basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

COMPUTER APPLICATIONS TECHNOLOGY

GUIDELINES FOR PRACTICAL ASSESSMENT TASKS

LEARNER GUIDELINES

2021

These guidelines consist of 55 pages.

TABLE OF CONTENTS

TABLE OF FIGURES

1. What is the PAT?

The PAT (practical assessment task) is an individual research project that involves extended independent work. It provides an opportunity for you to demonstrate the skills you have acquired in the subject in terms of your:

- Research and information management skills
- Ability to use software applications and technologies to produce quality outputs

You will be provided with a very broad topic/scenario (see Section 3 – The topic) on which to base your PAT.

You need to:

- Analyse the broad topic/scenario and decide which issue/challenge/opportunity best aligns with your interests and where you believe you can find most data
- Provide a short description of the problem and the task
- Produce a single, clear, researchable focus question that will guide you through the task
- Produce a set of high-quality questions in order to begin and guide you through the investigation
- Search for, identify and evaluate possible sources of information to answer the questions you have formulated
- Gather quality information from the sources you have identified
- Set up a survey/questionnaire in order to gather data related to the task
- Design and create a spreadsheet and database which reflect the management, processing and analysis of data and information
- Create a report regarding your investigation with information that has been sifted, evaluated and summarised to present your findings
- Design a simple website which conveys information about the topic you investigated and your findings

The PAT will be done in THREE phases over the first THREE terms of the Grade 12 year:

Phase 1: Define the task and find, access and evaluate information needed to complete the task
Phase 2: Process data and information
Phase 3: Present information, solution, findings and conclusions

Your teacher will provide you with dates and deadlines for each phase. These are determined by the provincial and district structures of the education department. In the absence of a valid reason, non-compliance with the dates set could lead to you not being awarded the marks for the particular phase.

Valid reasons for not timeously completing the phases of the PAT include the following:

- Illness, supported by a valid medical certificate issued by a registered medical practitioner
- Humanitarian reasons, which include the death of an immediate family member, supported by a death certificate
- Your appearance in a court hearing, which must be supported by written evidence
- Any other reason that may be accepted as valid by the head of the assessment body or his/her representative

NOTE: The three phases are designed to ultimately combine to produce a word-processed report and a website that contain your findings and conclusions. Each phase therefore 'feeds' into the next phase. The development of the final report starts in Phase 1 and is added to and refined as you complete the phases. It is therefore critical to view the task as a series of linked tasks, so you need to picture or 'imagine' what your final 'product' or report will look like and manage your time appropriately.

2. Mark allocation

NOTE: **The PAT counts 25% of your final Grade 12 mark for CAT. It is therefore crucial that you strive to produce work of a high standard.**

PHASE	FOCUS	MAXIMUM	PERCENTAGE
Phase 1	Find and access data and information	32	21%
Phase 2	Process data and information	44	29%
Phase 3	Present information/solution	70	47%
Phase 3	Present information/solution – General	4	3%
	TOTAL	150	100%

NOTE: The final PAT mark is a compulsory component of the final certification mark (100) for all candidates registered for Computer Applications Technology.

Carefully read and take note of the sections referring to 'Dishonesty' (Section 7) and 'Non-compliance' (Section 8).

Your PAT could be moderated by provincial subject advisors and a sample could also be quality assured by Umalusi.

NOTE: **You need to complete and hand in any outstanding work for the PAT at least three weeks before the final CAT practical examination.**

3. The topic

TOPIC – UNLOCKING A RESILIENT FUTURE!

As the COVID-19 virus spread from late 2019 into 2021, governments limited large gatherings and advised people to practise social distancing. Restrictions caused by efforts to limit the spread of the virus changed practically every part of life and the way things used to be.

Figure 1: https://www.unido.org/news/covid-19-responding-crisis-building-better-future

The Coronavirus crisis has reshaped the world! Some sectors and individuals have implemented creative ICT solutions to adapt to new situations caused by the crisis.

Which transformations in response to the crisis may be here to stay? What are the positive lessons to be learnt? What creative solutions are possible? etc.

To discover more about the innovative ICT solutions or opportunities that arose in response to the Coronavirus crisis and challenges, your school wants you to conduct some research and look at how certain sectors are adapting by doing things differently. This would include sectors such as the:

- Education sector (e.g. schools, universities, colleges, learning resources)
- Corporate sector (e.g. entrepreneurial opportunities, digi-working/telecommuting, skills training, meetings)
- Trading sector (e.g. retailers, wholesalers, online shopping, express deliveries)
- Restaurant and catering sector (e.g. coffee shops, grab-n-go/pre-cooked meals)
- Travel and tourism sector (e.g. travel agents, airlines, hotels, bed and breakfast facilities)
- Entertainment sector (e.g. cinemas, clubs, music concerts, plays and live shows, art galleries, exhibitions)
- Sporting sector (e.g. gyms, parks, sports clubs, sport matches)
- Services sector (e.g. beauticians, hairdressers, health centres)
- Religious sector (e.g. places of worship, funerals, memorial services)

Your task is to:

- Investigate ONE of the sectors mentioned and their associated challenges related to a crisis (caused by the pandemic) at an international, national, provincial, local or school level
- Investigate how the sector you selected affects the community in terms of:
  - The existing problems and challenges we need to overcome in response to the crisis
  - Look at (partial) solutions for these challenges
  - Investigate community involvement in the solution to the challenge
- Gather and analyse data relevant to the challenge
- Identify possibilities that could address/solve the challenge
- Identify a suitable audience (such as the government, the school management team, a community forum, etc.) that you can present your research and findings to in a report that they could use or implement

NOTE:

- The focus of the PAT research **must be on ICT** and other solutions in response to the pandemic **and** the positive lessons learnt during the lockdown period.
- Some data is generally better processed in a spreadsheet rather than a database, and vice versa. For this reason, you should use different data and statistics for the spreadsheet and for the database. *In other words, your spreadsheet and database may NOT contain exactly the same data, where the spreadsheet is simply exported into a database table.* (You may, however, use some of the spreadsheet data in the database, if it is relevant, as long as you add some more data to the database.)

Figure 2: https://www.bbc.com/future/article/20200527-coronavirus-how-covid-19-could-redesign-our-world

- The spreadsheet **must also** contain data other than only the data gathered during your survey.[1]
- Statistics related to the number of COVID-19 infections, recoveries or deaths are **NOT required**.

---

[1] Please read the note about using 'external data' on page 21.

4. Overview of tasks

Phase 1

(Planning and sourcing of data and information, as well as critical assessment of information sources)

- Create a suitable folder structure.
- Formulate a task definition and a focus question.
- Draw up questions to guide the process/research.
- Identify sources to find quality information.
- Identify the research methods you will use.
- Perform background research.
- Critically assess information sources.
- Start the final report.
- Hand in Phase 1.

Phase 2

(Design and implementation of suitable tools for capturing and analysis of data)

- Draw up and conduct a questionnaire/survey.
- Design and use a spreadsheet and database to analyse the survey results and other data/statistics gathered.
- Continue refining the final report as needed.
- Hand in Phase 2.

Phase 3

(Findings, conclusions and reporting)

- Draw up findings, conclusions and recommendations in your own words.
- Complete the word processed report and create a website to report on the process, findings and recommendations.
- Hand in Phase 3.

5. General

For this project, you are expected to hand in your *own, original* work. You will show that your work is original by signing the declaration of authenticity (**ADDENDUM C**) after completing the PAT.

6.   What you will need to complete the PAT

To complete the tasks, you will need:

- An office suite with the following software:
  - o Word processing software
  - o Spreadsheet software
  - o Database software
- An HTML editor (e.g. Notepad++) and a web browser (e.g. Edge, Chrome or Firefox)
- Internet access to:
  - o Find data and information
  - o Administer electronic questionnaires, e.g. use e-mail to send questionnaires to respondents and receive completed questionnaires from respondents
- Access to other sources, such as printed media (e.g. magazines, newspapers, brochures, textbooks) or other electronic material (e.g. e-books, e-articles)
- Access to facilities to convert hard copies to electronic documents, e.g. scanner, digital camera, smartphone
- Storage media to store and backup your work electronically, e.g. flash drive, rewritable CD/DVD

7.   Dishonesty

Since the PAT is an individual project that is part of your final promotion mark, you may NOT:

- Get help from others without acknowledging this help
- Submit work which is not your own
- Lend your PAT work to other learners
- Allow other learners to access or use your own material (this does not mean that you may not lend books to or borrow books from another learner, but you may not plagiarise other learners' research)
- Include work directly copied from books, the internet or other sources without acknowledgement and recognition
- Submit work typed or word-processed by another person

The above actions constitute **dishonesty**, for which you will be penalised.

8.   Non-compliance

You will be given the opportunity to submit any outstanding work for the PAT as outlined in national and provincial documentation.

NOTE: The absence of a PAT mark for CAT, without a valid reason, will mean that you will not receive a result for CAT at the end of Grade 12. This would influence the publication of your final Grade 12 results.

9.   Preparation

1.   Ensure that you understand the information management content, such as:

- What a task definition is and how to formulate one
- How to formulate a focus question
- How to formulate research questions
- Different types of information sources
- How to evaluate information sources
- What a questionnaire is and how to compile one
- How to use application packages to process data and information
- Know what data is best processed in which application
- How to reference information and not commit plagiarism when compiling your report

2.   Choose an sector based on the overall topic and do some pre-reading regarding the sector before you start with Phase 1 in order to gain background knowledge about the sector and the challenges it faces or faced because of the pandemic.

