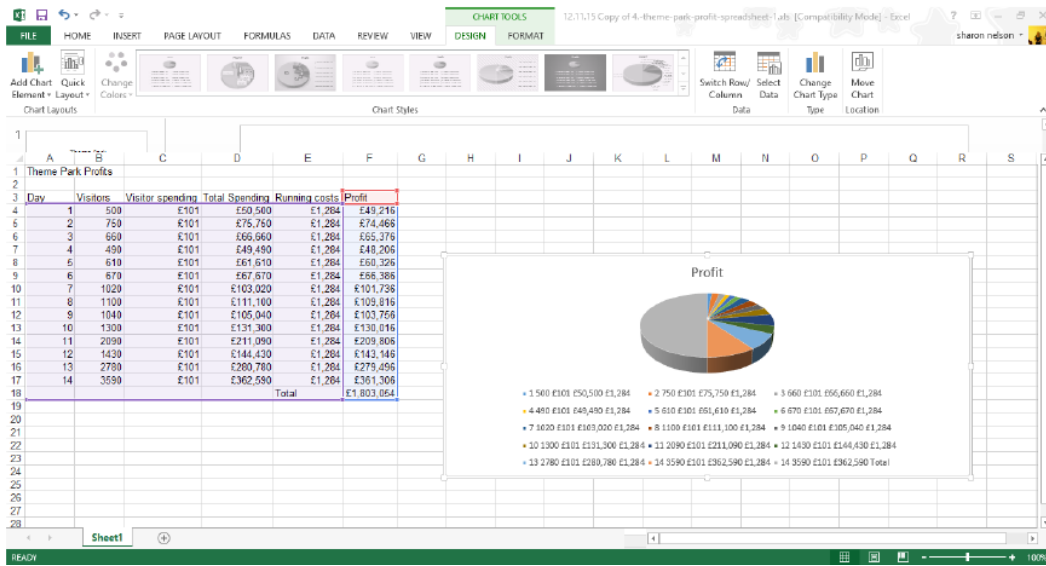
Learner Evidence

12.11.15 Copy of 4-theme-park-profit-spreadsheet-1.xls [Compatibility Mode] - Excel

Day	Visitors	Visitor spending	Total Spending	Running costs	Profit
1	500	£101	£50,500	£1,284	£49,216
2	750	£101	£75,750	£1,284	£74,466
3	660	£101	£66,660	£1,284	£65,376
4	490	£101	£49,490	£1,284	£48,206
5	610	£101	£61,610	£1,284	£60,326
6	670	£101	£67,670	£1,284	£66,386
7	1020	£101	£103,020	£1,284	£101,736
8	1100	£101	£111,100	£1,284	£109,816
9	1040	£101	£105,040	£1,284	£103,756
10	1300	£101	£131,300	£1,284	£130,016
11	2090	£101	£211,090	£1,284	£209,806
12	1430	£101	£144,430	£1,284	£143,146
13	2780	£101	£280,780	£1,284	£279,496
14	3590	£101	£362,590	£1,284	£361,306
Total				£1,803,054	

