

SUMMARIES OF INTERACTIVE MULTIMEDIA

GRADE 10 - 12

INFORMATION MANAGEMENT

<p>1.</p>	<p>Grade 10 - What is the Practical Assessment Task All About? This lesson will be useful for Grade 10s who are doing a Practical Assessment Task for the first time, but it also provides a good basis for carrying out phase 1 of PAT in all Grades.</p> <p>The lessons deals with:</p> <ul style="list-style-type: none"> • Understanding the purpose of the PAT • Identifying the correct steps to successfully complete phase 1, the planning phase <p>To start, each phase of the PAT is described.</p> <div data-bbox="646 750 1093 1187" data-label="Diagram"> </div> <p>There is detailed information on how to understand the topic and define it in terms of a problem that needs to be solved. It is important to collect the right kind of data, using two main types of questions and different levels of questions.</p> <p>There are other ways to collect information too, such as:</p> <div data-bbox="497 1460 1246 1691" data-label="Diagram"> </div>
<p>2.</p>	<p>Grade 10 - How to Process Data and Information This lesson about phase 2 is aimed at Grade 10s doing the PAT for the first time, but it describes useful steps and processes for use in all Grades.</p> <p>By the end of the lessons learners will know how to:</p> <ul style="list-style-type: none"> • Process data and information • Use the data and information to solve the problem and complete the task

- Process and analyse data

Always make sure that you have gathered enough useful data and information. This will lead to knowledge and insight into the problem. There are several tools and functions to use to process and analyse data, all described in these 3 categories:

Count

Other Calculations

Graphs

It is also important to deal with data in an ethical manner. One way to do this is to make a commitment to the privacy of the information gathered from people in surveys and questionnaires.

Remember:

- Keep only useable data
- Continually refer to your problem statement and questions
- All useable data and information must be processed and analysed to get the knowledge and insight you need to solve the problem
- Check what information the information needs to deliver, what calculations must be done and how best to present it
- Avoid plagiarism – process it yourself and put it in your own words
- Keep all collected data confidential

3. Grade 10 - How to Analyse, Evaluate and Present Data and Information

This is a lesson for Grade 10s doing the PAT for the first time, but it has useful information for all Grades. It deals with phase 3.

This lesson deals with a large number of topics, including:

- Identify tips and tools when using a word processor
- Identify and use common graphs or charts to graphically represent data
- Understand the purpose of summarising
- Use a spreadsheet to analyse and evaluate data
- Use a database to analyse and evaluate data
- Identify and understand the various elements of a report
- Understand the difference between and importance of copyright and plagiarism
- Properly acknowledge your sources
- Identify the 2 ways in which to present your findings

Phase 3 makes up most of the marks of the PAT. It requires a report to present all findings as a summary and to formulate a conclusion.

There are different graphs to use; the purpose of each is explained.













Column chart
Line chart
Pie chart
Bar chart
Area chart
Scatter chart

It is also very useful to include some information in tables made in a word processor. Use databases in PAT presentations to record information gathered from people in questionnaires

and surveys. Spreadsheets can also be used to present data, either by data capturing or importing from research documents. In addition, spreadsheets are useful for using functions and formulae to process and analyse data to get useful information. Spreadsheets also offer easy ways to make graphs from data and information.

When it comes to presenting all your findings in a report, there are several report components to include, such as:

- Title page
- Table of contents
- Introduction
- Body
- Conclusion
- Bibliography or references

Take note of some of the special things to consider when referring sources you have used.

Also refer to the many tips for making presentations of your PAT, included in this lesson.

4. Grade 11 - Planning your PAT and validating sources
 This Grade 11 lesson deals with phase 1 – planning and determining where to gather information. It will be useful for all Grades.

PAT planning can be summarised as follows:

- 1 To effectively begin your Planning Phase, you need to describe or explain the pending problem or task in your own words.
- 2 Some may find this a waste of time; however, if you are able to put what is expected into your own words, you will be able to understand what is going on, what is expected of you and what you need to do to accomplish the task.
- 3 Once you understand your main task, formulate a main question that will help to define the research and solve the problem. To answer this main question you have to create or formulate other questions in categories or headings.

It's important to ask a lot of questions and to use different types of questions, referred to as different levels of questions.

- Factual questions (Level 1)**
- Investigative questions (Level 2)**
- Change questions (Level 3)**
- Comparison questions (Level 4)**

This is also a good time to choose the right kinds of sources, depending on the questions you are going to ask, and to start a referencing system at once.

