basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

COMPUTER APPLICATIONS TECHNOLOGY

GUIDELINES FOR PRACTICAL ASSESSMENT TASKS

2014

These guidelines consist of 49 pages.

Copyright reserved

CONTENTS

What is the PAT? 4
Mark allocation 4
Topic 5
Overview of tasks 6
Phase 1 6
Phase 2 6
Phase 3 6
General 6
What you will need to complete the PAT? 7
Misconduct 7
Non-compliance 7
Preparation 8
Instructions for Phase 1 9
Define the task 9
Determine the focus question 9
Ask questions that will guide your investigation 9
Create a questionnaire 10
Gather information and data 11
Hand-in for Phase 1 12
Instructions for Phase 2 13
Engage with and use information and data 13
Process data and analyse questionnaire results 14
Generate queries and reports 14
Hand-in for Phase 2 15
Instructions for Phase 3 16
Report 16
Website 18
Hand-in for Phase 3 18
Assessment Tool - Phase 1 19
Assessment Tool - Phase 2 24
Assessment Tool - Phase 3 31
Annexure A 41
Style guide for word processing documents 41
Annexure B 42
Learner declaration – Phase ____ 42
Annexure C 43
Learner declaration of authenticity – Final PAT 43
Annexure D 44
K-W-L-S Chart 44
Guidance Notes for Teachers 45
What are the learners required to do and provide? 45

Copyright reserved

How will learners go about it? 45
Skills required 45
What must the learners be taught beforehand? 46
Misconduct 46
Learner authentication of the PAT 46
Role of the teacher 47
Supervised/Controlled Conditions 47
Managing the PAT 48
Assessment Evidence 48
Requirements 48
Non-compliance 49

What is the PAT?

The PAT (Practical Assessment Task) is an individual research project and involves extended independent work. It provides an opportunity to demonstrate your information management skills. You will also be required to demonstrate your ability to use the software applications and technology which you have studied during the year to produce quality outputs in the form of:

- A short description of the problem and the task
- A researchable focus question
- A set of *high quality* questions
- A list of appropriate information *sources*
- A questionnaire
- Sifting, evaluation and summary of *information*
- Management, processing and analysis of data and information (spreadsheet and database)
- A report regarding your investigation
- A simple website which conveys information about the topic you investigated

The PAT will be done in three phases:

- Phase 1: Find and access information
- Phase 2: Process data and information
- Phase 3: Present information/solution

Your teacher will provide you with dates and deadlines for each phase.

Mark allocation

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

Phase	Focus	Maximum Mark	Percentage (%)
Phase 1	Find and access data and information	36	20%
Phase 2	Process data and information	46	25%
Phase 3	Present information/solution	73	41%
General	Observation and overall evaluation	25	14%
	Total	**180**	**100**

The PAT mark is a compulsory component of the final certification mark for all candidates registered for Computer Applications Technology.

You need to complete the PAT before you start your final Grade 12 examinations. Refer to the '*What you need to complete the PAT' s*ection (page 7) in this regard.

Your PAT will be moderated by CAT subject experts and quality assured by UMALUSI.

Copyright reserved

Topic

Conservation

We do not inherit the earth from our ancestors; we borrow it from our children.
~Native American Proverb

Conservation is everyone's responsibility. Even if you don't spend a lot of time in nature or appreciate her beauty, everyone needs access to food, clothing, medicine, clean air and water, and a variety of other resources you depend upon every day. It is in everyone's best interest to try to conserve natural systems.

Your school wants to inform learners about conservation issues, the importance of conservation and create an awareness to address these issues.

The school management team wants you to investigate a conservation issue that may interest you. They also want a formal report regarding your investigation which they can use in their awareness campaign.

Your investigation should address a conservation issue/problem, the impact thereof, possible solutions and the role learners could play or any other interesting facts and statistics that will inform learners about this issue.

You must share information, such as the knowledge and insights that you gain through your investigation, by creating a website for fellow learners.

Copyright reserved

Overview of tasks

Phase 1

In this phase you will have to:

- Give a task definition.
- Formulate a focus question.
- Formulate other questions that will form part of a questionnaire.
- Identify sources to find *quality* information.
- Gather data and information.

Phase 2

In this phase you will have to:

- Evaluate and summarise *data* and *information* that you have found.
- Process and analyse the data gathered.
- Design and create a database.
    - Ideas for a database:
        - Endangered species/wetlands/ecosystems
        - Poaching statistics
        - Conservation events
        - Conservation organisations
        - Reserves or sanctuary areas
        - Any other relevant database information

Phase 3

In this phase you will have to:

- Critically analyse data and information, interpret, combine and adjust the information to show ***your*** understanding/solution/recommendation, and to answer the focus question.
- Type a structured, coherent report.
- Create a website to convey information regarding the topic and investigation and to provide tips for conservation.

General

- For each phase you are expected to hand in your *own, original* work. You will show that your work is original by
    - signing a declaration for each phase that all the work done is your own (**Annexure B**).
    - signing the final declaration of authenticity (**Annexure C**) after completing the PAT.

Copyright reserved

What you will need to complete the PAT?

To complete the tasks, you will need:

- An office suite with the following software
  - Word processing software
  - Spreadsheet software
  - Database software
- HTML editor (e.g. Notepad++) and web browser (e.g. Internet Explorer, Chrome or Firefox)
- Internet access to:
  - find data and information
  - 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

Misconduct

As 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 by another person

The above actions constitute misconduct, for which a penalty will be applied.

Non-compliance

You will be given the opportunity to submit outstanding work (or present yourself) for the PAT as outlined in National and Provincial documentation.

The absence of a PAT mark for CAT, without a valid reason, will mean that you will not receive a result for CAT.

Copyright reserved

Preparation

1. Ensure that you understand the Information Management content, e.g. what a task definition is and how to formulate one; how to formulate a focus question; how to formulate research questions; types of information sources; how to evaluate information; what a questionnaire is and how to compile one; how to process data and information and how to write a report.

2. Choose a topic and do some pre-reading regarding the topic before you start with Phase 1 to gain background knowledge about the topic.

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

4. Create an appropriate file structure to store your work. Within a main folder, each phase must have its own subfolder, with more subfolders to organise the work done in the different phases.

   All the documents that you created and the evidence that you collected must be saved in the appropriate folders. The documents and folders must have meaningful file names and 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.

5. Create a blank word processing document for Phase 1 in which to record your work in this phase. Give the document a sensible file name and save it in the folder created for Phase 1.

6. Create a blank word processing document for Phase 2 in which to record your work in this phase. Give the document a sensible file name and save it in the folder created for Phase 2.

7. Create a blank word processing document for Phase 3 which you will use to complete your report. Give the document a sensible file name and save it in the folder created for Phase 3.

8. Follow the instructions for each phase, create the documents requested (in number 5, 6 and 7 above) and save them in the appropriate folders.

Copyright reserved

Instructions for Phase 1

The purpose of this phase of the PAT is to determine:

- what the problem is and what needs to be done – get 100% clarity
- what the focus of your investigation will be
- what data and information you will need for the project
- where the information (sources) could be found

Define the task

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

1. Your description should

   - provide a clear statement of the problem (current situation) and the purpose of the investigation (desired outcome)
   - indicate the focus of your investigation, i.e. give an overview of aspects to be investigated and covered
   - indicate 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.)
   - who the target audience is
   - how you will present the information

   Use the following questions to help you write your own task definition:

   - **Why** am I doing the investigation?
   - **What** will the focus of my investigation be?
   - Considering the PAT requirements **how** will I go about the investigation?
   - **Who** is the information for (target audience)?
   - **How** must I present the information?

