**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 1**

Make a list of data that can be gathered from the monthly mobile phone bill. What useful information can be gained after this data is analysed?

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**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 2**

Classify these examples as EITHER primary data or secondary data.

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| John checked the bills and counted the number of customers who had placed an order for chicken burger at the counter. |  |
| Ahmed likes gaming apps. He checks a website to find out the list of apps that have received a rating of 5 stars. |  |
| Nancy takes the heights of her classmates at school and makes a record of their measurements. |  |
| Li Wei checks a website to find out the value of Chinese exports to the United Kingdom in 2015 and 2016. |  |

**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 3**

Alia wants to buy a fashionable case for her new mobile phone. She visits an online shop. What type of data will Alia get from each of the questions below?

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| What different types of materials are cases available in? |  |
| What is the price for each type of case? |  |

**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 4**

The owner of a retail outlet wants to find out the number of items sold last month. Will the data be discrete or continuous?

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**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 5**

Classify each of the following as EITHER discrete or continuous data.

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| Height of a student |  |
| Number of books |  |
| Time |  |
| Temperature |  |
| Shoe size |  |

**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 6**

Refer to Case Study 1 in the study guide. Working in pairs:

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| --- | --- |
| List down examples of 10 questions that will help David and Fatima to collect qualitative and quantitative data for getting the complete picture of their population’s shopping habits and preferences for clothes. |  |
| Classify your examples of quantitative data into discrete and continuous. |  |
| Also mention the method that you will use for data collection and state the reason for choosing your method. |  |

**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 7**

Find out when was the last time a census study was conducted in your country.

List five key items of information that are typically gathered by a census study.

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**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 8**

Bilal is conducting a research through which he wants to understand whether male and female school teachers adopt different teaching styles. His population consists of 12 schools in his small town. What sampling technique has been used by Bilal for the following two approaches?

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| --- | --- |
| He decides to select a sample with equal number of male and female teachers from all the 12 schools. |  |
| From the 12 schools, he decides to interview all teachers of only two schools A and B. School A is a boys’ school with all male teachers. School B is girls’ school with all female teachers. |  |

**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 9**

What level of data measurement is gender classification? Explain your answer

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**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 10**

Jiao and Waheeda are conducting a research on the gaming market. They decide to randomly interview 20 young male adults and 20 young female adults. They find that 13 males play games only on their mobile phones and 7 males play games only on their gaming consoles, while 15 females play games on their mobile phones and 5 females play games only on their gaming consoles.

Prepare a two-way table to present this data**.**

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**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 11**

Jiao and Waheeda collected the following data on the number of games bought in the past one month by 40 respondents.

2, 6, 14, 6, 7, 8, 9, 7, 9, 9, 2, 6, 8, 2, 12, 3, 2, 15, 10, 8, 7, 4, 20, 18, 19, 4, 10, 4, 3, 6, 18, 17, 1, 6, 4, 6, 3, 6, 5, 1

Tabulate the data showing tally marks and class frequencies.

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**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 12**

Jiao and Waheeda have also collected data on the number of games bought in the past one month by 40 respondents.

2, 6, 14, 6, 7, 8, 9, 7, 9, 9, 2, 6, 8, 2, 12, 3, 2, 15, 10, 8, 7, 4, 20, 18, 19, 4, 10, 4, 3, 6, 18, 17, 1, 6, 4, 6, 3, 6, 5, 1

Tabulate the data showing cumulative and relative frequency distribution.

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**ELEMENT 3: BUSINESS STATISTICS**

**Learning Outcome 3: ACTIVITY 13 - Class project**

Get into groups of 5-6 students. Let one student be a researcher who will conduct a focus group interview on a chosen subject, for example, fast food eating or sports interests. The researcher should prepare a questionnaire that should contain:

* one question for nominal level data measurement
* two questions for ordinal level data measurement
* two questions for interval level data measurement
* two questions for ratio level data measurement.

The researcher should record the entire focus group discussion on a recording device, for example, a mobile phone. The focus group should start by noting the name and gender of each participant. Thereafter the researcher should direct the discussion on each question by giving each participant an equal chance to express his or her opinion.

At the end of the discussion, the researcher should prepare a transcript (written version) of the entire recorded discussion. Using the written version, the researcher should record and classify relevant data against each question for each participant. The final report should be prepared as two-way and frequency distribution tables. The researcher should present this data to the class with the help of visual aids, such as acetate slides or a PowerPoint slideshow.