## 9015 Formative Assessment Workbook

### Formative Assessment 1

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| List three sources of secondary information |
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| List three sources of primary information |
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| List two sources of internal information |
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### Formative Assessment 2

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| How do we evaluate secondary information? List three questions |
|  |
| Who conducted the research? |
|  |
| Who provided the information? |
|  |
| Who reported the information? |
|  |
| What information was gathered? |
|  |
| When was the information gathered? |
|  |
| Where was the information gathered? |
|  |
| How was the information gathered? |
|  |

### Formative assessment 3

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| In a group, decide on a topic that you want to do research on. The topic has to relate to your place of work. Write down the aim of the research. |
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### Formative Assessment 4

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| List 3 ways of segmenting your customers. |
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### Formative Assessment 5

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| Explain the following terms: A population |
|  |
| A unit |
|  |
| A sample |
|  |
| A sampling frame |
|  |
| A variable |
|  |
| A probability sample |
|  |
| List 2 probability sampling techniques |
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### Formative assessment 6

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| In a group, determine the population group that you will target for your survey. Then determine the size of the sample as well as the market segment. |
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### Formative Assessment 7

The following example of a Likert scale is copyright James C McCroskey and may only be used for instructional purposes.

#### Personal Report of Communication Apprehension (PRCA-24)

Directions: This instrument is composed of 24 statements concerning your feelings about communication with other people. Please indicate in the space provided the degree to which each statement applies to you by marking whether you (1) Strongly Agree, (2) Agree, (3) Are Undecided, (4) Disagree, or (5) Strongly Disagree with each statement. There are no right or wrong answers. Many of the statements are similar to other statements. Do not be concerned about this. Work quickly, just record your first impression.

[ ] 1. I dislike participating in group discussions.

[ ] 2. Generally, I am comfortable while participating in a group discussion.

[ ] 3. I am tense and nervous while participating in group discussions.

[ ] 4. I like to get involved in group discussions.

[ ] 5. Engaging in a group discussion with new people makes me tense and nervous.

[ ] 6. I am calm and relaxed while participating in group discussions.

[ ] 7. Generally, I am nervous when I have to participate in a meeting.

[ ] 8. Usually I am calm and relaxed while participating in meetings.

[ ] 9. I am very calm and relaxed when I am called upon to express an opinion at a meeting.

[ ] 10. I am afraid to express myself at meetings.

[ ] 11. Communicating at meetings usually makes me uncomfortable.

[ ] 12. I am very relaxed when answering questions at a meeting.

[ ] 13. While participating in a conversation with a new acquaintance, I feel very nervous.

[ ] 14. I have no fear of speaking up in conversations.

[ ] 15. Ordinarily I am very tense and nervous in conversations.

[ ] 16. Ordinarily I am very calm and relaxed in conversations.

[ ] 17. While conversing with a new acquaintance, I feel very relaxed.

[ ] 18. I’m afraid to speak up in conversations.

[ ] 19. I have no fear of giving a speech.

[ ] 20. Certain parts of my body feel very tense and rigid while giving a speech.

[ ] 21. I feel relaxed while giving a speech.

[ ] 22. My thoughts become confused and jumbled when I am giving a speech.

[ ] 23. I face the prospect of giving a speech with confidence.

[ ] 24. While giving a speech I get so nervous, I forget facts I really know.

The Likert scale is often presented with the question in one column and the scores ‘SA’, ‘A’, ‘U’ or ‘N’, ‘D’ and ‘SD’ in another column which allows the respondent to circle the answer instead of entering a number.

The items scored on this Likert scale are ‘Group’ (your score in a group), ‘Meeting’ (your score in a meeting), ‘Dyadic’ (your score in a one-on-one encounter), ‘Public’ (your score in a public meeting) and ‘Overall (your overall score). The scoring is done as follows where the numbers in parentheses represent the numbers the respondent entered.