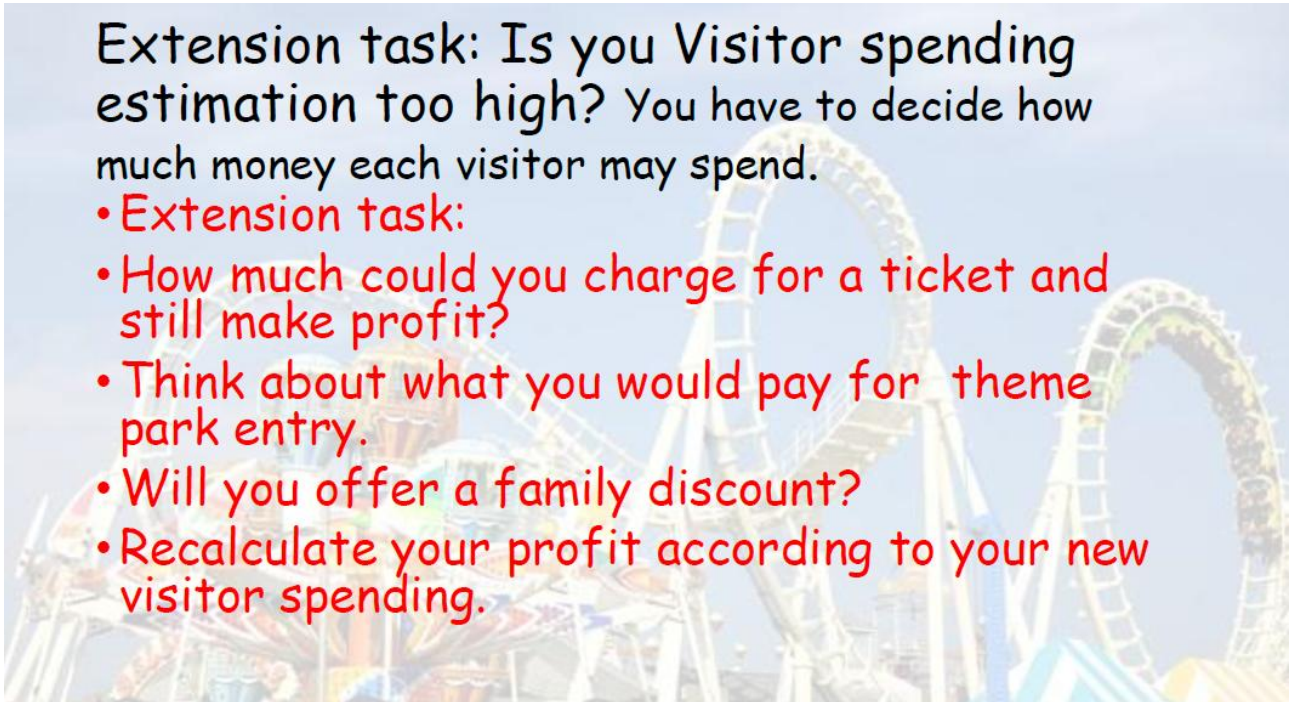
Write this figure on the worksheet.

Create a bar chart, pie chart and chart of your choice. Save as profit 1 profit 2 and profit 3.



Extension task: Is your Visitor spending estimation too high? You have to decide how much money each visitor may spend.

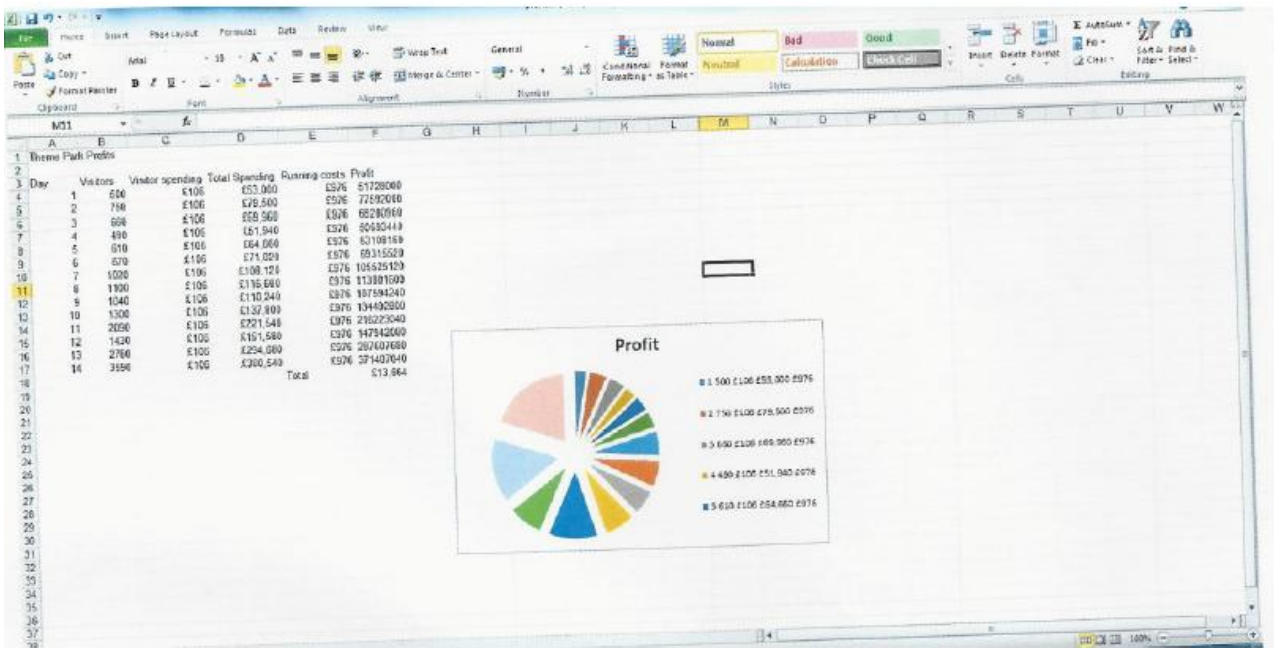
- Extension task:
- How much could you charge for a ticket and still make profit?
- Think about what you would pay for theme park entry.
- Will you offer a family discount?
- Recalculate your profit according to your new visitor spending.