Determine the focus question

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

2. Considering the topic/scenario and the requirements of the PAT, set the focus for your investigation. You must ask **ONE** broad question. This question is called the **focus question** and must clearly describe exactly what the focus of your investigation will be.

   The answer to this question is the solution to the problem and must be reflected in your final report.

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.

3. Read the focus question that you need to answer. The focus question should guide you to identify additional *quality* questions that will help you to find the data and information that you need.

Copyright reserved

4. Keep in mind that you will also need appropriate data and information which can be

   - processed using a spreadsheet
   - saved and manipulated using a database – to create queries and reports.

5. Identify headings related to the investigation (at least FOUR) which you can use to organise your questions and information. Place each question under an appropriate heading.

6. Complete your list of questions (at least TEN).

7. Evaluate the *quality* of the questions. You need a variety of question types. Check for different types of questions or questions that show different levels of thinking, e.g. questions that will

   ① provide facts (who, when, where, what, how many, etc.)

   ② to give direction to the investigation (why, how, etc.)

   ③ support predictions or help with adjustments (what if, if, etc.)

   ④ support judgement or help to evaluate, critique, review or find meaning (would it be better if, what recommendation, what would be best, etc.)

   Collectively, your questions should represent at least ***THREE*** different types/levels.

8. Check your final list of headings and questions against the task definition and the focus question to make sure that you stay focused on the problem and the task.

9. Rework or change questions should it be necessary and finalise ***your*** list of headings (at least four) and questions (at least TEN) which ***you*** will then use to complete your investigation.

Create a questionnaire

To collect data and information that you may not find in other sources or to support data or information in other sources, you need to create a questionnaire.

10. The questions in the questionnaire should help you to gather data/information from people (i.e. data/information not likely found in other sources, e.g. opinions, preferences) such as

    - what the attitudes of people are towards conservation
    - what people know about the conservation of the aspect you are investigating

11. Remember that questions with only one answer or questions where people can choose an answer from a list are often easier to process.

12. Questionnaires are often easier to interpret when they have headings and clear instructions for users.

13. Design the questionnaire to suit the way in which it will be administered, e.g. use content controls/form fields to enable respondents to complete them electronically and for you to easily save the data.

Copyright reserved

Gather information and data

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

14. Use at least ***four*** headings (see number 5) with their relevant questions from your final list.

    - For *each* heading, complete a table such as the one below.
    - Start *each* heading on a new page of your word processing document.
    - You must have *at least* 10 questions in total.
    - Indicate the type or level of thinking for each question to show that you have thought about the *quality* of your questions.
    - For each question, write down a possible source where you are likely to find the information for that question (you need not give any details about the source at this stage).
    - Use the *Internet* (at least ***two*** different websites) **plus** at least one other source, e.g. media (printed or electronic) such as newspapers, magazines, brochures, textbook, etc. or expert (using e-mail or interview), etc. You should also use the questionnaire to collect data from people.

Heading: _____

No.	Question	Type/ Level	Possible source
1			
2			
3			
4			
5			
...			

Figure 1: Example of question and source table

15. Distribute the questionnaire to at least 20 people. Try and include a variety of people in this group in terms of e.g. age, etc.

16. Receive/collect/scan/photograph the questionnaires after they have been completed and save them in an appropriate folder. Ensure that each questionnaire has an appropriate (different) file name.

17. Save a copy (URL/Screenshot) of each website that you intend to use in an appropriate folder.

18. Gather all other information and data you will need to complete the project. Save electronic copies of the information and data.

19. Provide bibliographical information of the sources.

    - For each website, complete a table similar to the one shown below:

Source X	
Name van website	
Name van web page	
URL	
Authors)	
Date creates/updated	
Date accessed	

Figure 2: Example of source table – Website

- For each printed source, such as books and magazines, complete a table similar to the one below:

Source Y	
Title of book/magazine	
Article name/chapter/pages	
Author(s)	
Date published/issued	

Figure 3: Example of source table - printed media

20. Record all the information you need to create a list of references. (You could already enter these in your report document using the word processor's referencing functions.)

Hand-in for Phase 1

Once you have completed Phase 1 of the project:

21. Submit your entire PAT folder to your teacher. The following should be in your Phase 1 folder:

    A *single* document typed in a word processing application with

    - your task definition
    - a table with questions (see example above) for each of the headings
    - a table (see example above) for each website that you intend to use
    - a table for each other source (printed media) that you intend to use
    - the questionnaire that you used as an annexure to the document
    - the declaration for Phase 1 (Annexure B) as an annexure to the document

22. Copies of websites you intend to use; saved in the appropriate folder.

23. Copies of other sources that you intend to use (not the entire book, only the pages you need).

24. Copies of all the completed questionnaires

Your teacher will give you the date on which to submit your Phase 1 work for assessment.

Copyright reserved

Instructions for Phase 2

The purpose of this phase of the PAT is to:

- evaluate and summarise the quality and relevance of information found from *appropriate* sources.
- use the information found and gathered and create a database with relevant information that could be queried and provide reports.
- analyse the questionnaire results as well as any other data required in a spreadsheet
- analyse/manipulate other information gathered.

Engage with and use information and data

To be able to use the data and information to find a solution you first need to ensure that you have quality information. Engage critically with the data and information, extract the relevant information and gain an understanding by summarising the information in your own words:

1. Evaluate the *quality* of the information you found in the *sources* that you identified in Phase 1. For *each source* (e.g. website, article in magazine, etc.) complete a table similar to the one below to indicate that you examined the *quality* and *usefulness* of the ***information*** *provided in the source (content* of the sources that you are now going to ***use****)*.

   Note: You may not copy and paste any information from the websites or other sources into your Phase 2 document. If you do, you will not earn any marks for this section of the task.

Source name/title_____

Criteria	Motivation/ Explanation
Authority **The validity of the author**	
Currency **The date the website was updated**	
Accuracy **The correspondence of the data with other sources**	
Objectivity **Prejudice, bias, skewing of information**	
Coverage **The scope of the source**	
Summary of source information	

Figure 4: Example of information evaluation table

2. Make sure that you have evidence of the source(s) you used.

Process data and analyse questionnaire results

Process and analyse all data (questionnaire data, as well as other data such as costs) that may require the use of a spreadsheet.

3. Import/capture the data in a suitable format.

    - Use suitable formatting to ensure that anybody will be able to easily interpret the results.
        - Use formatting features such as colour, borders, wrapping and styles.
        - Make sure that column and row headings are formatted differently to other data.

4. Use formulae and/or functions to process data and answer the data related questions posed in Phase 1.

5. Summarise the results that you will use in the report on a separate sheet.

6. 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

    - Apply what you have learned in Mathematics/Mathematical Literacy when creating the graphs.
    - Ensure that the graphs are easy to read and interpret.
    - You should have a least two relevant graphs, although more would be useful.

7. Save the spreadsheet in your Phase 2 folder. Make sure that you use a meaningful file name.

Generate queries and reports

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/solution.

8. Create a database with a meaningful filename and save it in your Phase 2 folder. The information must be relevant to the investigation. See the section '*Overview of tasks'* for ideas.

    - Capture appropriate data (at least 20 records) that could be used to answer or support questions.
    - Make use of appropriate field names and data types as well as validation techniques to ensure that the data is captured correctly.
    - Create queries (at least **TWO**) and at least **ONE** report to provide information or answer questions — you should be able to use the information obtained from these queries and report/reports in your final report.