Group = 18 - (1) + (2) - (3) + (4) - (5) + (6)

Meeting = 18 - (7) + (8) + (9) - (10) - (11) + (12)

Dyadic = 18 - (13) + (14) - (15) + (16) + (17) - (18)

Public = 18 + (19) - (20) + (21) - (22) + (23) - (24)

Overall CA = Group + Meeting + Dyadic + Public

(Dyadic means person-to-person or one-to-one.)

### Formative assessment 8

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| In a group, decide how you will collect the information for your research project and who will do it. |
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### Formative assessment 9

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| In a group, draw up a list of at least six questions for your questionnaire |
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### Formative assessment 10

Use the other groups in the class as samples for your pilot survey. They must answer the questions drawn up in exercise 5 for your group.

### Formative assessment 11

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| In your group, look at the replies you received from the pilot survey. Is there anything you would change on the questionnaire? Make the changes to your questionnaire and indicate the changes below. |
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### Formative assessment 12

Each learner gets an opportunity to throw a dice once. Before any one throws, do the following:

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| --- | --- |
| Predict how many times the dice will land on 4 |  |
| Predict how many times the dice will land on 6 |  |

Note the number of times the dice falls on a number in the frequency table below, while the dice is being thrown.

|  |  |
| --- | --- |
| Outcome | Frequency |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |

Write the letters of the words VERY WELL on 8 cards and put them in a bag. Shuffle them well. Do the following:

|  |  |
| --- | --- |
| What is the probability for a V to be drawn? |  |
| What is the probability for an E to be drawn? |  |
| What is the probability for an R to be drawn? |  |
| What is the probability for a Y to be drawn? |  |
| What is the probability for a W to be drawn? |  |
| What is the probability for an L to be drawn? |  |

Divide into groups of eight. Each member draws a card. Note which letter it is. Put the card back and another member of the group draws a card. Note which letter it is. Continue until all the members of the group have drawn a card.

### Formative assessment 13

Suppose you write the letters of the words VERY WELL on 8 cards and put it in a bag.

Shuffle them well and draw a card and note which letter it is.

|  |  |
| --- | --- |
| What is the probability of drawing a card with a vowel on it from the bag? |  |
| What is the probability of drawing a card with a consonant on it from the bag? |  |
| What is the sum of the probabilities of drawing a vowel and drawing a consonant? (These events are mutually exclusive.) |  |

### Formative assessment 14

Make a list of all the possible outcomes if two coins A and B are tossed.

|  |  |
| --- | --- |
| If two coins are tossed 50 times, how many times do you expect to get two heads |  |
| If two coins are tossed 50 times, how many times do you expect to get one tail and one head? |  |

Make a list of all possible outcomes if two dices X and Y are rolled simultaneously.

|  |  |
| --- | --- |
| Make a list of the different outcomes of which the total is 6. |  |
| What is the probability that, if two dice are rolled simultaneously, the total is 6? |  |

### Formative assessment 15

Analyse the responses for the following questions:

|  |  |  |
| --- | --- | --- |
| Why do you use a taxi to and from work | Cheap | 1631 |
| Fast | 1091 |
| Safe | 312 |
| Convenient | 1849 |

If you sent out 2000 questionnaires, what percentage of the sample use taxis because they are cheap, what percentage use taxis because they are fast, what percentage use taxis because they are safe and what percentage use taxis because they are convenient?

|  |  |  |  |
| --- | --- | --- | --- |
| Cheap |  | | |
| Fast |  | | |
| Safe |  | | |
| Convenient |  | | |
| Which taxi route do you use every day? | | Route A | 755 |
| Route B | 830 |
| Route C | 415 |

What percentage uses Route A, Route B and Route C?

|  |  |
| --- | --- |
| Route A |  |
| Route B |  |
| Route C |  |

You would do this for all the questions.

