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GATHERING AND PREPARING DATA

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QUESTION 1.

In your own words, explain the difference between primary and secondary data in such a way that a 12 year old child could understand.

Primary data is: Data gathered from source, i.e. data collected by dealing with the people or company being analysed.

Secondary data is: Data which has been gathered by someone else. One of the most common sources of secondary data is the Office for National Statistics in the UK.

QUESTION 2.

One, of many issues with secondary data, is that the data will probably contain more information than you require. Investigate what the term 'filtering data' means. You can probably make an intelligent guess as to its meaning, but an important skill (one you will develop over time) is to be able to find the meanings of technical terms used within statistics. Some experts love to show the rest of us how clever they are by using 'techno babble'. Do what I do, ask them to explain in plain language what they mean!

Filtering means: The data you use should be 'fit for purpose'. This means you only want data that can be used to answer your research question. It is very easy to be distracted by irrelevant data.

QUESTION 3.

You have recently been promoted to Head of Data Analysis and one of your first jobs is to conduct Professional Development Review interviews with your team.

Seeing that you are new to the post, you decide you must get to know your team members and find out a bit about them. You want the interviews to be non-confrontational and the interviewees to feel comfortable and at ease.

You have three choices on where you can conduct the interviews: (a) the staff restaurant, (b) your office or (c) an interview room.

In the boxes below give the pros and cons of each of the venues.

	Pros	Cons
(a) Restaurant	Informal and public	Public, could be overheard
(b) Your office	Private	Could be intimidating
(c) Interview room	Private	Gives a formal atmosphere to the interview

QUESTION 4.

When designing a questionnaire you need to be careful not to ask 'leading questions'. In the box below explain what is meant by a 'leading question'.

A leading question is:

where you want the respondent to answer the question with a pre-determined answer which confirms your viewpoint.

QUESTION 5.

You have been asked to design a questionnaire to find out if people prefer your company's coffee to a competitor's. Decide which of the following, if any, are leading questions.

(a) What is your opinion of our coffee?	no
(b) Our coffee is expensive compared to our competitor's, but do you agree that you get what you pay for?	yes
(c) Do you agree that our coffee has a better taste than our competitor's?	yes
(d) How often do you drink coffee?	no

QUESTION 6.

In the box below explain why project management is important. You might like to consider the definition of PRINCE 2 given in the text.

I think project management is important because:

It provides a structure for the project. It provides a mechanism to divide the project into manageable 'chunks'. It provides an indicative timeline to ensure all phases are considered and completed in a timely fashion.

QUESTION 7.

A much talked about item is a project plan. Explain why a project plan is important. You could mention things like costing a project, ensuring tasks are performed in the right order and at the correct time, etc.

A project plan is important because:

It enables all aspects of the project to be identified. It provides an indicative timeline. It shows the time relationships between the various phases required for completion of the project.

QUESTION 8.

Government projects are well known for going over budget and over time. Write down some of the reasons why this state of affairs occurs and ultimately costs the taxpayer lots of their hard earned cash.

You might consider such things as the tendering process, lack of realistic costings, etc.

Government projects can go over budget and over time because:

Some companies deliberately under cost the project just to obtain the contract. It is difficult to accurately assess the future costs of commodities, labour, taxation, etc. A major contributor to the project could become bankrupt. Lack of contingency planning. Change of government and hence priorities.

QUESTION 9.

At the time of writing these questions, a popular television programme was 'Come Dine with Me'. It was where a group of people would compete with one another to see who could produce the best meal. Just for a bit of fun, imagine you are involved and are desperate to win. In order to ensure your success you decide to write a project plan. In the box below, write down the things you would consider including in your project plan. For example, what ingredients you would need, cooking times, etc.

To be the winner, I would need to:

Consider the tastes of the diners. Cost of ingredients and where to source them. Cooking times, preparation time. Drinks which complement the food. Serving the food in a timely manner.

MINI PROJECT

This mini project should tie all the ideas from the chapter together.

You have been approached by a construction company who want to build a wind farm in rural Berkshire. Around the proposed site there are a number of villages and a small quaint town. The company is conducting a feasibility study and want you to lead on the data collection aspect of the project. Your task, if you choose to take it, is to come up with a project plan detailing all aspects of the data collection. The data collection phase has to be completed within 3 months. They also want you to organise and implement the data collection. It is up to you how you collect the data, for example you might use questionnaires, focus groups, interviews or a combination of data collection methods, but you have to give a clear rationale for why you have chosen a particular method.

Although it is not your specialism, the company would also like some advice on how to analyse the data and have asked you to give them some ideas.

You should prepare a report using appropriate language for the project manager who only has a very basic knowledge of data collection and statistics.

The report should include an introduction, a summary (or abstract), the main body where you discuss the different data collection methods and give your rationale for choosing a particular approach and a recommendation. Your project plan should be an appendix to the main report.

And finally...

Remember to say to yourself every morning when you look in the mirror 'I love statistics!!!'.