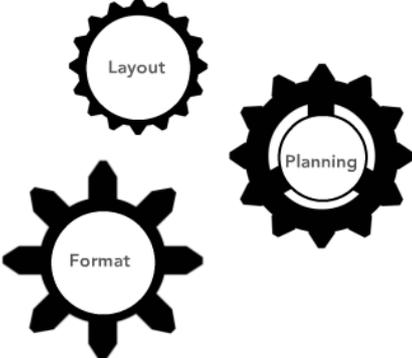
When gathering information, always ask yourself whether the information is useful and whether it will help to answer the main question or contribute to the solution. Remember, the sources you use for your information must be reliable, so check things like:

- Accuracy
- Authority
- Objectivity
- Currency
- Coverage

5. Grade 11 - Questionnaires, Evaluation and Presentations
 All CAT learners can benefit from this lesson, although it is designed to provide information for Grade 11s doing their PAT.

The lesson contains:

1. Helpful hints to draw up a questionnaire or survey



2. More helpful tips about questions to gather information
3. Ideas on how to extract information from different sources
 - Make photocopies from specific sections of books and magazines.
 - Make audio recordings or video recordings of interviews with people who can answer your questions..
 - Make notes of information from books, magazines and the Internet. Look for keywords, answers to questions you have asked and concepts to help you make meaningful notes.
 - Distribute your questionnaires and make sure that you collect them at an arranged time.
 - Save web pages to use at a later stage (You can also use hyperlinks).
 - Take photographs of relevant items.
 - Remember that you must get your information from a variety of sources.

- 4. Guidelines on how to write a professional report
- 5. Ways to integrate data and information in reports, using databases and spreadsheets
- 6. A handy checklist for using PowerPoint for the PAT presentation

6. Grade 12 - Overview of Entire PAT Based on the Marking Rubric (Phase 1, 2 & 3)
 This Grade 12 lesson is ideal for CAT learners who have done a PAT before and who need a refresher course. It can, however, also be used by learners in other Grades.

The lesson sets out to ensure that , by the end, learners will:

- Understand what the PAT requires and expects
- Identify and understand what is expected in phase 1
 - Task definition and information finding strategies
- Identify and understand what is expected in phase 2
 - Access information and determine relevance
 - Use the information - planning
- Identify and understand what is expected in phase 3
 - Use the information – processing or analysing
 - Use the information – final presentation or synthesis

The lesson sets out what the main objectives of the PAT are and summarises what is required. It also summarises the 3 phases.

There are very easy summaries of the main things to do in each of the 3 phases, and the marks allocated to each one. In addition, the marks allocated to the use of each application in phase 3 are explained. It is worth becoming very familiar with this information.

Here is a summary of what to expect:

Phase	Focus	Marks	Percentiles
Phase 1	Define the problem/task	36	20%
Phase 2	Gather data/ information	46	25%
Phase 3	Present data/ information	73	41%
General	Observe and evaluate	25	14%
	Total	180	100

SUMMARIES OF VIDEO LESSONS

GRADE 10 - 12

INFORMATION MANAGEMENT

1.	<p>Grade 10: How to Use Digital Tools to Find Information and use it to Solve a Problem I</p> <p>Electronic questionnaires are a useful to collect data. The forms can be created on a number of platforms, one of them being Microsoft Word. They can be emailed to the respondents and once the respondents have returned the forms, the data can be imported into a spreadsheet. Functions and formulas can be used to manipulate and interpret the data, and graphs can be used to illustrate it.</p> <p>This video looks at a case study. A school governing body wants to install WiFi and do a tablet roll out to all learners. The case study asks for a survey to be done to find out how many learners have access to smart phones, tablets or laptops. The video then goes through the steps needed in doing PAT phase 1 and 2.</p>
2.	<p>Grade 10: How to Manage and Manipulate Information to Complete your Practical Assessment Task I</p> <p>Before you attempt a project like the PAT, you need to understand exactly what you need to do. You need to read and understand the topic of the task and should be able to re-write it in your own words. Use these questions to guide you:</p> <ul style="list-style-type: none"> • Why am I doing the investigation? • What will the focus of my investigation be? • How will I go about conducting the investigation, considering the PAT requirements? • Who is the information for (target audience)? • How must I present the information? <p>In any organisation, management makes use of steps to solve any problems. For them to be able to function properly there steps are important and guide them to the final product. The following five steps (guidelines) can be applied to any type of task/problem.</p> <ol style="list-style-type: none"> 1. Define the task. 2. Establish where and how information can be found. 3. Find sources and extract information. 4. Use information. 5. Evaluate the process and the product. <p>To solve a problem you need to ask questions to help you find appropriate data and information. A variety of question types will show different levels of thinking, e.g.:</p> <ul style="list-style-type: none"> • Questions that provide facts are level 1 question. (Who, when, where, what, how many, etc.) • Questions that give direction to the investigation are level 2 questions. (why, how, etc) • Questions that support predictions or help with adjustments are level 3 questions (what if, if, etc.) • Questions that support judgement or help to evaluate, critique, review or find meaning are level 4 questions. (would it be better if, what recommendation, what would be the best, etc) <p>It's important to use a variety of sources besides the internet. Other sources include publications, interviews and surveys.</p>