Note: The level and the quality of the processing in the spreadsheet as well as the database will be evaluated and marks assigned accordingly.

Hand-in for Phase 2

Once you have completed Phase 2 of the project:

9. Submit your entire PAT folder to your teacher. The following should be in your Phase 2 folder:
    - the completed spreadsheet with the analysis of the data
    - the completed database with relevant queries and report/reports
    - a *single* document typed in a word processor showing
        - a table (see *Figure 4: Example of information evaluation table*) with summaries of information and notes regarding the *quality* and usefulness of the *information*
        - summary and graphs from your spreadsheet
        - database with queries and report(s)
    - the declaration for Phase 2 (Annexure B) as an annexure to the document.

Your teacher will give you the date on which to submit your Phase 2 work for assessment.

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* understanding and insight and to answer the focus question.
- complete the report. Make use of good word processing principles and techniques. Use your own words.
- create a website using HTML that takes into consideration appropriate layout, readability and other usability issues.

Report

To be able to communicate the knowledge and insight that you have gained as well as the recommendation/solution to the problem you need to write a report (**6–10 pages**) on your investigation and findings:

1. Apply the word processing skills you have learnt to produce a *professional* document. Take note of the style guide – see **Annexure A**.

2. Your report must consist of the following

    - A cover page
      Create a professional looking, well-structured, custom-made cover page using appropriate content controls. The cover page must at least display the following:
        - your name and surname
        - the name of your school
        - the subject name
        - the PAT topic
        - the focus question
        - a meaningful abstract/extract
        - the date

    - A table of contents as well as other references/tables, such as a table of figures or a table of authorities, etc.

    - Content
      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 consist of approximately 1600 – 2000 words (content only, excluding cover page, table of contents, references and graphics). Use the following outline:

        - **Introduction**
          Provide background information that tells the reader what the report is about. Clearly state the problem, purpose and the focus of the investigation, i.e. answers the following questions
            - What is the problem?
            - What was the purpose of the investigation?
            - What was the focus/which aspects did you investigate?

- **Body**
  - Headings from Phases 1 and 2 with relevant, appropriate information under each heading discussing the investigation and findings as well as providing arguments/making claims. All arguments/claims must be supported by evidence from the investigation and motivated/explained.
  - Supporting evidence such as graphs, tables and data, where appropriate.
  - Interpret and integrate information where necessary.
  - Provide findings/recommendations that clearly and effectively address the original problem/focus question
  - Look at the sequence and flow of the information.
  - Provide citations and/or footnotes where appropriate.
  - The information you give *must* be written in your **own words**.
  - You will be heavily penalised if you copy and paste large chunks of text directly from the Internet or any other source. Plagiarism is completely unacceptable.
  - Be original and creative.

- **Conclusion**
  The conclusion should be drawn using the information and evidence presented and must address the original problem/focus question, appropriately summarised with no new information that you did not investigate.

- **List of references**
  - Make use of the reference function in your word processor in either the Harvard or APA referencing style.
  - The information you need should be found in the summary documents you created in Phase 1.

3. All information must be clearly cited where appropriate.

4. The declaration of authenticity as well as other supporting evidence added as appendices.

5. The different parts of the report (cover page, table of contents, appendices) must be clearly separated using appropriate word processing principles and techniques such as section breaks. Different appendices must be clearly distinguishable from the main document and each other.

6. Organise the information in any logical and coherent way.

7. Use of graphics and/or graphs
   - The graphics and/or graphs included must be meaningful and add value to the document.
   - Graphs, tables, data, summaries, etc. must be easy to read and interpret.
   - Provide captions.
   - Graphics obtained from the Internet or other sources must be acknowledged.

8. Use a word processing function to insert page numbers into the footer of the document. Page numbers should not be used on the title page and page numbers of sections each as annexures should restart and/or be formatted differently

Copyright reserved

Website

To be able to share the knowledge and insight you have gained with a broader audience you need to create a website

9. Create a website with at least a home page linked to at least **two** other pages. Save it in your Phase 3 folder making use of meaningful file names.

10. 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
    - hyperlinks to other good, quality information where appropriate.

11. 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.

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

13. 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, and should also consider visually impaired users.

14. Use good 'standard' English and ensure there are no spelling and grammar mistakes.

15. Acknowledge information and graphics used from other sources appropriately.

Hand-in for Phase 3

Once you have completed this phase of the project:

16. Submit your entire PAT folder to your teacher—make sure that the questionnaires, electronic copies of sources, web pages used as sources, report documents from Phase 1 and Phase 2, spreadsheet, database, report and website are saved correctly.

17. Ensure that you have completed the final declaration (**Annexure C**) as part of your report.

18. Hand in the file containing any hardcopy evidence you have collected and that has not been converted to electronic format.

Your teacher will give you the date on which to submit your Phase 3 work for assessment.

Copyright reserved

Assessment Tool - Phase 1

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

Note: This is a criterion-reference tool and not a norm-reference tool.
The teacher should 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 5 questions are evident, then a mark of 4 is awarded.

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
1	TASK DEFINITION (± 300 words/half a page) 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.							
	☐ Why am I doing the investigation? ☐ What will the focus of my investigation be? ☐ How will I go about the investigation considering the parameters of the PAT? ☐ Who is the target audience? ☐ In what format would my findings be presented?	4	• All 5 questions in the criteria are clearly answered and in learner's own words	• Only 4 of the 5 questions in the criteria are clearly answered and in learner's own words	• Only 3 of the 5 questions in the criteria are clearly answered and in learners own words	• Only 2 of the 5 questions in the criteria are clearly answered OR • Any 1 question is not clearly stated in learner's own words.	• Not done or • Fewer than 2 of the 5 questions in the criteria answered or • The questions are so vaguely answered that no discernible purpose can be found or • Task definition is not in learner's own words	