3.   It could be helpful to complete a K-W-L-S chart after your pre-reading. See **ADDENDUM E**.

4.   Follow the instructions for each phase, create the documents requested and save them in the appropriate folders.

10.   Instructions for Phase 1

The purpose of this phase of the PAT is to first create a suitable and logical electronic folder structure in which to store your work, and then to:

- Determine what the problem is and what needs to be done – get 100% clarity
- Decide what the focus of your investigation will be
- Decide what data and information you will need for the project
- Determine where the information (sources) could be found
- Locate, evaluate and summarise the quality and relevance of information found in appropriate sources and add it to the report
- Begin to design the structure and layout of the final word processing report to be completed in Phase 3

Create a suitable folder structure

1.   Create an appropriate (electronic) folder structure in which to store your work as follows:

    - Create a main folder (your teacher may require you to name this in a specific way).
    - Within the main folder, each phase must have its own subfolder (you can/will add more subfolders to organise the work done in the different phases).
    - The names of the folders and files that you will store in them should be meaningful.

    NOTE:

    - All the documents that you create and the evidence that you collect must be saved in the appropriate folders.
    - The documents and folders must be organised in such a way that it is easy to navigate and find information.
    - **It is your responsibility to ensure that you keep a backup copy of all your work at all times.**

Create a report

Now start the report that will be used as the final product to communicate your findings and conclusions. Don't worry if you are unfamiliar with some of the 'headings'; you are simply putting together a 'skeleton' template or structure at this stage. You will add content (and other headings) to this report document throughout the course of the three phases of the PAT.

2.   Create a word-processed report that contains the following:

    - **A cover page**

      A professional-looking, well-structured, custom-made cover page using appropriate content controls in order to add:

      o   Your name and surname
      o   The name of your school
      o   The subject name and the PAT topic
      o   A content control for the abstract

    - **An automatic table of contents**

    - **An automatic table of figures**

- **Headings**

  You need to add the following provisional headings: *Table of Contents, Table of Figures, Introduction, Task Definition, Focus Question, Discussion and Analysis, Findings, Conclusion, Bibliography* and *Appendices.*

  NOTE: Some headings will not have any content until Phase 2 or 3.

- An **addendum** under the heading *Appendices* you created in your report **with a diagram or a screenshot** showing the folder structure, including any subfolders, used for Phase 1. Give it a suitable heading such as *'Folder Structure'* and paste the diagram or screenshot in this addendum.

- An **addendum** with the **declaration of authenticity** that will be used during all the phases.

HINTS:

- Apply the word processing skills you have learnt to produce a *professional-looking* document. While you will only be formally assessed on these aspects after completing your report in Phase 3, take note now of the style guide in **ADDENDUM B** of this document. This will save you a lot of time and effort at a later stage.

- Save the report in a suitable subfolder in your 'Phase 1' folder.

Define the task

To show that you understand why you are conducting this investigation, you must be able to define, *in your own words*, what you will investigate and what you are required to do (±300 words or half a page in font size 12 pt as a guideline). This is called the *task definition.*

3.   Your description should be added under the heading **Task Definition** (added in the previous section) and it must:

- Provide a clear statement of the problem (current situation), i.e. why you are doing this investigation
- Indicate the focus and the purpose of your investigation (desired outcome), i.e. give an overview of which of the aspects will be investigated and covered
- Specify in broad terms how you will approach the task (study the requirements of the PAT and indicate how you intend to collect the data and information, manipulate it, etc.)
- Identify a realistic target audience for the final report that will be drafted

Considering the guidelines above, use the following questions to help you write your own task definition:

- **What** is the current situation?
- **What** will be the focus and purpose (desired outcome) of my investigation?
- **How** will I go about the investigation considering all the PAT requirements?
- **Who** is the target audience?

NOTE: Keep in mind that (in the long term), when choosing the issue/challenge/ opportunity facing the sector, you will also need appropriate data and information (including a survey/questionnaire) which can be:

  - Processed using a spreadsheet
  - Captured and manipulated using queries and reports in a database

Determine the focus question

To manage and complete the task, you must have a clear focus.

4.   Considering the issue/challenge/opportunity facing the sector you have chosen and the requirements of the PAT, you need to set the focus for your investigation. To do this, you must set/ask **ONE question** (the **focus question**), which must clearly reflect what the main focus of your investigation will be. The 'answer(s)' to this question form(s) the 'solution' to the problem that will be reflected in your final report. This question should be added under the heading **Focus Question** (added in the previous section) and needs to be:

- A single sentence (NOT two questions or a paragraph)
- Clearly phrased, concise and researchable and must describe exactly the focus of the investigation within the broader issue/challenge/opportunity
- Clearly relevant to/be the focus point of the chosen issue/challenge/opportunity

Ask questions that will guide your investigation

To solve the problem and answer the focus question, you need to ask more questions to help you find appropriate data and information.

5.   First create a new addendum under the heading **Appendices** you created in your report. Give it a suitable heading such as 'Questions and Sources Table', and create the following table (also see **ADDENDUM D**):

No.	QUESTION	QUESTION LEVEL (1, 2, 3, 4)	CATEGORY	TYPE OF SOURCE	BIBLIOGRAPHICAL INFORMATION	QUALITY OF INFORMATION FOUND	SUMMARY OF INFORMATION FOUND
1							
...	...	...	...	...	...	...	...
10							

Figure 3: Example of Questions and Sources table

TIP: It might be useful to place this addendum in landscape format.
NOTE: You will fill in the required information in the various columns in this table as you progress through Phase 1.

6.   Read the focus question that you asked and need to answer. The focus question should guide you in identifying additional quality questions that will help you to find the data and information that you need. **In other words, what else do I need to find out (and that I do not know) BEFORE I start this task?** The K-W-L-S chart in **ADDENDUM E** may help in this regard.

7.   Compile and evaluate the list of questions (at least TEN) that show at least THREE of the four different levels of thinking, as follows:

LEVEL	TYPE OF LEVEL OR QUALITY OF QUESTION
①	Provide facts (who, when, where, what, how many, etc.)
②	Give direction to the investigation (why, how, etc.)
③	Support predictions or help with any changes, alternatives or variations (what if, if, etc.)
④	Support your judgement or help to evaluate, critique, review or find meaning (would it be better if, what recommendation, what would be best, etc.)

Figure 4: Levels of questions

NOTE: Fill in the questions (at least 10) and the level of each question in the source table, making sure that your (minimum of) TEN (10) questions collectively represent at least **THREE** of these four different types/levels.

8. Review your questions and categorise/group them under at least **THREE** categories. This is so that the information you gather in answer to these questions is logically grouped together. Add the category into which each question falls, e.g. 'Problem' or 'Solution', to the table. An example of a possible extract from this table (with the relevant details added) is shown below.

   NOTE: These categories will become headings, later in Phase 3.

   Some examples:

   Background: Which online solutions are available for education during a lockdown period?
   Problem: Many learners do not use the available online resources.
   Impact: Will online school resources help to improve education in the long term?
   Costs: What will it cost to get online school resources in my community?
   Solution: How can more stakeholders get involved to address the challenges that prevent learners from accessing online school resources?

   NOTE: Do NOT use the examples above verbatim.

No.	QUESTION	QUESTION LEVEL (1, 2, 3, 4)	CATEGORY	TYPE OF SOURCE
1	What is the most efficient way to conduct a survey?	2	Background	…
…	…	…	...	…
10	…	…	…	…

Figure 5: Questions and Sources table with a question and relevant details added

9. Rework or change the questions which you will then use to guide your investigation and finalise your list of:

   • **At least TEN questions** representing
   • **At least THREE levels** of questions types and
   • **At least THREE categories** of questions

Identifying sources

To solve the problem, you need to find and identify sources of data/information and gather quality data/information.

10. For EACH of the (minimum of) TEN questions you created (see point 7 on the previous page), locate **sources** to enable you to answer these questions by doing the following:

   • Identify a source to find the data/information for each question.
   • You must use the *internet* (at least TWO different websites) **plus** at least ONE other source, e.g. media (printed/electronic), such as newspapers, magazines, brochures, textbook, etc. or an expert (e-mail/interview), etc.
   • Provide bibliographical information for the sources you use **(at least TWO websites and ONE other source)** as follows:

o   For each <u>website</u>, record the following information:

WEBSITE SOURCE	
Author(s)/Organisation/Publisher	Amelia
Name of website/web page	ICT sector post-COVID-19
Date created/updated	16 April 2020
Date accessed	7 August 2020
URL	https://www.globalvoicegroup.com/the-ict-sector-post-covid-19-a-global-perspective/

Figure 6: Example of bibliographical information needed for a website

o   For each <u>other source</u>, such as books and magazines, record the following information:

OTHER SOURCE	
Author(s)	Park, Alice
Title of source	The Tech That Could Be Our Best Hope for Fighting COVID-19 — and Future Outbreaks
Date published/issued	19 May 2020
Publisher	Time

Figure 7: Example of bibliographical information needed for printed media

- Now add all this information in the appropriate columns in the Questions and Sources table you created. Modify the table as needed. You can also add the bibliographical information as sources in the word processing document. A **partial** example of how you could go about it is shown below.

NO.	QUES-TION	TYPE OF SOURCE	BIBLIOGRAPHICAL INFORMATION		...
1	...	Internet/ Website	**Authors(s)**	Amelia	...
			Name of website/ web page	ICT sector post-COVID-19	...
			Date created/ updated	16 April 2020	...
			Date accessed	7 August 2020	...
			URL	https://www.globalvoicegroup.com/the-ict-sector-post-covid-19-a-global-perspective/	...
2	...	Magazine	**Author(s)**	Park, Alice	...
			Title	The Tech That Could Be Our Best Hope for Fighting COVID-19 — and Future Outbreaks	...
			Date published	19 March 2020	...
			Publisher	Time	...
3	…	Internet/ Website	**Authors(s)**		...
			Name of website/ web page	…	...
			Date created/ updated	…	...
			Date accessed	…	...
			URL	…	...
4	…	Internet/ Website	….		...

Figure 8: Example of Questions and Sources table with bibliographical information added

TIP: You can already enter these details as *sources* in your report document using the referencing functions of the word processing program using a style such as APA or Harvard. If the details are included in the sources of your report document, you may add the citation only, as shown above. The bibliography with all the details must be included in your Phase 1 document should you choose to include only the citation in this table.

