

## Suggested Exercises for Business Charts

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### Exercise One

Possible activity for session plan four in the suggested scheme of work

A survey has been taken to work out how best students learn and what computer access they have outside the college. The table of data is below you have been asked to produce various charts from this data.

- produce a pie chart from the data **About the Course**  
show a legend  
ensure that the segments are easily identifiable when printed on black and white printers  
show the % value at the side of each segment of the pie. Clearly label the chart  
save and print the pie chart
- produce a bar chart from the data **About you and your computer**  
do not show a legend  
clearly label the chart and the axis labels  
save and print the bar chart
- produce a pie chart from the data **Distance learning**  
show a legend  
show the % value at the side of each segment of the pie  
emphasise a portion of the pie chart  
clearly label the chart  
save and print the pie chart  
produce a pie chart from the data **Online learning** show a legend
- show the % value at the side of each segment of the pie  
emphasise a portion of the pie chart  
clearly label the chart  
save and print the pie chart

## COURSE SURVEY

<b>ABOUT THE COURSE</b>	
I enjoy attending College	30
I enjoy meeting people in College	20
I enjoy working with fellow colleagues	20
I borrow work from college to do at home	26
I spend some time at work looking at my course work	11
I can only attend College at my class time	13
I do not use the ITSC or FLC	35
I would like a more flexible approach to learning	32
<b>ABOUT YOU AND YOUR COMPUTER ACCESS</b>	
I have a computer at home	27
I have internet access at home	15
I have a computer at work	34
I have internet access at work	8
I have access to the same software as College at home	31
I have access to the same software as College at work	42
<b>DISTANCE LEARNING</b>	
I would be interested in participating in a distance learning programme	42
I like the idea of learning when I want to at College/home/office	23
<b>ONLINE LEARNING</b>	
I would be interested in participating in an online learning programme	10
I have an e-mail address	23

A further survey was carried out in the college to see which sections of college computing students attended. The following table shows the sections attended.

Produce a line graph showing all the sections attended. Do not display a legend.

Clearly label the chart and the axis labels.

Save and print the bar chart.

Business	289
Pennine Weekend	18
Flexible	123
Construction	128
Art& Design	216
Maths	240
Electronics	39
Leisure	36
Tourism	34
Care	1
Hairdressing	40
Animal Care	99
Community Outreach	255

## Exercise Two

Possible activity for session plan six in the suggested scheme of work

Using the data in the table below produce a bar chart, pie chart and line graph Get the group to compare and discuss the output and decide which of the graphs shows the data in a correct form.

<b>Cars Sold in UK Sales for 1989</b>	
<b>Manufacturer</b>	<b>% of Sales</b>
Ford	21.6
Vauxhall	19.6
Austin Rover	15.5
Nissan	9.4
Toyota	7.6
Others	26.3

Mark out the appropriate ranges and create:

- a Bar Chart of % of Sales
- use the 'Cars sold' line as the Title
- display the actual value on each line
- print the Chart
- produce a Pie Chart with a text labels, percentage labels but no legend
- print the Chart

## Exercise Three

Possible activity for session plan six in the suggested scheme of work

The group could now look at present car values and create an up-to-date table showing the cost of each car type.

- different chart types can be produced from the new data

## Exercise Four

Possible activity for session plan two in the suggested scheme of work

- using the LastName and Grade in the table below create a bar graph
- ensure that the graph has a no legend and appropriate axis labels are displayed
- title the graph Company Employee's Grades
- ensure the bars can be printed on a black and white printer and still be legible
- save and print/plot

LastName	Department	Grade
Andrews	Personnel	3
Davies	Admin	2
Jackson	Sales	2
Jenkins	Sales	4
Johnson	Production	1
Smith	Sales	4
Smithson	Admin	3
Stevens	Production	3
Williams	Admin	2

### Exercise Five

Possible activity for session plan three in the suggested scheme of work

- using the data for Budget in the table below create a pie chart
- ensure that the segments show labels and % values
- emphasise part of the chart
- the title for the chart is **Budget Expenses for Ward One**
- using the data for Budget and Actual in the table below create a bar chart
- ensure that the axis labels are displayed and that the legend shows Budget and Actual
- ensure the bars can be printed on a black and white printer and still be legible
- save and print/plot

Hospital Ward 1	Budget	Actual	Difference
Heating	2500	2750	-250
Lighting	1500	1450	50
Cleaning	2400	3000	-600
Laundry	4000	3800	200
Maintenance	1200	1200	0
<b>Totals</b>	<b>11600</b>	<b>12200</b>	<b>-600</b>

### Exercise Six

Possible activity for session plan Four in the suggested scheme of work

- using the table below you are going to create a line graph showing the price of each pet
- select only the data for the pet's name and the price
- ensure that the axis labels are displayed
- the title for the chart is **The Cost of Pets**
- save and print/plot

PET	DATE SOLD	PRICE
GERBIL	22/11/1999	4.10
RABBIT	01/04/2000	7.25
SNAKE	09/04/2001	15.00
HAMSTER	04/06/2000	6.50

- add the following set of data:

NUMBER SOLD
34
11
2
5

- add a second axis to the line graph to show the new data
- format the axis to display 0 – 20 maximum scale on the first axis and ensure that the secondary axis is displaying 0 – 40 maximum scale
- save and print/plot

### Exercise Seven

Possible activity for session plan six in the suggested scheme of work

Create the following charts from a table on Sports Club Membership (see below for table)

- produce a bar graph indicating membership levels for each member
- change the Y-axis to display integer
- label the axis with suitable titles
- legend required
- print the graph
- produce three separate pie charts for each of the three levels
- each chart should show value and have a legend
- ensure the segments are formatted to show on a black and white printout
- print the charts
- produce a line graph showing the joining age of each member for members who joined after January 1996
- change the Y-axis scale to be 20 - 55 displaying the top scale number
- label the axis with suitable titles
- print the graph
- produce a line graph showing the Name, Level and Joining Age. Display the graph with a second y-axis
- print the graph ensuring that the data can be distinguished when printed in black and white

NAME	TEL NO	DATE JOINED	TRAINER	LEVEL	JOINING AGE
Sue Brightman	0161579734	02/12/95	RC	1	48
Maurizio Moroni	0161677497	09/12/95	JB	2	20
Peter Zworsky	0161435128	24/12/95	ACJ	1	45
Abdul Rasakumaran	0161409631	20/01/96	JB	2	43
Kay Reilly	0161564568	02/03/96	JB	1	47
Danny Davies	0161557417	03/03/96	JB	1	50
Jemma Thrush	016179750	18/03/96	RC	2	32
Eric Buczko	0161567908	26/03/96	JB	3	34
Janette Simpson	0161580676	27/03/96	ACJ	3	24
Franc Krischke	0161687837	28/03/96	ACJ	2	25
Katherine Cooper	0161585654	12/09/99	SJ	2	36
Farhana Gupta	0161622766	14/09/99	ACJ	2	27
Thomas Hardy	0161421950	26/09/99	CAB	2	39
Carl Eggleton	0161652346	29/09/99	JB	1	23
Maria Larsson	0161658387	11/10/99	ACJ	2	30
Yvonne Moncada	0161513341	17/10/99	ACJ	3	42
David Hobson	016142254	29/10/99	CAB	3	24

### Other Activities

Ask the students to collect data on the course they are on and create a table of data.

Example:

Course	Length in hours	Number of days per year

Various charts can be produced from this data.

Ask the students to collect details of their favourite books and authors and the price of the books.

Again various charts can be produced from the data.