Copyright reserved

	CRITERIA	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 within the broader scenario will be 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, researchable question ☐ Provides clear focus and scope for directing the investigation ☐ Clearly relevant to scenario/topic	3		• All 3 aspects clearly present	• Only 2 of the 3 aspects clearly present	• Only 1 of the 3 aspects clearly present	• No focus question **or** • So vague that no discernible focus or direction can be found **or** • Not research-able	
3	QUESTIONS – QUALITY (Questions to guide the research – This is NOT for the QUESTIONNAIRE) A minimum of 10 questions, on at least ***three*** different levels (e.g. 'factual/closed', 'investigate/explore', 'predict/change', 'judge/evaluate') relevant to the focus question, that will help to answer the focus question 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.							
	☐ All questions provided are relevant to the focus question and will help to answer the focus question. ☐ Includes questions that will give data/statistical type answers, for example How many? How many times? How often? ☐ Includes a variety of questions (at least ***three*** questions on each of ***three*** different levels)	3		• Clearly contains all 3 aspects	• Clearly contains 2 of the 3 aspects	• Clearly contains only 1 of the 3 aspects	• No questions **or** • All three aspects inappropriate	
4	QUESTIONS – TECHNICAL ASPECTS Technical aspects such as organisation of questions, number of questions and sources indicated							
	☐ All organised under appropriate headings that are relevant to the topic (at least 4 headings) ☐ Possible appropriate source type (e.g. Internet/printed media/people) indicated for each question ☐ At least 10 questions included	3		• Clearly contains all 3 aspects	• Clearly contains 2 of the 3 aspects	• Clearly contains 1 of the 3 aspects	• Not done **or** • All 3 aspects inappropriate	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
5	QUESTIONNAIRE – QUALITY Well thought-out questionnaire that will provide answers to questions <u>not likely found in other sources</u> or that will lead to verifying, clarifying or supplementing other information. Some questions will enable the processing of data using a spreadsheet and a database							
	☐ All questions are relevant ☐ Questions mostly provide answers to questions <u>that cannot be found in other sources</u> or that supplement/verify/clarify ☐ Includes questions that will elicit data or statistical information (numerical, or that can be converted to numbers) ☐ Mostly new questions or derived from other questions (other questions broken down into data questions) ☐ Questions are grouped using appropriate headings ☐ Clear instructions guide users in the answering of questions	4	• Clearly contains all 6 aspects	• Clearly contains 5 of the 6 aspects	• Clearly contains 4 of the 6 aspects	• Clearly contains 3 of the 6 aspects	• No questionnaire or • Fewer than 3 of the 6 aspects clearly present	
6	QUESTIONNAIRE – TECHNICAL Electronically created questionnaire, professionally and appropriately designed according to the way in which it will be administered (online, via e-e-mail, or printed, e.g. created in word processor using appropriate principles and techniques such as controls/form fields or created in Google docs) 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 headings with appropriate questions. (Appropriate questions grouped together under relevant headings) ☐ Clear instructions/prompts to guide user ☐ Maximum one (1) page with at least 5 questions, excluding biographical data (e.g. name, gender, age, address) ☐ At least 20 completed forms ☐ Professional formatting and layout (e.g. appropriate word processing techniques) with no errors	4	• Clearly contains all 6 aspects	• Clearly contains 5 of the 6 aspects	• Clearly contains 4 of the 6 aspects	• Clearly contains 3 of the 6 aspects	• No questionnaire or • Contains fewer than 3 of the 6 aspects	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
7	EVIDENCE AND ORGANISATION OF DOCUMENTS Format and organisation of material/evidence							
	☐ Electronic and/or hard copies of all documents (including evidence of sources) available ☐ All organised into a logical folder structure, clearly named and easy to find/navigate ☐ Meaningful folder and file names used	2			• Clearly contains all 3 aspects	• Clearly contains 2 of the 3 aspects	• No evidence **or** • Contains fewer than 2 of the 3 aspects	
8	SOURCES – BIBLIOGRAPHICAL INFORMATION Appropriate sources identified to answer questions and source details clearly indicated for all sources as required by the type of source and referencing functions in word processor							
	☐ Source name ☐ Article name/webpage/chapter/pages ☐ Author ☐ URL (if obtained from web) ☐ Dates (created/ published/issued/ updated/accessed) ☐ Publisher	4	• Clearly provides all listed details – at least 5 or all 6 aspects for **all** sources	• Clearly provides at least 4 of the 6 listed details for **all** sources	• Clearly provides at least 3 of the 6 listed details for **all** sources • Two aspects omitted **or** • All listed details for any 1 source totally omitted	• Clearly provides at least 2 of the 6 listed details for **all** sources	• No source details **or** • Only 1 of the listed details provided for any 1 source **or** • Listed details for more than 1 source totally omitted	
9	SOURCES – TECHNICAL Learner identified a variety of sources (at least **three** sources, *excluding questionnaire*)							
	Number of sources*, excluding questionnaire*, ☐ 2 websites *plus* ☐ 1 from another type/media (e.g. magazine, newspaper, brochure, textbook – printed or electronic format), e-mail/ interview to an expert	2			• Correct number and variety of sources	• Too few **or** not an appropriate variety	• Not provided	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
10	PHASE 1 DOCUMENT One word processing document that contains all information required for Phase 1 (including a copy of the questionnaire as an annexure but excluding other information sources) and that provides hyperlinks to other files/evidence/sources to facilitate easy navigation and easy access to all other files/evidence/sources							
	☐ All required work/information for Phase 1 presented as a single (1) document ☐ Includes screen shot of folder structure ☐ Hyperlinks/bookmarks in document and/or source table lead to relevant information/sources and work/open correctly	3		• Clearly contains all 3 aspects	• Clearly contains 2 of the 3 aspects	• Clearly contains 1 of the 3 aspects	• No document	
11	PHASE 1 DOCUMENT – TECHNICAL QUALITY Professional presentation that uses sound and correct word processing principles and techniques							
	Well structured, legible, professional document: ☐ Appropriate, readable fonts, size and number (not more than two). Headings given due prominence (also in tables) ☐ Appropriate line and paragraph spacing (no 'empty' paragraphs) ☐ Appropriate word spacing (not two or more spaces between words or after punctuation marks) and punctuation (period at end of sentence, capital letter at beginning of sentence) ☐ No spelling or grammar mistakes ☐ Consistent formatting throughout	4	• Clearly contains all 5 aspects	• Clearly contains 4 of the 5 aspects	• Clearly contains 3 of the 5 aspects	• Clearly contains 2 of the 5 aspects	• No document **or** • Contains fewer than 2 of the 5 aspects **or** • Totally unstructured, not readable or unprofessional	
	TOTAL MARK:	36					MARK OBTAINED	

Comment/feedback:

_____

_____

Teacher name: _____ Teacher signature: _____ Date: _____

Assessment Tool - Phase 2

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

Note: This is a criterion-reference tool and not a norm-reference tool.
The teacher should 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 5 questions are evident, then a mark of 4 is awarded.

	CRITERIA	Possible mark	4	3	2	1	0	Mark
1	INFORMATION – EVALUATION A table has been completed for each source, clearly evaluating the quality of the source and its contents by providing a clear, relevant motivation/explanation for each aspect							
	☐ Authority ☐ Currency ☐ Accuracy ☐ Objectivity ☐ Coverage	4	• All 5 aspects clearly addressed and correctly motivated/ explained for **all** sources	• At least 4 of the 5 aspects clearly addressed and correctly motivated/ explained for **all** sources	• At least 3 of the 5 aspects clearly addressed and correctly motivated/ explained for **all** sources	• At least 2 of the 5 aspects clearly addressed and correctly motivated/ explained for **all** sources	• Fewer than 2 of the 5 aspects clearly and correctly done for **all** sources • Not done for **all** sources	
2	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.							
	☐ Summary of information – for all sources used ☐ All summarised information is relevant to the topic and likely to answer questions/help solve the problem/demonstrate understanding of clear links	4	• Both aspects clearly present and all summaries are definitely learner's own words	• Only 1 of the 2 aspects clearly present and summaries provided are learner's own words	• Both aspects clearly present but any part of any 1 summary is not in learner's own words	• Both aspects clearly present but any part of more than 1 summary is not learner's own words	• Neither of the 2 aspects clearly present **or** • Mostly not learner's own words **or** • Not done	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark
3	SPREADSHEET – TECHNICAL Well designed and formatted using appropriate formatting techniques (borders, shading, font alignment, etc.) with good layout and is easy to read and interpret, (row and column headings stand out). The format should contribute to readability, not hinder it.							
	☐ Well designed and formatted ☐ Good layout, easy to read and interpret	2			• Both aspects clearly present	• Only 1 of the 2 aspects clearly present	• No spreadsheet **or** • Neither of the 2 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.							
	☐ Relevant, appropriate data collected and captured ☐ Relevant/appropriate processing and analysis of data ☐ Analysis includes relevant, appropriate data other than the questionnaire/survey data ☐ No processing errors/error indicators	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 appropriate/ relevant or totally incorrect	
5	SPREADSHEET – GRAPHS Graphs 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 two relevant, meaningful graphs, correctly done that will contribute to the solution ☐ Correct type of graph used ☐ Easy to interpret	4	• Clearly contains all 3 aspects	• At least 2 graphs are meaningful and contribute to the solution but either 1 is of the incorrect type or not easy to interpret	• Only 1 meaningful graph of the correct type that contributes to the solution and is easy to interpret	• Only 1 meaningful graph that contributes to the solution but is either not easy to interpret or of the incorrect type	• No chart/graph or • No relevant, meaningful graph	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark
6	SPREADSHEET – COMPLEXITY Level of relevant, meaningful processing done correctly							
	① Simple functions that only include a range/list of cell references/values/list of text (e.g. SUM, MAX, MIN, COUNT, AVERAGE, MODE, MEDIAN, CONCATENATE, LEN, VALUE) **or** formula to substitute any one of these functions **or** simple calculations using only one arithmetic operator (+, – ,*, /) ② Functions that include a range/text/values/list of cell references/list of text *plus* one parameter/criterion (e.g. ROUND, LARGE, SMALL, LEFT, RIGHT), **or** functions using range/text/list of cell references/values *plus* criterion with one relational operator (e.g. COUNTIF, SUMIF) **or** calculations using a combination of arithmetic operators, brackets **or** calculations using a combination of any two simple functions at level ① ③ Functions including a range/text/list of cell references/list *plus* two parameters/criteria (e.g. POWER, MID, FIND) **or** simple IF function (IF(test, true, false)) **or** a combination of more than two functions **or** calculations using a combination of arithmetic operators, brackets *and* other functions **or** calculations using date/time functions **or** variations of known functions (e.g. ROUNDUP, RANDBETWEEN, TEXT, MAXA) ④ Lookup or nested If function /If function using Boolean operators **or** complex calculations (e.g. combine functions and arithmetic/relational operators) **or** functions not in curriculum	4	• At least 1 instance of relevant, meaningful[1] processing each at level ③ and level ④, done correctly	• At least 1 instance of relevant, meaningful processing each at level ② and level ③, done correctly	• At least 1 instance of relevant, meaningful processing at level ② done correctly	• Relevant, meaningful, correct processing done at level ① only	• No spreadsheet or • No relevant, meaningful processing done	