Once you have identified your sources (or during that process), you need to assess the potential quality of these sources of information in order to gather quality information.

11. For each of the THREE minimum sources you identified (at least TWO different websites plus at least ONE other source), you need to briefly evaluate the quality of the information using the following criteria:

CRITERIA	MOTIVATION/EXPLANATION
Authority	The 'validity' or 'credentials' of the publisher or author(s)
Currency	The date on which the material was published or updated
Accuracy	Correspondence of the information with other sources
Objectivity	Any presence of prejudice, bias, skewing of information, etc.
Coverage	How extensively the material covers the topic

Figure 9: Criteria for checking the quality of information on websites

NOTE: **One-word sentences will NOT be accepted.**

12. Now add all this information to the Questions and Sources table you created. Modify the table as needed. A partial example of how you could go about it is shown below and a more detailed version is provided in **ADDENDUM D**.

NO.		TYPE OF SOURCE	BIBLIOGRAPHICAL INFORMATION		QUALITY OF INFORMATION FOUND	
1	...	**Internet/ Website**	**Authors(s)**	Amelia	**Authority**	The author is world-renowned ICT specialist.
			Name of website/ web page	ICT sector post-COVID-19	**Currency**	The article was published in 2020 reflecting the latest programs available.
			Date created/ updated	16 July 2020	**Accuracy**	Information provided corresponds with other sources and is also accurate in terms of providing recent programs.

NO.		TYPE OF SOURCE	BIBLIOGRAPHICAL INFORMATION		QUALITY OF INFORMATION FOUND	
			Date accessed	7 August 2020	Objectivity	There is no bias on the web page and the information is presented in a factual, objective fashion.
			URL	https://www.global voicegroup.com/ the-ict-sector-post-covid-19-a-global-perspective/	Coverage	The article provides extensive coverage on a wide variety of programs available.
2	...	Magazine	Authors(s)	Park, Alice	Authority	…
			Title	The Tech That Could Be Our Best Hope for Fighting COVID-19 — and Future Outbreaks	Currency	…
			Date published	19 March 2020	Accuracy	…
			Publisher	Time	Objectivity	…
					Coverage	…
3	…	…	…	…	…	…

Figure 10: Example of Questions and Sources table with an example of criteria for quality information added

TIP: You can split the main table and create a separate table for the quality of the information if you find it easier to work with.

Engage with and use data and information

Now that you have identified and evaluated your potential sources of information, you can start to extract the relevant information and gain an understanding by **summarising** the information in your own words:

13. Gather all other information and data from the sources you identified, as follows:

- Save a copy (screenshot/copied content) of each website that you intend to use in an appropriate folder.

  TIP: You can use a free online service, such as PrintFriendly.com, to capture and save the contents of a web page in a single (PDF) file. You can then open or import the PDF file to MS Word, depending on the version you have.

- Process/Summarise the information to extract appropriate information that is relevant to your information requirements (you will need it to compile the final report in Phase 3).
- Record/Save the information in ONE of the following two ways:

  i. Copy the information and paste it in the relevant cells in the last column of the Questions and Sources table you created (the 'Summary of Information Found' column). An extract of this type of table is shown on the next page.

	TYPE OF SOURCE	BIBLIOGRAPHICAL INFORMATION		QUALITY OF INFORMATION FOUND		SUMMARY OF INFORMATION FOUND
...	Internet/ Website	Authors(s)	Amelia	Authority	The author is world-renowned ICT specialist.	• Top 10 applications • Innovative solutions • Helpful advice for online collaboration
		Name of website/ web page	ICT sector post-COVID-19	Currency	The article was published in 2020 reflecting the latest programs available.	
		Date created/ updated	16 April 2020	Accuracy	Information provided corresponds with other sources and is also accurate in terms of providing recent programs.	
		Date accessed	7 August 2020	Objectivity	There is no bias on the web page and the information is presented in a factual, objective fashion.	
		URL	https://www.global voicegroup.com/ the-ict-sector-post-covid-19-a-global-perspective/	Coverage	The article provides extensive coverage on a wide variety of programs available.	
...	...	...	...		...	
...	...	...	...		...	

Figure 11: Example of Questions and Sources table showing summarised information

    ii.   Store the summarised information for each question in word processing files in an appropriate folder and add hyperlinks to the files in the last column of the Questions and Sources table you created ('Summary of Information Found' column). An extract of this type of table is shown below. Note the last column.

	TYPE OF SOURCE	BIBLIOGRAPHICAL INFORMATION		QUALITY OF INFORMATION FOUND		SUMMARY OF INFORMATION FOUND
...	Internet/ Website	Authors(s)	…	Authority	…	Hyperlink to summary 1
		Name of website/ web page	…	Currency	…	
		Date created/ updated	…	Accuracy	…	
		Date accessed	…	Objectivity	…	
		URL	…	Coverage	…	
...	...	...	...		...	
...	...	...	...		...	

Figure 12: Example of Questions and Sources table showing links to summarised information

NOTE: You may find that you still need <u>additional</u> sources, in which case you need to add them (as outlined in steps 10–12).

              Bear in mind that the information you finally add in the report needs to be suitably referenced, i.e. you may NOT commit plagiarism.

Hand-in for Phase 1

Once you have completed Phase 1 of the project:

14.   Submit a copy of your entire PAT folder to your teacher.

The following should be in your Phase 1 subfolder:

A *single* report document typed using a word processing application that includes the following:

☐   A cover page with appropriate content controls to display your name and surname, the name of your school, the subject name and the PAT topic

☐   The following provisional headings: *Table of Contents, Table of Figures, Introduction, Task Definition, Focus Question, Discussion and Analysis, Findings, Conclusion, Bibliography* and *Appendices*

☐   Your task definition and focus question under the appropriate headings

☐   An addendum with a diagram/screenshot of the folder structure for Phase 1

☐   An addendum with the completed Questions and Sources table, with all the columns (see **ADDENDUM D** in this document for an example) filled in, with:

     ☐   A minimum of 10 questions, covering three categories of question types

     ☐   Sources for each question (from at least TWO different websites plus at least ONE other source)

     ☐   Appropriate bibliographical data for each question

     ☐   An assessment of the quality of the sources for each of the questions

     ☐   A summary of the content for each of the questions, either added in the table or in separate files with a hyperlink to each file

☐   An addendum with the declaration of authenticity

NOTE: Apply the word processing skills you have learnt to produce the report. Take note of the style guide in **ADDENDUM B** in this document.

Your teacher will give you the date on which to submit your Phase 1 work for assessment. If you are unable to meet the deadline set, then you will need to provide a valid reason.

Copy the report from this phase (Phase 1) to the relevant Phase 2 folder.

Ensure that all electronic and/or hard copies of all documents/files are available and organised into a logical folder structure, clearly named and easy to find/navigate.

11.   Instructions for Phase 2

The purpose of this phase of the PAT is to:

- Design, create and administer a suitable questionnaire/survey to gain relevant insights from respondents in terms of the task
- Create and use a suitably designed database and spreadsheet to analyse the data from the questionnaire/survey

Creating a questionnaire and conducting a survey

To collect data and information that will help answer your research questions and **that you may not find in other documented sources**, you need to create an electronic questionnaire. It needs to be skilfully and appropriately designed to ensure the easy and appropriate answering of questions, as well as accurate importing/capturing and processing of data and information.

Remember that your survey needs to gather data that will help to answer the research questions.

1.   The questions in the questionnaire should help you to gather data/information **regarding peoples' perceptions or experiences** (i.e. data/information not likely to be found in other sources, e.g. opinions and preferences).

   Brainstorm some topics whereby you can get feedback from people through a questionnaire regarding your specific focus question (from Phase 1). For some ideas, look at the examples on page 14.

2.   Think of the options available to you in terms of how you are going to administer the questionnaire for at least 25 respondents, trying to **reach a cross-section of people** in terms of age, gender, etc. This can be done by:

   - Creating a questionnaire in a word processor and either e-mailing it (or placing a link online) or getting different people in your school to answer them (saved under different file names). Note that the questionnaire must be created in a word processor first (to be handed in even if it is ultimately going to be conducted online).
   - Printing and distributing copies of the questionnaire OR
   - Creating an online version of the questionnaire you created using a word processor or by using an online tool such as an editable PDF document, Google Forms or SurveyMonkey, etc.

3.   Formulate at least FIVE questions, **excluding** biographical data (e.g. name, gender, age, address), as follows:

   - Ensure that all the questions are relevant and provide answers to questions that cannot be found in other sources.
   - Try to create questions where people can choose an answer from a list of possible answers (i.e. closed questions), as the responses to this type of question are often easier to record and process.
   - Keep in mind that processing the data from these questions will be done in either a spreadsheet or a database. Design your questions in such a way that they produce the appropriate data needed to answer the research questions.
   - Only include biographical data in your processing if it is relevant to the information needed to answer the research questions.

4. Design the layout of the questionnaire while bearing the following in mind:

- It must suit the way in which it will be administered, e.g. use content controls/form fields to enable respondents to complete the questionnaire electronically and for you to easily save the data/information.
- The questionnaire should be easy to interpret, with appropriate headings and clear instructions for users.
- Related questions should be grouped together under relevant headings.
- It must consist of a maximum of one page.
- You need to use professional formatting and layout (e.g. appropriate word processing) techniques.
- It is a good idea to get other learners to 'test' your survey to see whether it is easy. Remember that you should have at least 25 respondents. You need to store the completed questionnaires in an appropriate folder under Phase 2. In the case of an online survey, the results of these surveys must be downloaded and saved in an appropriate folder under Phase 2.
- Hard-copy questionnaires also need to be stored safely, preferably by scanning them and saving them in electronic format.

Using the data from the questionnaire together with data from other sources

- Identify data suitable for spreadsheet processing
- Identify data suitable for database processing
- Identify data from external sources that can be used in the spreadsheet or database

Example:

One of your research questions may enquire as to whether learners had internet data to do schoolwork during the lockdown period.

