


Week 1

What is Data?

Students will begin the topic by giving opinions on what data is and identify different ways in which companies and business may use data and how it helps them to collect information.

Football Team



A football team like Manchester City would use data for lots of different reasons. Some of these include:

- Looking at: goals, assists, clean sheets, league positions etc.
- Identifying transfer targets.
- Seeing how many fans watch games.
- Finding out how much money they make from shirt sales.
- Comparing the statistics of other teams and their form.

Week 2

How Data is collected?

Students will be exposed to the different reasonings behind how data working and the scenarios in which they can use data to collect information.


Focus Groups

A focus group is a market research method that brings together a small group of people (6-10 people) in a room and provide feedback on; products, services or marketing campaigns.

Companies will lead a 30-90 minute discussion with the focus group, using a set of questions in order to gather information.

It is seen as fairly reliable as it comes directly from customers.

| Advantages | Disadvantages |
|---|---|
| Easy to see reactions of consumers | Not as in-depth as other types of research |
| Time saving as many things can be discussed at one time | Expensive – paying/compensating people to take part |



Week 3

Data Entry and Manipulation

Students will be looking at different data manipulation methods and using excel to input data and get an understanding of how they can be used through a practical demonstration and follow along.

| | A | B | C | D | E | F | G | H | I | |
|----|---|----------|--------------------|-------------------------------|-----------------------------|------------------------------|---------------------|-------------------|--------------------|-----------|
| 1 | | | | | | | | | | |
| 2 | | Product | Price Per Unit (£) | Number of Units Sold in March | Number of Units Sold in May | Number of Units Sold in July | Revenue - March (£) | Revenue - May (£) | Revenue - July (£) | |
| 3 | | T-Shirts | £9.99 | 65 | 76 | 118 | £649.35 | £759.24 | £1,178.82 | |
| 4 | | Hoodies | £17.89 | 42 | 36 | 20 | £751.38 | £644.04 | £357.80 | |
| 5 | | Joggers | £12.14 | 37 | 40 | 23 | £449.18 | £485.60 | £279.22 | |
| 6 | | Shorts | £14.49 | 32 | 41 | 72 | £463.68 | £594.09 | £1,043.28 | |
| 7 | | Trainers | £30.50 | 44 | 68 | 64 | £1,342.00 | £2,074.00 | £1,952.00 | |
| 8 | | Sliders | £8.70 | 18 | 25 | 54 | £156.60 | £217.50 | £469.80 | |
| 9 | | Hats | £10.40 | 11 | 14 | 33 | £114.40 | £145.60 | £343.20 | |
| 10 | | Coats | £24.99 | 48 | 31 | 6 | £1,199.52 | £774.69 | £149.94 | |
| 11 | | | | | | | Total Revenue (£) | £5,126.11 | £5,694.76 | £5,774.06 |
| 12 | | | | | | | Total Costs (£) | £1,700.00 | £2,200.00 | £2,600.00 |
| 13 | | | | | | | Total Profit (£) | £3,426.11 | £3,494.76 | £3,174.06 |



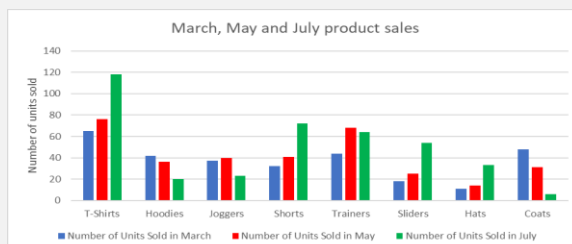
Year 8 ICT: Term 5 – Data Analysis



Week 4

Data Presentation

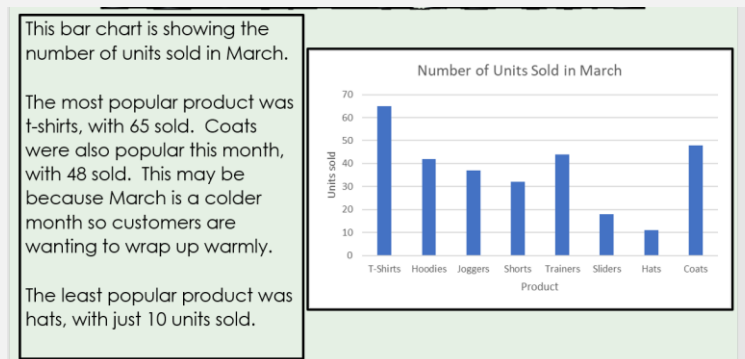
We will be developing charts/graphs to show the information based on the data entries from last lesson and developed out knowledge of excel and the features on it.



Week 5 + 6

Assessment Weeks

Students will be creating a how to excel guide and create charts and graphs based off a specific criteria.



Key words:

Data: facts and numbers used to analyse something or make decision.

Spreadsheet: a tool that is used to store, manipulate and analyse data.

Cell: the boxes in Excel used for data entry.

Column: the cells that run down an Excel document.

Row: the cells that run across an Excel document.

Chart/Graph: a visual representation of the data stored.

Week 1

| Questions | Answers |
|---------------------|---|
| What is data? | Data is a combination of letters, numbers, symbols and characters that a computer will use to carry out calculations or to read information. |
| Why do we use data? | <ul style="list-style-type: none"> Improve something that a company offers Help make decisions on things Identify problems before they become bigger ones Back up an argument or an opinion To see what works and what doesn't Keep track of what is happening Plan moving forward |



Week 2

| Questions | Answers |
|------------------------|--|
| How is data collected? | <ul style="list-style-type: none"> Tracking social media, discussion forums, reviews sites, blogs and other online channels. Surveys, questionnaires and forms. Focus groups (having a discussion about a product/service and recording it) and one-on-one interviews with customer. Direct observation of participants in a research study Experiments – Trialling products out and analysing outcome. |

Week 3

| Questions | Answers |
|--------------------------|--|
| What is a spreadsheet? | Spreadsheets are electronic documents in which data is arranged in the rows and columns of a grid and can be manipulated and used in calculations. |
| What is Microsoft Excel? | MS Excel is a package used to carry out data entry onto spreadsheets and to create charts, graphs and tables as a result for presentation. |
| What is a formula? | A formula is used to calculate values in a specific order within a spreadsheet. |



Year 8 ICT: Term 5 – Data Analysis

Week 4

| Questions | Guidance |
|---|--|
| What is a cell? | A cell is a unit where data or information is placed within MS Excel. Each cell has its own cell reference e.g. A1, B8 and C12. |
| Why do we use charts and graphs to display information? | We use charts and graphs as they are often a simple, but effective way to demonstrate the results of data collection e.g. how many people has a show size of 7 when collecting data of 1,000 people. |

Weeks 5 & 6

| Criteria | |
|---------------|---|
| Bronze | <ul style="list-style-type: none"> There is a positive attempt at creating a spreadsheet and formatting information, however some steps are not followed accurately. The detail included in the report and guide covers some areas well but is lacking consistency across the document. |
| Silver | <ul style="list-style-type: none"> Instructions have been followed fairly well and the layout of information in charts/graphs is easy to follow. Points provided in the data analysis and guide are relatively clear and provides reasoning for the client. |
| Gold | <ul style="list-style-type: none"> Students will be able to accurately follow instructions and produce an effective spreadsheet that uses charts, graphs and formulae to a high standard. The data analysis and created 'how to guide' outline clear justification behind outcomes and steps for how to carry out functions in Microsoft Excel. |

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