[1] Must be able to answer questions/contribute to solving the problem/demonstrates understanding of appropriate links

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark
7	DATABASE – DESIGN Well designed and formatted with appropriate data types, field names and field properties/components to ensure accurate input/capturing of data. A single field contains one piece of data (e.g. title, name, surname in three separate fields)							
	☐ At least 20 appropriate, relevant records in 1 or more tables ☐ All fields have appropriate names, data types and size ☐ All fields use appropriate components/ properties to ensure accurate capturing where appropriate ☐ All fields contain single pieces (entities)	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 clearly present	• No database or • None of the 4 aspects clearly present	
8	DATABASE – PROCESSING At least two relevant, meaningful queries and one relevant, meaningful report that are correct and will inform/support the problem/solution. (NB: Incorrect/meaningless queries or reports do not qualify for marks)							
	☐ At least two relevant queries that are correct and meaningful and will inform/support the problem/ solution/ demonstrate understanding of appropriate links ☐ At least one relevant, meaningful and correct report that informs/supports the problem/solution	3		• Both aspects clearly present	• At least 1 report and only 1 query (relevant, meaningful, correct)	• Only 1 of the aspects clearly present	• No database or • Neither of the 2 aspects clearly present	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark
9	DATABASE – COMPLEXITY OF QUERIES Level of relevant, meaningful queries used correctly (evaluate according to 8 above)							
	① Only fields with 1 simple criterion (e.g. "X", >X, =X, not "X", Is Null) ② One field with combined criteria using Boolean and relational operators (e.g. "X" or "Y", >1 and < 10 or replacements such as between 1 and 10) **or** 1 field with criterion including wildcards **or** 1 field with level ① criteria that includes sort/ display options ③ More than two fields with at least level ② criteria **or** 1 simple calculated field (e.g. SUM, MIN, MAX, AVG, COUNT or calculations replacing these functions **or** calculation using 1 arithmetic operator (+, – ,*, /)) **or** 1 field with a criterion using complex combinations (e.g. AVG[Z] and between 1 and 10) ④ One calculated field with complex calculations (e.g. combine functions and arithmetic/relational operators) **or** query using more than one table **or** query using criteria not in curriculum/transferred from functions used in spreadsheet, e.g. IIF, LEN	4	• Any 1 relevant, meaningful[2] query at level ③ and level ④ used correctly	• Any 1 relevant, meaningful query at level ② and level ③ used correctly	• Any 1 relevant, meaningful query at level ② used correctly and level ① used correctly	• Relevant, meaningful, correct queries at level ① only	• No database **or** • No relevant, appropriate, correct queries	

[2] Must be able to answer questions/contribute to solving the problem/demonstrates understanding of appropriate links

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark
10	DATABASE – COMPLEXITY OF REPORT Level of relevant, meaningful report used correctly (evaluate according to 8 above)							
	① Simple, not grouped, no calculations, no filters, but sorted on 1 field ② Not grouped with 1 simple calculation only (min, max, sum, avg, count), **or** grouped without any calculations **or** grouped with sorted option ③ Grouped with 1 simple group **and** 1 simple report calculation **or** not grouped with simple report calculations on more than one field ④ Grouped with simple report and group calculations on more than 1 field **or** grouped/not grouped with 1 calculated field added **or** grouped/not grouped with complex group and/or report calculation (combination of fields, operators, functions) **or** function used transferred from spreadsheet/not in curriculum	4	• Any 1 relevant, meaningful[3] report at level ③ and level ④ used correctly	• Any 1 relevant, meaningful report at level ② and level ③ used correctly	• Any 1 relevant, meaningful report at level ② used correctly	• Relevant, meaningful, correct report at level ① only	• No database **or** • No relevant, appropriate report	
11	EVIDENCE AND ORGANISATION OF DOCUMENTS Format and organisation of material/evidence							
	☐ Electronic and/or hard copies of all documents/files (including spreadsheet and database) available ☐ All organised into a logic folder structure, clearly named and easy to find/navigate ☐ Meaningful folder and file names used	2			• Clearly contains all 3 aspects	• Clearly contains 2 of the 3 aspects	• No evidence **or** • Contains fewer than 2 of the 3 aspects	

[3] Must be able to answer questions/contribute to solving the problem

	CRITERIA	Possible mark	4	3	2	1	0	Mark
12	PHASE 2 DOCUMENT One word processing document that contains all information required for Phase 2 (including a copy of the questionnaire as an annexure but excluding other information sources) and that provides hyperlinks to other files/evidence/sources to facilitate easy navigation and easy access to all other files/evidence/sources							
	☐ All required work/information for Phase 2 presented as a single (1) document ☐ Includes screen shot of folder structure ☐ Hyperlinks/bookmarks in document and/or source table lead to relevant information/sources and work/open correctly	3		• Clearly contains all 3 aspects	• Clearly contains 2 of the 3 aspects	• Clearly contains 1 of the 3 aspects	• No document	
13	**PHASE 2 DOCUMENT – TECHNICAL QUALITY** Well structured, legible, professional document that uses sound and correct word processing principles and techniques							
	☐ Appropriate, readable fonts, size and number (not more than two). Headings given due prominence (also in tables) ☐ Appropriate line and paragraph spacing (no 'empty' paragraphs) ☐ Appropriate word spacing (not two or more spaces between words or after punctuation marks) and punctuation (period at end of sentence, capital letter at beginning of sentence) ☐ No spelling or grammar mistakes ☐ Consistent formatting throughout	**4**	• Clearly contains all 5 aspects	• Clearly contains 4 of the 5 aspects	• Clearly contains 3 of the 5 aspects	• Clearly contains 2 of the 5 aspects	• No document **or** • Contains fewer than 2 of the 5 aspects **or** • Totally unstructured, not readable or unprofessional	
	TOTAL MARK:	**46**					**MARK OBTAINED**	

Comment/feedback:

_____

_____

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

Assessment Tool - Phase 3

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

Note: This is a criterion-reference tool and not a norm-reference tool.
The teacher should 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 3 questions are evident, then a mark of 4 is awarded.