- To answer one of your research questions, you may want to compare the number of learners with inadequate data and other challenges regarding data in your school to the situation in the province/country/world.
  o You could perform various calculations using the data from your questionnaire, which gives you data from your respondents (e.g. how much data was needed or what expenditure was incurred in purchasing data), together with the information gathered from an external source which gives you data for the local, national or provincial situation.
  o Using these two sets of data may allow you to fully answer your research questions. Spreadsheets are better at processing 'number' data, so you will not repeat the calculation of these percentages/differences, etc. in the database.
  o Use data from the internet or other sources that have been processed already.
  o You are NOT required to obtain large amounts of external data, but rather to use some of the data already gathered. Decide on which of the data you have gathered will be better suited for processing in a spreadsheet and which of the data would be better suited for analysis and queries in a database.
- Should you wish to compare the type of data available to learners in your area as compared to the type of data available to learners in the rest of the country, you will again use data obtained from your questionnaire, together with data obtained elsewhere, but as you are not dealing with numbers in this case, the database would provide the most meaningful way to process this data.

- The data could be obtained from the same questionnaire, but would be processed using different applications, i.e. some questions would be analysed in the spreadsheet and other questions in the database. You may add more questions to your questionnaire, if necessary.
- You may wish to consider including more questions in your questionnaire to improve the quality of your research.
- Biographical data should only be used in the processing if it adds to the quality of your research in a meaningful way.

Process and analyse data in a spreadsheet

You now need to process and analyse all data (such as the number of people affected, as well questionnaire data, etc.) that may require the use of a spreadsheet and worksheets within the spreadsheet. **Use data suitable for spreadsheet processing, INCLUDING but NOT ONLY, data from the survey.**

5. Create a spreadsheet with a meaningful file name and save it in an appropriate subfolder in the Phase 2 folder.

6. Capture/Import/Copy any suitable data you sourced in Phase 1 that you need to process AND the data from your questionnaire to this spreadsheet.

    Ensure that:

    - Only relevant, appropriate data from the questionnaire/survey data is captured
    - Relevant, appropriate data other than the questionnaire/survey data is added
    - There are no processing errors/error indicators (formatting errors or inconsistencies) in the data

7. Design and format the spreadsheet with a good, user-friendly layout so that it is easy to read and interpret the data using appropriate formatting techniques:

    - Make sure the row and column headings/labels stand out, e.g. that they are formatted differently to other data
    - Use consistent colour, borders, wrapping and styles to format the spreadsheet
    - Ensure that the formatting makes it easy for anybody to interpret the data/results

8. Use filtering or sorting as needed on the data, **as well as** formulas and/or functions to process data and answer any data-related questions posed in Phase 1 (at least ONE from EACH level given below):

LEVEL	EXAMPLES OF FORMULAS/FUNCTIONS
①	Simple functions that only use/include a single cell range, e.g. SUM, MAX, MIN, COUNT, AVERAGE, MODE, MEDIAN, LEN, VALUE or a formula using any of the arithmetic operators (+, − , * , /)
②	Functions that include a cell range and one other parameter/condition, e.g. ROUND, LARGE, SMALL, LEFT, RIGHT, CONCATENATE, COUNTIF, SUMIF OR Calculations using a combination of arithmetic operators and brackets OR Calculations using a combination of any two simple functions from level ①
③	Functions that include a cell range plus two parameters/conditions, e.g. POWER, MID, FIND, COUNTIFS, SUMIFS, ROUNDUP, RANDBETWEEN or a simple IF-function or any of the DATE and TIME functions OR Any combination of more than two functions of arithmetic operators, brackets and other functions
④	A LOOKUP or nested IF-function or functions not specified in the CAT CAPS curriculum

Figure 13: Levels of complexity of spreadsheet functions

NOTE: No marks will be awarded for functions that do not produce meaningful or relevant information. In other words, you must be able to use the information obtained from these formulas and functions as findings or partial findings and conclusions in your final report.

If you are unsure of the level of functions, consult your teacher.

Indicate to your teacher if you have used functions not in the curriculum.

The types and complexities of spreadsheet functions and formulas needed are specified in more detail in the Assessment Instruments.

9. Summarise the results that you will use in the report on a **separate worksheet** within the same spreadsheet.

10. Create appropriate, meaningful graphs in your spreadsheet program that you will be able to use in your report to substantiate/support other information, claims or arguments, as follows:

- Apply the skills that you have learnt in CAT and Mathematics/Mathematical Literacy when creating the graphs.
- Use appropriate types of graphs and options.
- Ensure that the graphs are easy to read and interpret.
- You must have at least two relevant graphs, although more might be useful.

NOTE: You must be able to use the information obtained from these formulas, functions and graphs **as findings or partial findings and conclusions** in your final report.

11. Save the spreadsheet in your Phase 2 folder. Make sure that you use an appropriate file name.

Process and analyse data in a database

To enable further analysis of data and information you need to capture **appropriate, relevant data in a database** so that you can create queries and reports to support/substantiate the discussion of the problem or the recommendations/solutions.

12. Create a database with a meaningful file name and save it in an appropriate subfolder in the Phase 2 folder.

13. You need to create a table containing at least 5 fields to store data relevant to the tasks (e.g. other sources you identified in Phase 1 and from the survey), as follows:

- At least one table must be created with suitable data for a database (NOT a direct import from the spreadsheet). Use only the data from your survey which is suitable for the database, as you have already used different data in your spreadsheet.
- The table must contain at least 5 fields.
- All fields must have an appropriate/meaningful name and a suitable/meaningful description.
- Make sure that all fields contain single data units (e.g. separate fields for Name and Surname).

14. Use appropriate components/properties to ensure/promote accurate data capturing where appropriate, as follows:

- All text fields must be set to appropriate sizes.
- There must be at least one appropriate/meaningful validation rule and validation text.
- There must be at least one appropriate/meaningful list/combo box.
- There must be at least one appropriate/meaningful input mask.

15. Capture/Import/Copy at least 20 relevant records into the table. Ensure that:

- Only relevant, appropriate data is added/captured
- There are no formatting errors or inconsistencies in the data

16. Create queries (at least THREE) that will provide information that is meaningful or relevant to the task to process data and answer any data-related questions posed in Phase 1. Your queries (overall) need to show four different levels of complexity, as follows:

LEVEL	COMPLEXITY OF QUERY
①	Only fields with 1 simple criterion (e.g. 'X', >X, =X, not 'X', Is Null)
②	One field with combined criteria using conditions and relational operators (e.g. 'X' or 'Y', >1 and <10 or ranges such as 'Between 1 and 10') OR One field with a criterion including wild cards ('*' or '?')
③	Simple calculated field using arithmetic operators (+, − , * , /) OR Date and time functions/calculations
④	Complex calculated field (e.g. SUM, MIN, MAX, AVG, COUNT) OR Queries that use Grouping OR Queries that use logical (IF) functions or text functions OR Advanced functions that are not in the CAT CAPS curriculum

Figure 14: Levels of complexity of database queries

NOTE: No marks will be awarded for calculations in queries that do not produce meaningful or relevant information. In other words, you should be able to use the information obtained from these calculations as findings or partial findings and conclusions in your final report.

If you are unsure of the complexity levels of your queries, consult your teacher.

Indicate to your teacher if you have used features/functions not in the curriculum.

17. Create a database report (at least ONE) which will provide information that is meaningful or relevant to the task to process data and answer any data-related questions posed in Phase 1.

    Your report must:

    - Be sorted according to at least one field
    - Be grouped appropriately on at least one field
    - Contain at least one meaningful calculation using a function in the report footer/group section

    NOTE: You **must** be able to use the information obtained from these queries and report(s) **as findings and conclusions** in your final report.

Continue working on the report

18. Copy the report from Phase 1 to the relevant Phase 2 folder, if you have not done so already, and continue working on this report by adding your graphs under the *Findings* heading. You will need to expand this section (and other sections) in Phase 3.

Hand-in for Phase 2

Once you have completed Phase 2 of the project:

19. Submit a copy of your entire PAT folder to your teacher.

    The following should be in your Phase 2 folder:

    ☐ The original questionnaire you designed

    ☐ A **minimum of 25** completely answered questionnaires, saved in an appropriate folder under Phase 2. Hard-copy questionnaires also need to be safely stored. Consider scanning them and saving them in electronic format for safekeeping.

    ☐ The completed spreadsheet with the analysis of the data, including graphs

    ☐ The completed database with relevant queries and report(s)

    ☐ Your updated report with your graphs added under the *Findings* section

    Copy the report from this phase (Phase 2) to the relevant Phase 3 folder.

    NOTE: Your teacher will give you the date on which to submit your Phase 2 work for assessment. If you are unable to meet the deadline set, you will need to provide a valid reason.

12. Instructions for Phase 3

The purpose of this phase of the PAT is to:

- Interpret data and information, combine and remix the information to show *your own* understanding and insight and to answer the focus question
- Complete the report by using good word processing principles and techniques
- Create a website using HTML that takes into consideration appropriate layout, readability and other usability issues

Report

In order to communicate the knowledge and insight that you have gained, as well as the recommendations/solutions to the problem, you need to continue working on the report that you created in Phases 1 and 2 and add your findings and solutions. Use the data and information from Phase 2 and the understanding and insight that you have gained through your investigation to complete the report. Your report should, as a guide, consist of approximately 1 600–2 000 words (content only, excluding cover page, table of contents, references and graphics).

Your report needs to be, as a guide, 6–8 pages long with the following sections:

- A cover page
- An introduction
- Discussion and analysis
- The findings and conclusions
- Any appendices that are needed

Suitable headings must appear in these sections. The categories, created in Phase 1, now become headings.