Practitioner Moderation Template

Learner Evidence

Day	Visitors	Visitor spending	Total Spending	Running costs	Profit
1	500	£105	£53,000	£976	£52,024
2	750	£105	£79,500	£976	£78,524
3	900	£105	£90,000	£976	£89,024
4	450	£105	£51,500	£976	£50,524
5	510	£105	£54,000	£976	£53,024
6	570	£105	£59,500	£976	£58,524
7	1000	£105	£106,000	£976	£105,024
8	1900	£105	£199,500	£976	£198,524
9	1040	£105	£109,200	£976	£108,224
10	1300	£105	£136,500	£976	£135,524
11	2050	£105	£216,000	£976	£215,024
12	1430	£105	£151,500	£976	£150,524
13	2700	£105	£284,000	£976	£283,024
14	3500	£105	£360,500	£976	£359,524
Total				£1,865,311,080	



Next steps: label your x and y-axis.

Theme Park Conclusion

Following the class discussion about theme parks and the features that attract visitors to them, I was asked to design a blueprint on paper for a theme park which included the things we had spoken about. I had to think about rides, rollercoasters, scenery, like trees and lakes, shops and cafes and how many of each I would include in my park. I decided to call my theme park RR

I then used an excel document to create my theme park. I had a budget of £500,000 and everything I included cost me money. I was not allowed to go over my budget and the excel document kept going down every time I added a new item.

After that I created a new excel document to work out how much it would cost to run my theme park. Mrs Nelson gave me the cost of each item and I used the excel calculator to work out how much it would cost based on how many of each thing I had in my park. My running costs were £976. I then used excel to create a bar chart and a pie chart of this.

Next I made a new excel document and used a different formula to calculate how much each visitor would spend if they were charged a certain amount of money for each ride. My visitor spending was £ 106 Again I created a bar chart and pie chart using excel.

Then I used a formula in excel, to calculate my profit.