REPORT

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
1	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 of problem ☐ Purpose of the investigation clearly stated ☐ Clear focus: which aspects investigated	4	• All 3 aspects clearly stated and no other/ unnecessary information	• All 3 aspects clearly stated but with other/ unnecessary information	• Only 2 of the 3 aspects clearly stated	• Only 1 of the 3 aspects clearly stated (only copy of task definition)	• None of the 3 aspects clearly stated	
2	REPORT – DISCUSSION (BODY) – ORGANISATION Content is organised using meaningful headings similar to headings in Phase 1. Headings group appropriate, relevant information together. Body paragraphs for each heading discuss the investigation. Information is logically and coherently structured.							
	☐ At least four appropriate headings relevant to the investigation ☐ Relevant information grouped together under the appropriate headings ☐ Headings same as/similar to headings in phase one – clear link	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 present or correctly done	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
3	REPORT – DISCUSSION (BODY) – INFORMATION USED, CONTENT RELEVANCE AND FLOW Information used from Phases 1 and 2 (summaries, questionnaire, spreadsheet and database) and all information/data/graphics (graphs, charts, pictures) used are relevant to the investigation/ supportive of different aspects within the investigation and address the minimum information requirements (problem, impact, consequences, solutions, role, facts/stats). The information is logically sequenced and flows naturally from one aspect to the next to ensure easy reading and clear understanding.							
	☐ All information is appropriate, relevant and addresses the minimum information requirements ☐ Relevant, appropriate data/information used from all processing in Phases 1 and 2 ☐ All graphics used are relevant and appropriate ☐ All information logically sequenced and flows naturally from one heading/ paragraph to next	4	• All 4 aspects clearly present. Easy to read and understand – reader has a clear understanding	• Only 3 of the 4 aspects clearly present	• Only 2 of the 4 aspects clearly present	• Only I of the 4 aspects clearly present	• None of the 4 aspects clearly present	
4	REPORT – DISCUSSION (BODY) - ARGUMENTS & SUPPORTING INFORMATION Discussion contains at least three relevant, appropriate 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 argument/claim (connects data/information to argument/claim)							
	☐ At least 3 appropriate claims/arguments that are appropriate and relevant to the investigation ☐ All claims/arguments are supported by relevant, appropriate data/information ☐ Meaningful explanation of how or why the evidence supports the argument/claim	4	• All 3 aspects clearly present for all claims/ arguments	• All 3 aspects clearly present for most claims/ arguments	• Only 2 aspects clearly present for all claims/ arguments **or** • All 3 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 3 aspects clearly present **or** • Not done **or** • Claims/ arguments not meaningful/ totally irrelevant	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
5	REPORT – FINDINGS/RECOMMENDATIONS All findings/recommendations are clear and effectively address the original problem/investigation. 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.							
	☐ All findings/recommendations clearly stated ☐ All findings/recommendations clearly and effectively address/support the original problem/investigation ☐ All findings/recommendations convey knowledge gained/understanding of the problem and investigation ☐ Findings/recommendations include some new/ thoughtful ideas/insights about the problem/investigation	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 findings/ recommendation	
6	REPORT – CONCLUSION Meaningful and logical conclusion drawn from the information and evidence presented, and which 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 ☐ No new information included that is not researched	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	
7	REPORT – PLAGIARISM 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 ☐ Graphics from other sources are clearly and appropriately acknowledged ☐ Declaration of authenticity signed and added as appendix	4	• All 3 aspects clearly present and report is clearly learner's own words	• Only 2 of the 3 aspects clearly present and report is clearly learner's own words	• Only 1 of the 3 aspects clearly present and report is clearly learner's own words	• Any number of aspects clearly present, but not in learner's own words in one or more places	• Definitely not learner's own words **or** • None of the 3 aspects clearly present	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
8	REPORT – TECHNICAL ASPECTS – ACKNOWLEDGEMENT & EVIDENCE Professional, well-structured document that gives credit to sources used, using sound word processing functions, principles and techniques							
	☐ Automatic reference list/bibliography correctly inserted ☐ Automatic, appropriate captions correctly inserted for all tables/figures ☐ Appropriate citations correctly used and inserted ☐ 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 – TECHNICAL ASPECTS – COVER PAGE Professional, well-structured, custom-made cover page using appropriate content controls. Displays all required information (Name, surname, school name, date, subject name, PAT topic, focus question as well as a meaningful abstract/extract).							
	☐ Professional, custom-made cover page using appropriate controls for type of information, correctly ☐ All required information included on cover page as in heading above ☐ Meaningful abstract/extract included	4	• All 3 aspects clearly present	• Only 2 of the 3 aspects clearly present	• Only 1 of the 3 aspects clearly present	• Cover page added with no suitable control components	• No cover page added	
10	REPORT – TECHNICAL ASPECTS – EASE OF NAVIGATION Professional, well-structured document that is easy to navigate and in which information is easy to find.							
	☐ Automatic table of contents, correctly inserted ☐ Other tables (tables, figures) correctly inserted ☐ Page numbers appropriately used and correctly inserted (e.g. no page number on cover page, page numbers of each annexure restart at 1/appears in a different format) ☐ Hyperlinks/bookmarks (other than the table of contents) appropriately and correctly used to navigate within document or to other documents, e.g. spreadsheet	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	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
11	REPORT – TECHNICAL ASPECTS – GENERAL One word processing document that contains all information required for Phase 3, professionally rounded off, using appropriate word processing functions, principles and techniques correctly.							
	Well structured, legible, professional document: ☐ Appropriate, readable fonts, size and number (not more than two) ☐ Headings given due prominence (also in tables) ☐ Appropriate line and paragraph spacing (no 'empty' paragraphs) ☐ Correct word spacing (only one space between words or after punctuation marks), and correct punctuation (full stop at end of sentence, capital letter at beginning of sentence) ☐ No spelling or grammar mistakes ☐ Consistent formatting throughout	4	• All 6 aspects clearly present	• Only 5 of the 6 aspects clearly present	• Only 4 of the 6 aspects clearly present	• Only 3 of the 6 aspects clearly present	• Fewer than 3 of the 6 aspects clearly present or • Totally unstructured, not readable or unprofessional	
	TOTAL MARK:	43					MARK OBTAINED	

WEBSITE

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
12	WEBSITE – GENERAL ASPECTS							
	☐ Home page with title included ☐ Two other pages ☐ Saved as HTML and opens correctly – no errors ☐ 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	
13	WEBSITE – GENERAL APPEARANCE							
	☐ All pages – consistent appearance (formatting, background, colours, layout, font, etc.) ☐ Colours/textures of background, fonts, form a pleasing palette, do not detract from the content or readability ☐ Point size varies appropriately for headings/sub-headings and text, and enhances readability ☐ White space and alignment used effectively to organise material and enhance readability	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 enhances readability and understanding							
	☐ Attractive and usable layout. Easy to locate all important elements/information (e.g. easy to read and skim/scan) ☐ 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	