1. Copy the report from Phase 2 to the relevant Phase 3 folder (if not done already).

2. Note that, over and above any specific instructions below, you need to apply the word processing skills you have learnt to produce a professional document. Take note of the style guide in **ADDENDUM B and the notes on referencing below**:

   Referencing

   o Using the information in Phase 1, add an automatically generated reference list/ bibliography using the features of your word processor. Ensure that sources used are referenced clearly and appropriately.
   o All the information you need should be found in the (summary) documents you created in Phases 1 and 2.
   o Any graphics from other sources must be acknowledged clearly and appropriately.
   o Automatic, appropriate captions must be inserted correctly for all tables/figures.
   o Make sure that you do not plagiarise, and use citations and/or footnotes appropriately using a referencing style such as Harvard or APA.

   NOTE: Your report must be written in **your own words**, except where information is correctly cited/acknowledged). You will be heavily penalised if you copy and paste large sections of text directly from the internet or any other source. Plagiarism is completely unacceptable. Be original and creative.

3. Complete the cover page.

    - You should have added a cover page in Phase 1. Ensure that you have a professional-looking, well-structured cover page using **appropriate content controls**, with:
        o Your name and surname
        o The name of your school
        o The subject name
        o The PAT topic you chose
    - Now add a meaningful abstract/extract in a suitable content control.

      An abstract is a brief summary (3–4 lines as a guideline) of the contents of the report. After reading the abstract, readers should be aware of the content of the report so that they can know, at a glance, whether or not they wish to read the full report.

      Note that the abstract is not an introduction to, but rather an overview of, the content and purpose of the report and should include a very brief mention of the findings.

      TIP: You are advised to recheck your abstract <u>after</u> you have completed the report.

4. Add an automatic table of contents and table of figures.

    - Add a provisional, automatically generated table of contents and table of figures once you have decided on the styles you are going to use for your headings.
    - Remember to update these tables once you have completed the report.

5. Write your introduction.

    - Give a clear overview and focus of the original problem.
    - Cleary state the focus and purpose of the investigation, pointing out which aspects you investigated.
    - Make sure you do not add any additional, unnecessary information.

    TIP: Consider your task definition and focus question when compiling your introduction but do <u>not</u> simply use them verbatim.

6. Discussion and analysis

    - You already have some headings added to your report but you may need to add additional headings and subheadings to the report as this will allow you to group the relevant information together in a logical fashion.
    - Add information from Phases 1 and 2 (summaries, questionnaire, spreadsheet and database) and all information/data/graphics (tables, graphs, charts, pictures) as needed. Make sure the data and information added are relevant to the investigation.
    - Adding hyperlinks:
        o Hyperlinks/Bookmarks must be used to navigate to other websites and external documents, e.g. the spreadsheet and database from Phase 2.
        o Hyperlinks to these external data/information sources must be easy to locate and recognise/'understand'.

7. Formulate your findings.

- You need to formulate as least THREE appropriate claims, arguments or findings that are appropriate and relevant to the investigation (as guided by your focus question).
- All these claims, arguments and findings must be:
  o Supported by relevant, appropriate data/information and a meaningful explanation of how or why the evidence supports these findings
  o Drawn from information presented in the report and address the original problem statement/focus in light of the evidence presented

8. Formulate your conclusion(s).

Your conclusion(s) must:

- Be meaningful and logical
- Address the original problem statement/focus in light of the evidence presented

The conclusion(s) should NOT contain new information that is not researched.

9. Once you have completed the report, do a final check in terms of the formatting and references covered in point 2 and remember to update the tables of contents and figures.

Website

In order to share the knowledge and insight you have gained with a broader audience, you need to create a website. This will serve as a 'summarised, visual' version of your report. Do not simply repeat the entire report in HTML format.

10. Create a website with a home page linked to at least **TWO** other web pages. Save it and all associated images in the relevant subfolder in your Phase 3 folder, using meaningful file names.

11. Your website should include at least the following:

- A title
- An introduction
- A functional navigation system
- Good quality information about the topic/your investigation, that is factually correct. The information should be well structured, using appropriate principles and techniques, such as headings, paragraphs, lists, horizontal lines, etc.
- Graphics and/or images
- Hyperlinks to other good quality information, where appropriate. These could also be the websites that you identified in Phase 1 as potential sources of information.

12. Ensure that your website is well laid out, readable and has a consistent appearance. It should be easy to skim/scan the website and to find important information.

13. Different elements/parts of the pages must be clearly distinguishable.

14. Graphics/Images should be relevant to the topic or purpose of the site, enhance understanding, display correctly and be of a high quality. They must be appropriately sized and cropped. It should also take into account visually impaired users.

15. Use good Standard English and ensure there are no spelling or grammar mistakes.

16. Acknowledge information and graphics used from other sources appropriately. See below.

- The following link on how to insert a citation in word processing may be helpful: https://support.microsoft.com/en-us/office/create-a-bibliography-citations-and-references-17686589-4824-4940-9c69-342c289fa2a5
- The following link on how to insert a citation in a website may be helpful: http://bit.ly/WebsitesHarvardReferencingGuide

Hand-in for Phase 3

Once you have completed this phase of the project, submit a copy of your entire PAT folder to your teacher:

The following should be in your Phase 3 folder:

☐ The word processing report you completed in this phase

☐ The website you created in this phase (home page linked to at least TWO other web pages), together with any resources needed for the website (graphics, etc.)

NOTE: You also need to complete and hand in the final declaration **(ADDENDUM C)**.

Your teacher will give you the date on which to submit your Phase 3 work for assessment. If you are unable to meet the deadline, you will need to provide a valid reason.

ADDENDUM A: ASSESSMENT TOOLS

ASSESSMENT TOOL – PHASE 1

LEARNER'S NAME: _____ **DATE HANDED IN:** _____

NOTE: This is a criterion-referenced tool and not a norm-referenced tool.

The teacher MUST highlight or tick applicable criteria in the second column. The number of ticks in this second column does not always determine the mark obtained in columns 4 to 8. Relate the criteria to the mark, e.g. in item 1, if answers to all 4 questions are evident, then a mark of 4 is awarded.

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
1	**TASK DEFINITION** Clearly describes, **in the learner's own words**, the intention of the task/project (PAT), i.e. shows a thorough understanding of the problem (what the problem is), what he/she needs to investigate and why he/she is doing the investigation. Provides a clear overview of the focus of his/her investigation and the aspects to be investigated and covered, as well as how he/she will go about it, to whom it must be presented and how it must be presented.							
	☐ What is the current situation? ☐ What will be the focus and purpose (desired outcome) of my investigation? ☐ How will I go about the investigation, considering all the PAT requirements? ☐ Who is the target audience for the final report? (Target audience should be realistic)	4	All 4 questions in the criteria clearly answered and in the learner's own words	Only 3 of the 4 questions in the criteria clearly answered and in the learner's own words	Only 2 of the 4 questions in the criteria clearly answered and in the learner's own words	Only 1 of the 4 questions in the criteria clearly answered and in the learner's own words	Not done **OR** None of the criteria clearly answered **OR** Any part of the task definition not in the learner's own words	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
2	**FOCUS QUESTION** A clearly phrased, concise, researchable question that describes exactly what the focus of the investigation will be within the broader scenario and that is relevant to what was given in the task description. (Will clearly direct the investigation and provide an indication of the scope)							
	☐ Clearly phrased, concise question ☐ Question will be researchable ☐ Single sentence ☐ Clearly relevant to/focus point of the scenario/topic	4	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	No focus question **OR** No discernible focus **OR** Not researchable	
3	**QUESTIONS – QUALITY (Questions to guide the research – This is NOT for the QUESTIONNAIRE.)** A minimum of **10 questions**, representing at least *three* of the four different levels (e.g. 'factual/closed', 'investigate/explore', 'predict/change', 'judge/evaluate') relevant to the topic, that will help to address the problem and provide a solution to the problem/focus question within the parameters of the PAT requirements, i.e. will provide qualitative as well as quantitative information. Questions are classified/categorised into a minimum of three groups.							
	☐ All questions provided are relevant to the topic and will help to address the problem ☐ Questions are representative of at least THREE different cognitive question levels ☐ All questions are grouped/classified under categories ☐ At least THREE different categories/groupings of questions	4	Clearly contains all 4 aspects	Clearly contains 3 of the 4 aspects	Clearly contains 2 of the 4 aspects	Clearly contains only 1 of the 4 aspects	None of the aspects have been addressed	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
4	**QUESTIONS – TECHNICAL ASPECTS** Technical aspects such as number of questions and sources indicated. Learner identified a variety of sources (at least THREE sources).							
	☐ Possible, appropriate source type (e.g. internet/printed media/people) indicated for each question ☐ At least 10 questions included Number of sources, *excluding questionnaire*: ☐ At least 2 websites identified as potential sources *plus* ☐ At least 1 other source from another type/media (e.g. magazine, newspaper, brochure, textbook – printed or electronic format), e-mail/interview with an expert	4	Clearly contains all 4 aspects	Clearly contains 3 of the 4 aspects	Clearly contains 2 of the 4 aspects	Clearly contains only 1 of the 4 aspects	None of the aspects have been addressed	
5	**SOURCES – BIBLIOGRAPHICAL INFORMATION** Appropriate sources identified to answer questions and source details clearly indicated for at least THREE sources listed as required.							
	Aspects/Criteria for websites: ☐ Authors(s) ☐ Name of website/web page ☐ Date created/updated ☐ Date accessed ☐ URL Relevant aspects/criteria for other types of sources: ☐ Authors(s) ☐ Title ☐ Date published ☐ Publisher etc.	4	All applicable aspects addressed for all 3 (minimum) sources	All applicable aspects addressed for at least 2 sources **OR** 4 or 5 aspects addressed for at least 3 sources	Applicable aspects addressed for at least 1 source **OR** 2 or 3 aspects addressed for at least 2 sources	Some applicable aspects addressed for at least 1 source	No source details provided **OR** No sources provided	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
6	**INFORMATION – EVALUATION** Table completed for at least **two websites and one other source**, clearly evaluating the quality of the source and its contents by providing a clear, relevant motivation/explanation for each aspect.							
	Aspects/Criteria: ☐ Authority ☐ Currency ☐ Accuracy ☐ Objectivity ☐ Coverage	4	All aspects clearly addressed and correctly motivated/ explained for all 3 sources	All aspects addressed for at least 2 sources **OR** 4 or 5 aspects addressed for all 3 sources	All aspects addressed for at least 1 source **OR** 2 or 3 aspects addressed for 2 sources	At least 2 of the 5 aspects clearly addressed and correctly motivated/ explained for all sources	Only 1 of the 5 aspects clearly and correctly done for all sources **OR** Not done for all sources **OR** One-word answers	
7	**INFORMATION – SUMMARY** Information from each source used is summarised in learner's own words. Summary gives information available in the source which is relevant to the topic and which will help to answer questions or is useful for solving the problem.							
	☐ Summaries are completed for all the questions ☐ Summaries give information available in the sources ☐ Information is relevant to the topic ☐ All summaries are in learner's own words	4	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the aspects clearly present **OR** Not done	

		CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
8		**PHASE 1 DOCUMENT** Single word processing document that contains all information required for Phase 1.							
	☐	Single report document present	4	Clearly contains all 4 aspects	Clearly contains 3 aspects	Clearly contains 2 of the 4 aspects	Clearly contains only 1 of the 4 aspects	No document	
	☐	Minimum headings present: Table of Contents, Table of Figures, Introduction, Task Definition, Focus Question, Discussion and Analysis, Findings, Conclusion, Bibliography and Appendices							
	☐	An addendum with a diagram/screenshot of the actual folder structure for Phase 1 is included							
	☐	Evidence of sources available: Completed table of Questions and Sources table with all the columns is present							
		TOTAL MARK FOR PHASE 1:	**32**					**MARK OBTAINED**	

Comment/Feedback:

_____

_____

Teacher name: _____ **Teacher signature:** _____ **Date:**_____

ASSESSMENT TOOL – PHASE 2

LEARNER NAME:_____   **DATE HANDED IN:**_____

NOTE: This is a criterion-referenced tool and not a norm-referenced tool.

The teacher MUST highlight or tick applicable criteria in the second column. The number of ticks in this second column does not always determine the mark obtained in columns 4 to 8. Relate the criteria to the mark, e.g. in item 1, if answers to all 4 questions are evident, then a mark of 4 is awarded.

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
1	**QUESTIONNAIRE – QUALITY** Well thought-out questionnaire that will provide answers to questions **not likely to be found in other sources** or that will lead to verifying, clarifying or supplementing other information. Some questions will also enable the processing of data using a spreadsheet and a database.							
	☐ Clear instructions guide users in the answering of questions ☐ Questions are relevant and mostly provide answers to questions **that cannot be found in other sources** or that supplement/verify/clarify ☐ Questions enabled processing in spreadsheet and/or database ☐ At least 25 completed questionnaires	**4**	Clearly contains all 4 aspects	Clearly contains 3 of the 4 aspects	Clearly contains 2 of the 4 aspects	Clearly contains 1 of the 4 aspects	No questionnaire **OR** None of the 4 aspects clearly present	
2	**QUESTIONNAIRE – TECHNICAL** Electronically created questionnaire, professionally and appropriately designed for the way in which it will be administered (online, e-mail or printed) (e.g. created in a word processing program using appropriate principles and techniques such as controls/form fields or created in Google Docs or an editable PDF format) that will ensure easy and appropriate answering of questions as well as accurate importing/capturing and processing of data and information.							
	☐ Form is created electronically, appropriate to the way it will be administered ☐ Appropriate questions grouped together under relevant headings ☐ At least 5 questions, excluding biographical data such as gender and age ☐ Professional formatting and layout (e.g. appropriate word processing techniques)	**4**	Clearly contains all 4 aspects	Clearly contains 3 of the 4 aspects	Clearly contains 2 of the 4 aspects	Clearly contains 1 of the 4 aspects	No questionnaire **OR** None of the 4 aspects clearly present	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
3	**SPREADSHEET – TECHNICAL** Well designed and formatted using appropriate formatting techniques (borders, shading, font alignment, etc.) with good layout and easy to read and interpret (row and column headings stand out). The format should contribute to readability, not hinder it.							
	☐ Separate worksheet for results ☐ Well-designed layout (headings and borders) ☐ Well formatted with appropriate, consistent formatting (e.g. freeze panes, conditional formatting, absolute cell referencing) ☐ Easy to read and interpret	4	Clearly contains all 4 aspects	Clearly contains 3 of the 4 aspects	Clearly contains 2 of the 4 aspects	Clearly contains only 1 of the 4 aspects	No spreadsheet **OR** None of the aspects clearly present	
4	**SPREADSHEET – QUALITY** Relevant data used. Processing is correct and relevant/appropriate and will answer questions, show trends/patterns, provide insights and contribute to the solution.							
	☐ Data suitable to a spreadsheet was collected and is captured, **excluding biographical data** ☐ Analysis includes relevant, appropriate data **other** than responses from the respondents to the questionnaire/survey data ☐ Spreadsheet **processing** and **analysis** of data is suitable to the solution/Appropriate functions used ☐ **Functions** applied and done correctly/No processing errors/error indicators/incorrect syntax	4	Clearly contains all 4 aspects	Clearly contains 3 of the 4 aspects	Clearly contains 2 of the 4 aspects	Clearly contains only 1 of the 4 aspects	Most data not relevant **OR** Majority of the processing not relevant or totally incorrect	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
5	**SPREADSHEET – GRAPHS**							
	At least TWO graphs that are relevant, meaningful and serve a purpose, are of the correct type and formatted to be easy to interpret (headings, labels, legends, etc.). The graphs will help to answer questions and contribute to the solution/explain aspects of the problem/solution.							
	☐ At least one relevant, meaningful graph present, that will **contribute** to the solution ☐ A second relevant meaningful graph that will **contribute** to the solution ☐ Appropriate types of graph(s) and options used ☐ Graph(s) easy to read and interpret	**4**	Clearly contains all 4 aspects	At least 3 aspects included	At least 2 aspects included	At least 1 aspect included	No charts/graphs **OR** None of the four aspects are included	
6	**SPREADSHEET – COMPLEXITY**							
	The following represent the four different levels of complexity of spreadsheet functions: ① Simple functions that only use/include a single cell range, e.g. SUM, MAX, MIN, COUNT, AVERAGE, MODE, MEDIAN, LEN, VALUE or a formula using any of the arithmetic operators (+, – ,*, /) ② Functions that include a cell range AND one other parameter/condition, e.g. ROUND, LARGE, SMALL, LEFT, RIGHT, CONCATENATE, COUNTIF, SUMIF OR Calculations using a combination of arithmetic operators and brackets, or calculations using a combination of any two simple functions from level ① ③ Functions that include a cell range PLUS two parameters/conditions, e.g. POWER, MID, FIND, COUNTIFS, SUMIFS, ROUNDUP, RANDBETWEEN or a simple IF-function or any of the Date and Time functions OR Any combination of more than two functions of arithmetic operators, brackets and other functions ④ A LOOKUP or nested IF-function or functions not in the CAT CAPS curriculum							
	☐ At least ONE meaningful calculation from level ①. ☐ At least ONE meaningful calculation from level ②. ☐ At least ONE meaningful calculation from level ③. ☐ At least ONE meaningful calculation from level ④. **NOTE:** Any incorrect/meaningless aspect/function does NOT qualify for consideration. List any function (where applicable) used that is not part of the curriculum.	**4**	Meaningful calculations using functions from all 4 levels (①, ②, ③ and ④)	Meaningful calculations using functions from any 3 different levels (①, ②, ③ or ④)	Meaningful calculations using functions from any 2 different levels (①, ②, ③ or ④)	Meaningful calculations using functions from only 1 level (①, ②, ③ or ④)	No spreadsheet **OR** No relevant, meaningful processing done	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
7	**DATABASE – BASIC DESIGN**							
	Well designed and formatted with appropriate data types, field names and field properties and each field contains one single piece of data (e.g. title, name, surname in three separate fields)							
	☐ At least one table created with suitable data for a database (**NOT** a direct import from the spreadsheet) ☐ Table contains at least 5 fields ☐ All fields have appropriate, meaningful names and a suitable/meaningful description ☐ All fields contain single data units (e.g. separate fields for Name and Surname)	**4**	All 4 aspects clearly present	At least 3 of the 4 aspects clearly present	At least 2 of the 4 aspects clearly present	Only 1 of the 4 aspects present	No database **OR** None of the 4 aspects present	
8	**DATABASE – VALIDATION**							
	Field properties/components to ensure accurate input/capturing of data							
	☐ All text fields are set to an appropriate size ☐ There is at least one appropriate validation rule and validation text ☐ There is at least one appropriate list/combo box ☐ There is at least one appropriate input mask	**4**	All 4 aspects clearly present	At least 3 of the 4 aspects clearly present	At least 2 of the 4 aspects clearly present	Only 1 of the 4 aspects present	No table **OR** None of the 4 aspects present	

		CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
9		**DATABASE – PROCESSING**							
		At least 20 records, plus THREE relevant, meaningful and correct queries that will inform/support the problem/solution.							
		NOTE: Incorrect/Meaningless queries or reports do NOT qualify for marks.							
	☐	At least 20 appropriate, relevant records in one or more tables	**4**	All 4 aspects clearly present	At least 3 of the 4 aspects clearly present	At least 2 of the 4 aspects clearly present	Only 1 of the 4 aspects present	No database **OR** None of the 4 aspects present	
	☐	At least ONE relevant query that is correct and meaningful and will inform/support the problem/ solution/demonstrate understanding of appropriate links							
	☐	At least ONE **other** relevant query that is correct and meaningful and will inform/support the problem/ solution/demonstrate understanding of appropriate links							
	☐	A third **other** relevant query that is correct and meaningful and will inform/support the problem/solution/demonstrate understanding of appropriate links							