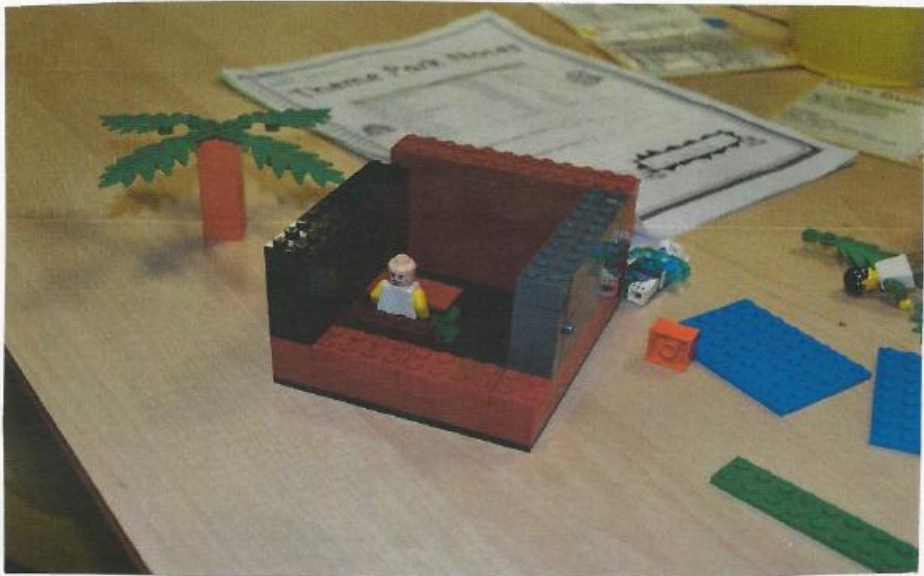
My profit made was £ 1,865,311,680

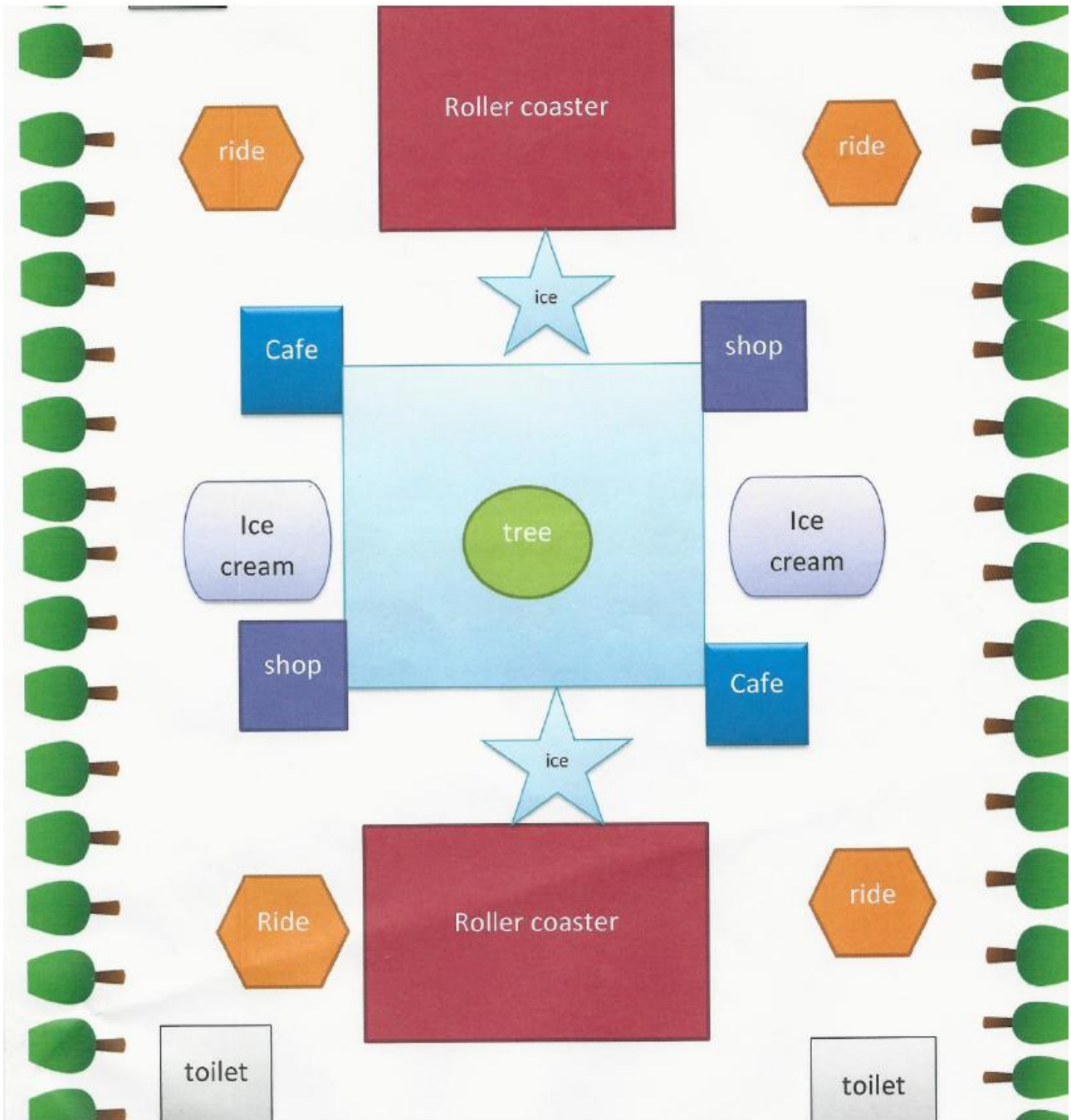
I think that this an unrealistic amount of profit to make because in real life you wouldn't make this amount of money