Copyright reserved

	CRITERIA	Possible mark	4	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 ☐ There are no broken images (images display) ☐ All graphics are thoughtfully cropped/ sized, are of high quality and enhance reader interest or understanding. ☐ All images have an ALT tag that describes the image and its link to ensure accessibility to visually impaired people	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	
16	WEBSITE – NAVIGATION Functional, logical/intuitive and user-friendly navigation							
	☐ Use is made of working hyperlinks to create a navigation system which allows users to move from the home page to related pages and back ☐ Hyperlinks use meaningful descriptive text ☐ Users of the site do not become lost. There are no "dead ends" ☐ Navigation system is consistently placed throughout website	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	
17	WEBSITE – INFORMATION – QUALITY Information presented in 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.							
	☐ Site contains good quality, relevant and factually correct content about the topic ☐ Demonstrates good understanding of the information/material included in the site, and where to find additional, good quality information presented in functional hyperlinks ☐ Good 'standard' language used, suited to target group with no spelling and grammar mistakes ☐ No unnecessary duplication of 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	

Copyright reserved

	CRITERIA	Possible mark	4	3	2	1	0	Mark obtained
18	WEBSITE – PLAGIARISM Fair use guidelines followed that recognise material borrowed from other sources							
	☐ Graphics/images from other sources clearly acknowledged ☐ Clear, easy-to-locate and accurate citations for all borrowed material	4	• Both aspects clearly present and content written in learner's own words	• Only 1 of the 2 aspects clearly present and content written in learner's own words	• Either or both aspects present but any one part not learner's own words	• Either or both aspects present but mostly not learner's own words	• Neither of the 2 aspects clearly present **or** • Wholly not learner's own words	
19	WEBSITE – ADDITIONAL TAGS/FEATURES USED (OUTSIDE CURRICULUM) Learner demonstrates knowledge/skills not included in the curriculum, but that enhance the website, appropriately and meaningfully used.							
	☐ List the tags/aspects (maximum 2)	2	• One mark for each feature used correctly, appropriately, meaningfully and that clearly enhances the website (to maximum of 2 marks)					
	TOTAL MARK:	30	MARK OBTAINED					

Comment/feedback:

_____

_____

Teacher name: _____ Teacher signature: _____ Date: _____

General evaluation based on continuous observation and final impression

The learner'/learner's PAT:

20 – 25 marks	• independently identifies his/her focus area and produces effective planning. • carries out the project in a highly organised fashion, showing excellent independent working skills and clear evidence of responding very effectively to guidance given. • shows clear evidence of detailed, critical investigation involving the selection and evaluation of a wide range of resources. • processes and analyses data effectively and applies findings to good effect. • shows clear links between sources of information and the focus question and fully explores the complexities of the topic. • identifies, fully explores and addresses problems and/or issues. • selects and uses a range of skills including, where appropriate, new technologies, to achieve high quality outcomes that fully realise the intentions of the project and to draw conclusions. • carries out full, in-depth evaluations, showing a high level of insight into how he/she conducted the project and the limitations of the resources at his/her disposal. • effectively presents conclusions clearly, in an appropriate format with excellent supporting evidence. • shows a deep and extensive knowledge and understanding of the focus area of investigation through his/her responses to questions.
15 – 19 marks	• identifies his/her focus area with minimum guidance and produces planning that enables him/her to demonstrate some higher level organisational skills. • works independently in carrying out the project and responds to guidance given. • shows evidence of reasonable investigation involving the selection and evaluation of a reasonable range of sources. • processes and analyses data and applies findings. • shows links between sources of information and the focus question and explores some complexities of the topic. • identifies and addresses some problems and/or issues.. • employs a range of skills to generally achieve the intended outcomes to a competent standard. In his/her evaluations, he/she reflects effectively on the final outcome and on his/her strengths and weaknesses in carrying out the project. • clearly presents conclusions in an appropriate format with sound supporting evidence. • shows a good knowledge and understanding of the focus area of investigation through his/her responses to questions
10 – 14 marks	• identifies their focus area with reasonable guidance and produces a workable planning. • mostly works independently and shows some organisational skills in completing the project. There is some evidence that he/she responds to guidance given. • shows evidence of some investigation involving a selection and evaluation of minimum resources. • processes and analyses some of the data and applies some findings. • makes some links between the sources of information and the focus question. • uses a range of skills to partially realise the intended outcomes. • presents outcomes and conclusions with some supporting evidence. • demonstrates reasonable knowledge and understanding of the focus area through his/her responses to questions.
1 – 9 marks	• identifies their focus area with extensive guidance and produces minimum planning. • shows little organisational skills in completing the project. There is minimal evidence that he/she has responded to guidance given. • shows limited investigation involving limited resources. • processes and analyses minimal data and applies minimum findings. • makes little or no links between the sources of information and the focus question. • shows limited skills used to reach intended outcomes. Gives little thought to the way the final outcomes have emerged and to this/her own strengths and weaknesses in carrying out the project. • presents limited outcomes and conclusions with little or no supporting evidence. • demonstrates limited knowledge and understanding of the focus area through his/her responses to questions. • provides evidence of a high degree of plagiarism.

Copyright reserved

LEARNER NAME:_____ **DATE:** _____

Assessment Summary

Phase	Focus	Maximum Mark	Mark Obtained	
Phase 1	Find and access data and information	36		
Phase 2	Process data and information	46		
Phase 3	Present information/solution – Report	43		
Phase 3	Present information/solution – Website	30		
General	Observations made and overall evaluation	25		
	Total	**180**	**/180**	**/100**

Authentication Declaration

I hereby declare that 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 was conducted under supervised/controlled conditions to ensure that the work has not been plagiarised, copied from someone else or previously submitted for assessment by anyone

Comment:

_____

_____

Teacher's name: _____ **Teacher's signature:** _____ **Date:**_____

Copyright reserved

Annexure A

Style guide for word processing documents

Title page

- Use appropriate content controls to display information
- Text should be **typed** using appropriate font sizes.
- This should be the only page on which you make use of a page border.
- Avoid “arty” borders and backgrounds.
- Do **NOT** use Word Art/Text Art.

Headings

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

Body text

- Use a font that is easy to read and that is the same as the heading font or matches the heading font, e.g. Calibri, Cambria.
- 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.

Page layout

- Use word processing functions to add page numbers.
- Make use of page/section breaks to start new pages/sections.
- Make use of lists 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.

Copyright reserved

Annexure B

Learner declaration – Phase ____

I understand that work submitted for assessment must be my own.

Have you received help/information from anyone to produce this work?

☐No ☐Yes (provide details below)

Help/information received from (person):	Nature of the help/information (provide evidence):
_____ ___ / ___ / 2014 Signature of Learner Date	

Annexure C

Learner declaration of authenticity – Final PAT

Learner name		**ID Number**	
Grade	12	**Year**	2014
Subject	Computer Applications Technology		
Practical Assessment Task (PAT)		**Teacher**	

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 else.

_____ ___ / ___ / 2014

Signature of Learner Date

Annexure D

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 know

Guidance Notes for Teachers

What are the learners required to do and provide?

Learners are required, with appropriate supervision, to:

- choose an area of interest within the topic/scenario provided;
- formulate a focus question that can be investigated/researched;
- plan, research and carry out the project;
- deliver a report to a specified audience;
- communicate information via a website; and
- provide evidence of all stages of the project for assessment.

How will learners go about it?