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
10	**DATABASE – COMPLEXITY OF QUERIES**							
	The following represent the four different levels of complexity of database queries: ① Only fields with 1 simple criterion (e.g. 'X', >X, =X, not 'X', Is Null) ② One field with combined criteria using conditions and relational operators (e.g. 'X' or 'Y', >1 and <10 or ranges such as 'Between 1 and 10') OR One field with criterion including wild cards ('*' or '?') ③ Simple calculated field using arithmetic operators (+, – ,*, /) OR Date and Time functions/calculations ④ Complex calculated field (e.g. SUM, MIN, MAX, AVG, COUNT) OR queries that use Grouping OR queries that use logical (IF) or text functions OR advanced functions that are not in the CAT CAPS curriculum							
	☐ At least ONE meaningful aspect from level ①. ☐ At least ONE meaningful aspect from level ②. ☐ At least ONE meaningful aspect from level ③. ☐ At least ONE meaningful aspect from level ④. **NOTE:** Any incorrect/meaningless aspect/function does NOT qualify for consideration. List any function (where applicable) used that is not part of the curriculum.	4	Meaningful use of aspects from all 4 levels (①, ②, ③ and ④)	Meaningful use of aspects from any 3 different levels (①, ②, ③ or ④)	Meaningful use of aspects from any 2 different levels (①, ②, ③ or ④)	Meaningful use of aspects from only 1 level (①, ②, ③ or ④)	No database **OR** No relevant, meaningful queries done	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
11	**DATABASE – REPORT AND THE COMPLEXITY OF REPORT** At least one relevant, meaningful and correct report that informs/supports the problem/solution. Report should contain relevant and selective information ONLY – e.g. based on a query. **NOTE:** Any incorrect/meaningless aspect/function does NOT qualify for consideration.							
	☐ At least one relevant, meaningful and correct report ☐ Report sorted according to at least ONE field ☐ Report is grouped appropriately on at least ONE field ☐ Contains at least ONE meaningful calculation using a function (MIN, MAX, SUM, AVG, COUNT) in the report footer/group footer	**4**	Meaningful use of all 4 aspects	Meaningful use of any 3 aspects	Meaningful use of any 2 aspects	Meaningful use of any 1 aspect	No database **OR** No relevant, appropriate report(s)	
	TOTAL MARK FOR PHASE 2:	**44**					**MARK OBTAINED**	

Comment/Feedback:

_____

_____

Teacher name: _____ Teacher signature: _____ Date: _____

ASSESSMENT TOOL – PHASE 3

LEARNER NAME:_____   **DATE HANDED IN:** _____

NOTE: This is a criterion-referenced tool and not a norm-referenced tool.

The teacher MUST highlight or tick applicable criteria in the second column. The number of ticks in this second column does not always determine the mark obtained in columns 4 to 8. Relate the criteria to the mark, e.g. in item 1, if answers to all 4 questions are evident, then a mark of 4 is awarded.

REPORT

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
1	**REPORT – TECHNICAL ASPECTS – COVER PAGE**							
	☐ Cover page added correctly ☐ Appropriate content controls used where possible ☐ Name and surname, name of school and topic added ☐ Meaningful abstract/extract included (summary of problem/topic)	**4**	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects present	No cover page added **OR** No suitable control components	
2	**REPORT – TECHNICAL ASPECTS – HEADINGS** *(Note to teacher: Use the Navigation Pane to see the headings.)*							
	☐ Headings stand out clearly from other (body) text (typically 12–18 pt) ☐ Styles used to give headings due prominence ☐ Different levels of headings are clearly distinguished ☐ Heading styles used to ensure that headings are formatted in a consistent way	**4**	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the aspects present	
3	**REPORT – TECHNICAL ASPECTS – BODY TEXT**							
	☐ Appropriate line and paragraph spacing (no 'empty' paragraphs) used ☐ Consistent formatting throughout ☐ Body text is easily distinguished from headings ☐ All body text is left-aligned/justified	**4**	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the aspects present	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
4	**REPORT – TECHNICAL ASPECTS – PAGE LAYOUT**							
	☐ Automatic page numbering used ☐ Header/Footers/Page numbering set appropriately per section ☐ Page breaks used to start new pages ☐ Uses section breaks to start new sections, e.g. Appendices	**4**	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the aspects present	
5	**REPORT – TECHNICAL ASPECTS – EASE OF NAVIGATION**							
	Professional, well-structured document that is easy to navigate and in which information is easy to find.							
	☐ Updated, automatic table of contents, correctly inserted ☐ Other tables (tables, figures) and appendices correctly inserted in any way ☐ Hyperlinks/Bookmarks (other than the table of contents) used appropriately and correctly to navigate to other documents, e.g. spreadsheet and database ☐ Hyperlinks to external data/information sources, e.g. spreadsheet and database are easy to understand	**4**	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the 4 aspects clearly present **OR** Totally dysfunctional	
6	**REPORT – TECHNICAL ASPECTS – GENERAL PRESENTATION**							
	☐ Appropriate, readable fonts, size (10–12 pt) ☐ Not more than two fonts used ☐ Appropriate word spacing and basic punctuation used ☐ No spelling or grammar mistakes highlighted	**4**	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects present	None of the aspects present	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
7	**REPORT – PLAGIARISM AND CITATION ISSUES**							
	Presented in learner's own words with all sources cited and all graphics from other sources acknowledged. Signed declaration of authenticity is included.							
	☐ All sources used are clearly and appropriately acknowledged/citations added for all sources ☐ Graphics from other sources are clearly and appropriately acknowledged ☐ Citations present are added correctly ☐ A minimum of THREE citations added	4	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the aspects clearly present	
8	**REPORT – TECHNICAL ASPECTS – ACKNOWLEDGEMENTS AND EVIDENCE**							
	Professional, well-structured document that gives credit to sources used, using sound word processing functions, principles and techniques							
	☐ <u>Automatic</u> reference list/bibliography correctly inserted ☐ <u>Automatic</u>, appropriate captions correctly inserted for all tables/figures ☐ <u>Automatic</u> table of figures/diagrams added ☐ Supporting documentation added as part of document (appendices), clearly distinguishable from main document (e.g. different sections, restarting page numbers, descriptive headers/footers)	4	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the 4 aspects clearly present **OR** Not done	
9	**REPORT – INTRODUCTION**							
	Clear, concise introduction providing background information that tells the reader what the report is about. Clearly states the problem, purpose and the focus of the investigation. Answers the questions: What is the problem? What was the purpose of the investigation/Why did you do the investigation? What was your focus (which aspects did you investigate)?							
	☐ Clear overview and focus of the of problem given ☐ Purpose of the investigation clearly stated ☐ Clear focus in terms of which aspects were investigated ☐ No unnecessary, additional information added	4	All 4 aspects clearly stated and no other/ unnecessary information	Only 3 of the 4 aspects clearly stated with no other/ unnecessary information	Only 2 of the 4 aspects clearly stated	Only 1 of the 4 aspects clearly stated **OR** Only a copy of the task definition/focus question appears	None of the 4 aspects clearly stated	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
10	**REPORT – DISCUSSION (BODY) – ORGANISATION** Information used from Phases 1 and 2 are relevant to the investigation/supportive of different aspects within the investigation and the information is logically sequenced and flows naturally from one aspect to the next to ensure easy reading and clear understanding. Content is organised using appropriate headings.							
	☐ Only relevant, appropriate data/information used from Phases 1 and 2 ☐ Relevant information grouped together under the appropriate headings ☐ Information logically sequenced and flows naturally from one heading/paragraph to next ☐ All graphics used are relevant and appropriate	**4**	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the 4 aspects clearly present	
11	**REPORT – DISCUSSION AND ANALYSIS – ARGUMENTS, FINDINGS AND SUPPORTING INFORMATION** Discussion contains at least THREE relevant, appropriate findings/arguments/claims related to the investigation that are supported by data/information gathered and processed (charts/graphs/queries/reports, etc.) or manipulated (combined, integrated and synthesised from various sources) and includes a meaningful explanation of how or why the data/information supports the finding/argument/claim (connects data/information to argument/claim). The findings/recommendations convey knowledge gained and the learner's understanding of the problem and investigation, as well as some new/thoughtful ideas/insights that address the problem.							
	☐ At least THREE appropriate claims/arguments/findings that are appropriate and relevant to the investigation ☐ All claims/arguments/findings are supported by relevant, appropriate data/information (links to external data) ☐ Meaningful explanation of how or why the evidence supports the argument/claim and shows a clear understanding of the problem and investigation ☐ Findings/Recommendations include some new/thoughtful ideas/insights about the problem/investigation	**4**	All 4 aspects clearly present for all claims/arguments	Only 3 of the 4 aspects clearly present for most claims/arguments	Only 2 of the 4 aspects clearly present for all claims/arguments **OR** All 4 aspects clearly present for only 1 claim/argument	Only 1 aspect clearly present for all claims/arguments **OR** Only 2 aspects clearly present for some claims/arguments	None of the 4 aspects clearly present **OR** Not done **OR** Claims/arguments not meaningful/totally irrelevant	

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
12	**REPORT – CONCLUSION** Meaningful and logical conclusion drawn from the information and evidence presented, and addresses the original problem/investigation, appropriately summarised. Any new information presented at this point must have been appropriately investigated/researched, with supporting evidence.							
	☐ Conclusion present ☐ Conclusion drawn from information presented in report and addresses the original problem statement/focus in light of the evidence presented ☐ Conclusion is meaningful and logical ☐ Conclusion relevant to the focus question in Phase 1	**4**	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the 4 aspects clearly present **OR** No conclusion	
	TOTAL MARK FOR REPORT:	**48**					**MARK OBTAINED**	

