



Assignment Title	Collecting Data	Date set	Spring 2	Hours	20																								
Summary of Unit 3			Key Words																										
To know the different methods to collecting data To know how to avoid bias and errors when collecting data and how to approach them if problems arise			Summary, population, sample, predict, reliability, replication, advantages, disadvantages, experimental, simulation, questionnaires, observation, reference, census, leading questions, bias, open questions, biased questions, validity, sensitivity, level of control, pre-test, pilot study, extraneous values, outliers																										
Prior Knowledge																													
Mr Khan asked the 22 students in his class what activity they wanted to do on a school trip. Here are the results.																													
<table><tr><td>bowling</td><td>swimming</td><td>roller skating</td><td>swimming</td></tr><tr><td>swimming</td><td>bowling</td><td>roller skating</td><td>roller skating</td></tr><tr><td>roller skating</td><td>swimming</td><td>roller skating</td><td>swimming</td></tr><tr><td>swimming</td><td>cinema</td><td>bowling</td><td>cinema</td></tr><tr><td>cinema</td><td>roller skating</td><td>swimming</td><td>swimming</td></tr><tr><td>swimming</td><td>bowling</td><td></td><td></td></tr></table>						bowling	swimming	roller skating	swimming	swimming	bowling	roller skating	roller skating	roller skating	swimming	roller skating	swimming	swimming	cinema	bowling	cinema	cinema	roller skating	swimming	swimming	swimming	bowling		
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(a) Complete the frequency table.																													
<table><tr><th>Activity</th><th>Tally</th><th>Frequency</th></tr><tr><td>bowling</td><td></td><td></td></tr><tr><td>swimming</td><td></td><td></td></tr><tr><td>roller skating</td><td></td><td></td></tr><tr><td>cinema</td><td></td><td></td></tr></table>						Activity	Tally	Frequency	bowling			swimming			roller skating			cinema											
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LEARNING JOURNEY

Level	Task Description
2-3	To be able to describe the following types of data and know the difference between them: discrete , continuous , quantitative and qualitative . To be able to group both discrete and continuous data.
2-3	To know the difference between primary and secondary data. To be able to state and understand the advantages and disadvantages of each.
4	Know the difference and identify between population , sample frame and sample and be able to identify each in context
4 - 6	Understand and explain how to use all different types of sampling . Know the advantages and disadvantages of each Be able to calculate a stratified sample for one category. Be able to calculate a stratified sample for more than one category (H) .
4	Know the key features of and design data collection sheets Write a hypothesis for an investigation.
4 – 5	Awareness of advantages/disadvantages of each data collection type. Understand why we use pilot studies . Know why and how we clean data .
4-5	Know the key features of interviews and questionnaires . Identify and write suitable questions. Use a random response question for sensitive questions.
5-6	Know the importance of identifying and controlling extraneous values . Use control groups and matched pairs(H) .
6 - 7	Apply Peterson capture/recapture formula to calculate estimate of the size of a population Know the assumptions associated with capture recapture.