The learner will:

- plan and complete an individual project, applying a range of information management skills and strategies to meet the objectives as set out by the PAT requirements;
- identify questions to ask;
- obtain, critically select and use selected information from a range of sources; process and analyse data, apply it relevantly and demonstrate understanding of appropriate linkages, connections and complexities of the topic and focus question;
- select and use a range of skills, including the applications and technologies studied, solve problems, take decisions critically, creatively and flexibly, to answer the focus question;
- support conclusion/recommendation using reasoned arguments based on evidence;
- evaluate outcomes both in relation to PAT requirements and own learning and performance; and
- use appropriate communication skills and media to present evidence in appropriate format.

Skills required

The learner must be able to:

- understand routine and non-routine procedures and problems in a wide range of familiar and unfamiliar contexts and situations.
- select and apply a range of mathematical skills and methods to find solutions.
- compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions.
- write documents, including extended writing, and communicate information, ideas and opinions effectively and persuasively.
- manage information storage to enable efficient retrieval.
- bring together information to suit content and purpose.
- enter, develop and format information independently to suit its meaning and purpose, including:
    - Text and tables
    - Images
    - Numbers
    - Graphs and records
- apply decision-making and problem-solving skills.

Copyright reserved

- extend planning, research, critical thinking, analysis, synthesis, evaluation and presentation skills.
- develop confidence in applying the content, application software and technologies they have studied.
- develop and apply skills creatively, demonstrating initiative and enterprise.
- seek advice and support when needed.

What must the learners be taught beforehand?

Before embarking on the PAT the learner needs to be taught the following:

- application software and ICT skills that will enhance the production of the report and the development of the project covering research, analysis and execution.
- information management content and skills including the ability to define a task, setting a focus, identify and ask questions, search for and identify suitable sources of information and prior reading or relevant work already undertaken, including the evaluation of sources.
- project management skills including time, resource and task management.
- the format and structure of accepted forms of research report to include abstract, introduction, discussion with all sources cited, conclusion, references.

Misconduct

Learners must **NOT**:

- get help/guidance from others without acknowledgment (complete **Annexure B for each phase**).
- submit work which is not their own.
- lend work to other learners.
- allow other learners access to, or the use of, their own independently-sourced source material (this does not mean that candidates may not lend their books to another candidate, but candidates should be prevented from plagiarising other learners' research).
- include work copied directly from books, the Internet or other sources without acknowledgement and attribution.
- submit work typed or word-processed by a third person.

These actions constitute misconduct, for which a penalty will be applied.

If misconduct is identified the assessment authorities must be notified and details of any work which is not the learner's own must be recorded.

Learner authentication of the PAT

For each phase, learners complete a declaration (**Annexure B**) for the work done during that specific phase. All substantive advice/help given to the learners should be recorded as part of the phase documents.

After completing the PAT, learners need to sign the declaration of authenticity (Annexure C) to confirm that the work submitted is their own.

Role of the teacher

The teacher will teach the information management content, skills and strategies prior to the project.

The teacher will:

- manage the project and supervise the learners.
- conduct an initial planning review to discuss the topic/scenario, requirements, objectives and development of the project.
- facilitate pre-reading to gain background information about the topic/scenario.
- agree to the focus question (learners should record the guidance given as part of the Phase 1 document – **Annexure B** – e.g. where appropriate, record their own initial question with clear evidence of the guidance and the final question).
- give regular feedback to learners, e.g. to formulate a focus question that is suitable and manageable.
- assess the work of the learners at the end of each phase using the standardised assessment tool and record feedback given.
- endorse each learner's assessment by signing the assessment tools for each phase including a final declaration that the evidence submitted for assessment is the unaided work of the learner.
- confirm their general evaluation based on continuous observation and feedback to provide a final impression regarding independent work, management of information, insight and problem-solving.
- make the assessment of the work of the learners following any standardising and internal moderation procedures required.

The teacher will assess the potential project (task definition and focus question) against the following checklist:

- Is the focus area suitable for the project?
- Does the focus question allow the learner to investigate and to access the higher-level concepts and skills in the assessment objectives, i.e. plan, research, analyse, evaluate and explain, rather than simply describe and narrate?
- Are the focus question and proposed action clear and focused on an issue which can be managed within the timescale, available resources and word total?
- Do the focus question and proposed action indicate that the learner will be capable of investigating and researching the topic or carrying out the activity or task independently and within appropriate ethical or methodological guidelines?
- Is the learner likely to face difficulties in understanding the task and issues associated with the focus question?

The teacher will ensure the authenticity of the PAT as follows:

- The teacher must confirm on the assessment tool that the work assessed is solely that of the learner concerned and was conducted under supervised/controlled conditions.
- The teacher must sign the assessment tool on completion of each phase.

Supervised/Controlled Conditions

The PAT must be managed in such a manner as to be able to confirm that the work assessed is solely that of the learner concerned.

Copyright reserved

Managing the PAT

The teacher must plan his/her work schedule according to the time allocated for the PAT in the CAT CAPS (teaching plan for Grade 12).

There are different possible approaches to managing the PAT:

Option 1:

- The teacher could dedicate a portion of the time on a weekly basis to the PAT while simultaneously continuing with normal teaching to complete the Grade 12 curriculum in the rest of the week.
- If he/she chooses this option, he/she should start with the PAT process towards the end of the first term, completing one phase per term.

Option 2:

- The teacher could dedicate a continuous period of time to the PAT, e.g. the last week(s) of each term, also completing one phase per term.

It is suggested that the teacher records the learners' topics when they start with Phase 1 so as to avoid 'instant projects' that might possibly not be the learner's own work.

Assessment Evidence

Evidence presented for assessment must show how the individual learner has met the assessment objectives and criteria and include the planning, feedback and progress of the project.

The evidence for assessment will include the following:

- the project product, including a written report of approximately 1600 – 2000 words (content only, excluding cover page, table of contents, references, graphics) website (home page plus 2 other pages) and other evidence (for each phase).
- the completed learner assessment tool (for each phase)

Requirements

(National Protocol for Assessment Grades R – 12, Chapter 3)

Practical Assessment Task components must:

- comprise assessment tasks that constitute the learners' PAT mark as contemplated in Chapter 4 of the Curriculum and Assessment Policy Statement for CAT
- include a mark awarded for each assessment task (phase) and a consolidated mark
- be guided by assessment components as specified in Chapter 4 of the Curriculum and Assessment Policy Statement for CAT
- be available for monitoring and moderation
- be evaluated, checked and authenticated by the teacher before being presented as the learner's evidence of performance

Copyright reserved

Non-compliance

(National Protocol for Assessment Grades R – 12, Chapter 3)

The candidate will be given three weeks before the commencement of the final end-of-year examination to submit outstanding work or present himself or herself for the Practical Assessment Task.

If a learner submits no Practical Assessment Task in CAT, without a valid reason, the learner will not receive a result in the subject.

In the event of a learner not complying with the requirements of the PAT, but where a valid reason is provided:

- He or she may be granted another opportunity to be assessed in the assigned tasks, based on a decision by the Head of the Assessment body.
- Should the learner fail to fulfil the outstanding PAT requirements, the mark for the outstanding PAT component will be omitted and the final mark will be adjusted for promotion purposes in terms of the completed tasks?

Valid reasons in this context include the following:

- illness, supported by a valid medical certificate, issued by a registered medical practitioner
- humanitarian reasons, which includes the death of an immediate family member, supported by a death certificate
- the learner appearing in a court hearing, which must be supported by written evidence
- any other reason as may be accepted as valid by the Head of the Assessment Body or his or her representative

In the event of a learner failing to comply with the Practical Assessment Task requirements of a particular subject, and where valid reasons are provided, the evidence of such valid reasons must be included with the evidence of learner performance.

Copyright reserved