	<p>When designing a questionnaire, it's important to pay attention to the appearance, the question sequence, the wording of the questions and the response categories.</p> <p>The data and information you find is going to increase your knowledge. Knowledge is an understanding of a topic or an understanding that you have gained through finding information. The information you find needs to be interpreted and provide insight into the problem.</p> <p>Once you have collected all your data in a spreadsheet, you will need to use formulas to answer the following questions:</p> <ul style="list-style-type: none"> • How many? • What is most popular? • What is least common? • How many more than? • What is the average?
<p>3.</p>	<p>Grade 11: How to Use Digital Tools to Find Information and Use It to Solve a Problem II</p> <p>More information is available to us today than ever before, especially in digital format. Digital content is easier to work with, as we don't have to retype or scan the data to use it. It is often more up to date.</p> <p>This video talks about the creation of questionnaires in Microsoft Word and Google forms. Once the data has been collected from respondents, you word need to import it into a spreadsheet and manipulate it using functions and formulas. You would also illustrate your findings with a chart.</p>
<p>4.</p>	<p>Grade 11: How to Manage and Manipulate Information to Complete your Practical Assessment Task II</p> <p>Before you attempt a project like the PAT, you need to understand exactly what you need to do. You need to read and understand the topic of the task and should be able to re-write it in your own words. Use these questions to guide you:</p> <ul style="list-style-type: none"> • Why am I doing the investigation? • What will the focus of my investigation be? • How will I go about conducting the investigation, considering the PAT requirements? • Who is the information for (target audience)? • How must I present the information? <p>In any organisation, management makes use of steps to solve any problems. For them to be able to function properly there steps are important and guide them to the final product. The following five steps (guidelines) can be applied to any type of task/problem.</p> <ol style="list-style-type: none"> 1. Define the task. 2. Establish where and how information can be found. 3. Find sources and extract information. 4. Use information. 5. Evaluate the process and the product. <p>To solve a problem you need to ask questions to help you find appropriate data and information. A</p>

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5.	Grade 12: How to Use Digital Tools to Find Information and Use It to Solve a Problem III

	<p>More information is available to us today than ever before, especially in digital format. Digital content is easier to work with, as we don't have to retype or scan the data to use it. It is often more up to date.</p> <p>This video talks about the creation of questionnaires in Microsoft Word and Google forms. Once the data has been collected from respondents, you would need to import it into a spreadsheet and manipulate it using functions and formulas. You would also illustrate your findings with a chart.</p> <p>In Grade 12, you will also need to use Access when working with the Data. You will need to provide appropriate field names and data types, and provide data validation techniques. These include validation rules, required fields, input masks, drop-down lists, and default values. You will then need to use queries to extract specific information and create a report with functions to analyse the data.</p> <p>You will then need to use Word to write a report on your findings.</p>
<p>6.</p>	<p>Grade 12: How to Manage and Manipulate Information to Complete your Practical Assessment Task III</p> <p>Before you design a questionnaire, ask yourself what you want to learn from the questions. Remember that the information you gather via your questionnaires has to be put into a spreadsheet – so you need appropriate data. Stay away from long sentences and stick to basic yes/no answers and figures.</p> <p>There are three types of questionnaires. A closed questionnaire has questions with only one or other answer, for example yes/no. A quantitative questionnaire asks questions that measure the quantity of something. A qualitative questionnaire asks the respondents to give an exact response.</p> <p>The data collected in the questionnaire should be tabulated into a spreadsheet. Group and sort the data and use calculations to extract specific information. Use charts to illustrate pertinent information.</p> <p>Your database is used to further analyse the data you've gathered. Create a table with suitable field names and data types. Use queries to extract specific information and a report to illustrate your findings.</p> <p>A report is a document that gives information about an investigation or research done. It also needs to have analysis, evaluations and recommendations. The report has a very specific layout:</p> <ul style="list-style-type: none"> • Title page • Table of contents • Introduction • Body • Recommendations and/or findings • Conclusion • Bibliography

LINKED ONLINE TUTORIALS (How To's)

Here is a list of the titles of How To's that are related to the interactive multimedia and video lessons about Information Management.

Information Management
<ol style="list-style-type: none">1. Information Sources and Data Gathering Tools2. Electronic Reference Works3. Presenting Information with Graphs, Tables, and Other Techniques and Tools4. Presenting Information in a Report5. Summarising Information using Presentation Software