A better price for my theme park would be £30 per person

This would cover my running costs and is an amount that people would be willing to pay.

I then created a poster advertising my theme park. I had to include my unique selling point (USP) and the entrance costs.





The poster is hand-drawn on yellow paper and features a central illustration of an ice cream cone with a blue top and pink and white striped bottom. The cone is surrounded by various text and drawings:

- Top Left:** A brown oval containing the text "Rocky address" and "Road" with an arrow pointing to the right.
- Top Right:** A blue cloud-like shape containing the letters "RR". Below it, the text reads "Theme parks one of a kind".
- Left Side:** The letters "RR" in green. Below them, the text says "Roller coasters get the fast pass and skip the line only £60".
- Bottom Left:** A small pink house-like structure. Below it, the text says "merchandise Starting from the price of £3-£10".
- Right Side:** The text "open time 9:00am" and "Rides".
- Bottom Center:** The text "close: 10:00pm" and a blue cloud-like shape containing "RR".
- Bottom Left (lower):** The text "Web site www.RR.com" and a small computer monitor icon with "RR" on the screen.
- Bottom Center (lower):** A cloud-like shape containing the word "Café" and a small blue and red house-like structure.
- Bottom Right:** A vertical stack of colorful circles (purple, blue, green, yellow, orange, red) resembling an ice cream cone. To its right, the text says "Ice cream parlour as many toppings as you want".
- Bottom Right (lower):** A list of prices: "£60 Fast pass", "£20 Bands", "£95 yearly pass", "Adults: £40", "Children: £25", "family: £75", "Student: £30".

Theme 17th November 2015

Extension task
Not included in
original LI or
Fo + Os.

LI: I can create a poster

SC:	SA	PA	TA
I have used an image	●		///
I have included the message of the poster (Why are you creating it?)	●		///
I have included a way to capture attention of the reader: fancy writing, alliteration, onomatopoeia, a simile, a metaphor or a slogan.	●		///
My text is eye-catching: think big / bold / colourful / spacious / font.	●		///
I have included HOW to contact the theme park	●		///
I have included the prices	●		///
Comments:			
<p>★ All relevant information is included and is clear for the audience.</p> <p>★ Variety of price options offered based on your Excel document workings.</p> <p>✎ The name of your theme park could be clearer: bigger or bolder. N.5</p>			

family (Ticket): £75 RR Fast pass: £60

child (Ticket): £25 open 9:00 am Student (Ticket) £30
close 10:00pm RR

Adult (Ticket): £40 London Rocky Road
Yearly pass: £95 Rollercoaster
Ride's
Ice cream

Bands: £20 ✓ It's the best place in town café
shop's Website www.RR.com

Practitioner Moderation Template

Learner Evidence