On the basis of the above information, you can now make a decision as to whether there is actually place in the market for a new taxi service, or whether your improved service will satisfy a need with the customers.

### Formative assessment 16

In a group, analyse the responses to the questions that you received from the other group during your pilot survey. Write down your conclusions.

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### Formative assessment 17

Use the names of learners in your class and the number of children they have to complete the table on the following page:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Names of Learners in your class | Number of Children | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |
| 16 |  |  |  |  |  |  |
| 17 |  |  |  |  |  |  |
| 18 |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |
| 21 |  |  |  |  |  |  |
| 22 |  |  |  |  |  |  |

We would like to indicate how many learners (number of cases) fall within the class intervals.

The class intervals range from 0 – 1 child, 2 – 3 children etc.

|  |  |  |
| --- | --- | --- |
| **Class Interval** | **Tally (number of learners)** | **Number of children** |
| **0 - 1** |  |  |
| **2 - 3** |  |  |
| **4 - 5** |  |  |
| **6 and more** |  |  |
| **TOTAL:** |  |  |

What is the range of the data set?

|  |
| --- |
|  |
|  |

### Formative assessment 18

Study the chart on the next page and answer the questions below:

|  |  |
| --- | --- |
| How many ice creams were sold during January? |  |
| During which month were the most ice creams sold? |  |
| In which month were 70 ice creams sold? |  |
| What was the total number of ice creams sold for the period? |  |
| What is the range of the data set? |  |



### Formative assessment 19

0

10

20

30

40

50

60

70

80

90

100

Jan

Feb

March

April

May

The example above is a column chart indicating how many ice creams were sold from January to May. Study the column chart and answer the questions below

|  |  |
| --- | --- |
| What tendencies do you pick up from this graph? |  |
| When would be a good time to start a new ice cream business? |  |

### Formative assessment 20

|  |  |
| --- | --- |
| Which company sold most cars? |  |
| Which company sold the smallest percentage of cars? |  |
| How many cars did Chevrolet sell during 1996? |  |
| What is the range of the data set? |  |



### Formative assessment 21

In a group draw a column chart or a bar chart for the following information. Use the grid below to help you.

|  |  |  |
| --- | --- | --- |
| Why do you use a taxi to and from work |  |  |
|  |  |
|  |  |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2200 |  |  |  |  |
| 2000 |  |  |  |  |
| 1800 |  |  |  |  |
| 1600 |  |  |  |  |
| 1400 |  |  |  |  |
| 1200 |  |  |  |  |
| 1000 |  |  |  |  |
| 800 |  |  |  |  |
| 600 |  |  |  |  |
| 400 |  |  |  |  |
| 200 |  |  |  |  |
|  | Cheap | Fast | Safe | Conve-nient |

In a group, draw a pie chart for the following information. A total of 2000 replies were received. Use the pie below to help you.

|  |  |  |
| --- | --- | --- |
| Which taxi route do you use every day? | Route A | 755 |
| Route B | 830 |
| Route C | 415 |

In a group, display the information you collected during the survey that was conducted in the class in the form of a chart.

Ideally, your charts should look as follows:

Your information as a column chart



Your information as a bar chart



Pie Chart



### Formative assessment 22



In a group, refer to the correlation plot and discuss the following statement, noting your conclusions:

What conclusions do you come to regarding the relationship between the occurrence of HIV AIDS and access to primary health care?

### Formative assessment 23

In a group, do the following: In each case state which of the three statistics is not an appropriate description of the given data. Order the data and draw a histogram of the data to see how it is distributed. If it is evenly distributed, the mean is most probably the best summary. If not, consider the median. If there are many occurrences of the same value, consider using the mode.

|  |
| --- |
| 5 7 2 3 8 1 5 2 6 |
|  |
| 6 2 9 0 3 2 0 2 1 3 1 0 2 |
|  |
| 21 30 14 5 16 24 17 3 29 |
|  |
|  |
|  |
|  |