WEBSITE

	CRITERIA/ASPECTS	Possible mark	4	3	2	1	0	Mark obtained
13	**WEBSITE – GENERAL ASPECTS**							
	☐ Saved as HTML and opens correctly – no errors ☐ Home page with title included ☐ At least TWO other web pages ☐ Style/Content suited to audience	4	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the 4 aspects clearly present **OR** No website	
14	**WEBSITE – ORGANISATION AND READABILITY** Correct grouping and structuring of elements and information. Layout and organisation enhance readability and understanding.							
	☐ Attractive and usable layout. Pages have consistent appearance (formatting, background, colours, layout, font, etc.) ☐ Related information grouped together ☐ Different elements/parts (e.g. header/banner/title, body/content, footer, credits) clearly distinguishable/ separated, e.g. using horizontal lines ☐ Techniques such as lists, tables, paragraphs and headings are used appropriately and correctly to structure information	4	All 4 aspects clearly present	Only 3 of the 4 aspects clearly present	Only 2 of the 4 aspects clearly present	Only 1 of the 4 aspects clearly present	None of the 4 aspects clearly present **OR** No website	

	CRITERIA/ASPECTS	Possible mark		3	2	1	0	Mark obtained
15	**WEBSITE – GRAPHICS AND ACCESSIBILITY**							
	Relevance, quality and accessibility of graphics							
	☐ All graphics are relevant to the topic/purpose of the site and are thoughtfully cropped/sized, are of high quality and enhance reader interest or understanding. ☐ There are no broken images (images display) ☐ All images have an ALT tag that describes the image and its link to ensure accessibility to visually impaired people	3	j	All 3 aspects clearly present	Only 2 of the 3 aspects clearly present	Only 1 of the 3 aspects clearly present	None of the 3 aspects clearly present **OR** No website	
16	**WEBSITE – NAVIGATION**							
	Functional, logical/intuitive and user-friendly navigation							
	☐ Working hyperlinks are used to create a navigation system which allows users to move from the home page to related pages and back ☐ Hyperlinks use meaningful descriptive text ☐ Navigation system is consistently placed throughout website	3		All 3 aspects clearly present	Only 2 of the 3 aspects clearly present	Only 1 of the 3 aspects clearly present	None of the 3 aspects clearly present **OR** No website	
17	**WEBSITE – INFORMATION – QUALITY**							
	Information presented in the website is relevant and factually correct, without unnecessary duplication of any information, to enable visitors to learn more about the topic/problem. References to other good quality information provided through functional hyperlinks.							
	☐ Information from the report included and appropriately adapted ☐ Demonstrates good understanding of the information/material included in the site, and additional, good quality information presented in functional hyperlinks ☐ Good language used, suited to target group with no spelling and grammar mistakes	3		All 3 aspects clearly present	Only 2 of the 3 aspects clearly present	Only 1 of the 3 aspects clearly present	None of the 3 aspects clearly present **OR** No website	

	CRITERIA/ASPECTS	Possible mark		3	2	1	0	Mark obtained
18	**WEBSITE – PLAGIARISM**							
	Guidelines followed that recognise material borrowed from other sources							
	☐ Three acknowledgements in the correct format inserted for any text content from other sources ☐ Graphics/Images/Graphs from other sources clearly acknowledged ☐ Clear, easy-to-locate and accurate citations/ acknowledgements for all borrowed material	3		All 3 aspects clearly present	Only 2 of the 3 aspects clearly present	Only 1 of the 3 aspects clearly present	None of the 3 aspects clearly present **OR** No website	
19	**WEBSITE – ADDITIONAL TAGS/FEATURES USED (OUTSIDE CURRICULUM)**							
	Learner demonstrates knowledge/skills not included in the curriculum, but that enhance the website							
	☐ Appropriate tag/aspect not specified in curriculum added (Specify): _____ ☐ Appropriate tag/aspect not specified in curriculum added (Specify): _____	2			The 2 aspects are clearly present	Only 1 of the 2 aspects clearly present	None of the 2 aspects clearly present **OR** No website	
	TOTAL MARK FOR WEBSITE:	22					**MARK OBTAINED**	

GENERAL

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
20	**EVIDENCE AND ORGANISATION OF ALL DOCUMENTS (ALL PHASES)** Format and organisation of material/evidence							
	☐ Electronic and/or hard copies of all documents (including evidence of sources) available ☐ All files organised into a logical folder structure (subfolders within each phase), clearly named ☐ Structure is easy to find/navigate ☐ Meaningful folder and file names used throughout	**4**	Clearly contains all 4 of the 4 aspects	Clearly contains 3 of the 4 aspects	Clearly contains 2 of the 4 aspects	Clearly contains 1 of the 4 aspects	No evidence **OR** Contains none of the 4 aspects	
	TOTAL MARK FOR GENERAL:	**4**					**MARK OBTAINED**	
	TOTAL MARK FOR PHASE 3:	**74**					**MARK OBTAINED**	

Comment/Feedback:

_____

_____

Teacher name: _____ **Teacher signature:** _____ **Date:** _____

LEARNER NAME: _____   **DATE:** _____

Assessment Summary

Phase	Focus	Maximum Mark	Mark Obtained		
1	Find and access data and information	32			
2	Process data and information	44			
3	Present information/solution – Report	48			
3	Present information/solution – Website	22			
3	Present information/solution – General	4			
	Total:	**150**	**/150**	**/100**	

Declaration of Authentication by Teacher

I hereby declare that, to the best of my knowledge, the work assessed is solely that of the learner (except where there is clear acknowledgement and record of any substantive advice/assistance given to the learner) concerned and that the work was conducted under supervised/controlled conditions to ensure that it has not been plagiarised, copied from someone else or previously submitted for assessment by anyone else.

Comment/Feedback:

_____

_____

Teacher name: _____   **Teacher signature:** _____   **Date:** _____

ADDENDUM B: STYLE GUIDE FOR WORD PROCESSING DOCUMENTS

Cover page

- Use appropriate content controls to display information.
- Text should be typed using appropriate font sizes.
- This should be the only page on which a page border is used.
- Avoid 'arty' borders and backgrounds/Do **NOT** use Word Art/Text Art.
- If a picture is used, the picture should be appropriate to the topic.

Headings

- The font used should be easy to read, e.g. Cambria or Calibri.
- The font size should vary between 12 pt to 18 pt.
- Ensure that headings stand out clearly from other text.
- Use heading styles where appropriate to ensure that headings are formatted in a consistent way.

Analysis and Discussion

- Use a font that is easy to read and that is the same as the heading font or matches the heading font, e.g. Cambria or Calibri.
- Do not use more than two different font types.
- Use appropriate word spacing and basic punctuation (i.e. one space after a full stop and comma).
- Font size should not be larger than 12 pt and not smaller than 10 pt.
- Ensure that different paragraphs are clearly distinguished.
- Use appropriate word processing principles and techniques to create white space and enhance readability (e.g. line and paragraph spacing).
- Ensure that all body text is formatted in a consistent way. Using styles would help to ensure consistency.
- Body text should be distinguished from headings.
- Body text should be left-aligned.

Paragraph formatting

- Use appropriate and consistent line and paragraph spacing throughout.
- Ensure there are no 'empty' paragraphs.
- Ensure that all text in the body is left-aligned.

Page layout

- Use word processing functions to add page numbers.
- Use page/section breaks to start new pages/sections, e.g. *Appendices.*
- Use bullets and numbering where appropriate to enhance readability.
- Use sufficient white space.
- Tables, graphs and other graphics should have appropriate captions.

General formatting and editing

- Keep it simple – this is not an art or design competition – it is the quality of the report and content that matter.
- Check the spelling and grammar of your document. Professional documents are error-free.

ADDENDUM C: LEARNER DECLARATION OF AUTHENTICITY

Learner name		**ID Number**	
Grade	12	**Year**	2021
Subject	Computer Applications Technology		
Practical Assessment Task (PAT)		**Teacher**	

Did you receive any help/information from anyone to complete this project?

☐ No   ☐ Yes (provide details below)

Help/Information received from (person):	Nature of the help/information (provide evidence):

I hereby declare that the contents of this assessment task are my own original work (except where there is clear acknowledgement and appropriate reference to the work of others) and that I have not plagiarised, copied from someone else or used work previously submitted for assessment by anyone.

_____   ___ / ___ / 2021

SIGNATURE OF LEARNER   DATE

ADDENDUM D: SAMPLE QUESTIONS AND SOURCES TABLE (PHASE 1)

NO.	QUESTION	QUESTION LEVEL (1, 2, 3, 4)	CATEGORY	TYPE OF SOURCE	BIBLIOGRAPHICAL INFORMATION		QUALITY OF INFORMATION FOUND		SUMMARY OF INFORMATION FOUND
1	…	…	…	Internet/ Website	Authors(s)	Amelia	Authority	…	<Hyperlink 1>
					Name of website/ web page	ICT sector post-COVID-19	Currency	…	
					Date created/updated	16 April 2020	Accuracy	…	
					Date accessed	7 August 2020	Objectivity	…	
					URL	https://www.globalvoicegroup. com/the-ict-sector-post-covid-19- a-global-perspective/	Coverage	…	
2	…	…	…	Magazine	Author(s)	Park, Alice	Authority	…	<Hyperlink 2>
					Title	The Tech That Could Be Our Best Hope for Fighting COVID-19 — and Future Outbreaks	Currency	…	
					Date published	19 May 2020	Accuracy	…	
					Publisher	Time	Objectivity	…	
3	…	…	…	…	…	…	…	…	…
…	…	…	…	…	…	…	…	…	…
…	…	…	…	…	…	…	…	…	…
…	…	…	…	…	…	…	…	…	…
10	…	…	…	…	…	…	…	…	…

ADDENDUM E: K-W-L-S CHART

Example of a K-W-L-S Chart			
K	**W**	**L**	**S**
What I already know	**What I want to know**	**What I learned**	**What I still want to learn**