basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Practical Assessment Task

Computer Applications Technology

Self-study Guide for doing the PAT

Contents

The purpose of this self-study guide

The purpose of this document is to guide teachers and learners through the PAT process. It will help them to produce a Practical Assessment Task of high quality that meets all the requirements.

It could also be used to revise or to teach important information management content and skills.

How to use this guide

This guide should be used as a resource for teachers and learners. Teachers should refer to the guide for clarity seeking issues regarding information management and the PAT process. The guide should be used in conjunction with all other resources and the Practical Assessment Task set by the Department of Basic Education.

An electronic copy of this guide can be downloaded from Thutong – Computer Applications Technology learning space: http://www.thutong.doe.gov.za/Default.aspx?tabid=2236&EntryID=425

Computer Applications Technology

Practical Assessment Task – Self-Study Guide for doing the PAT

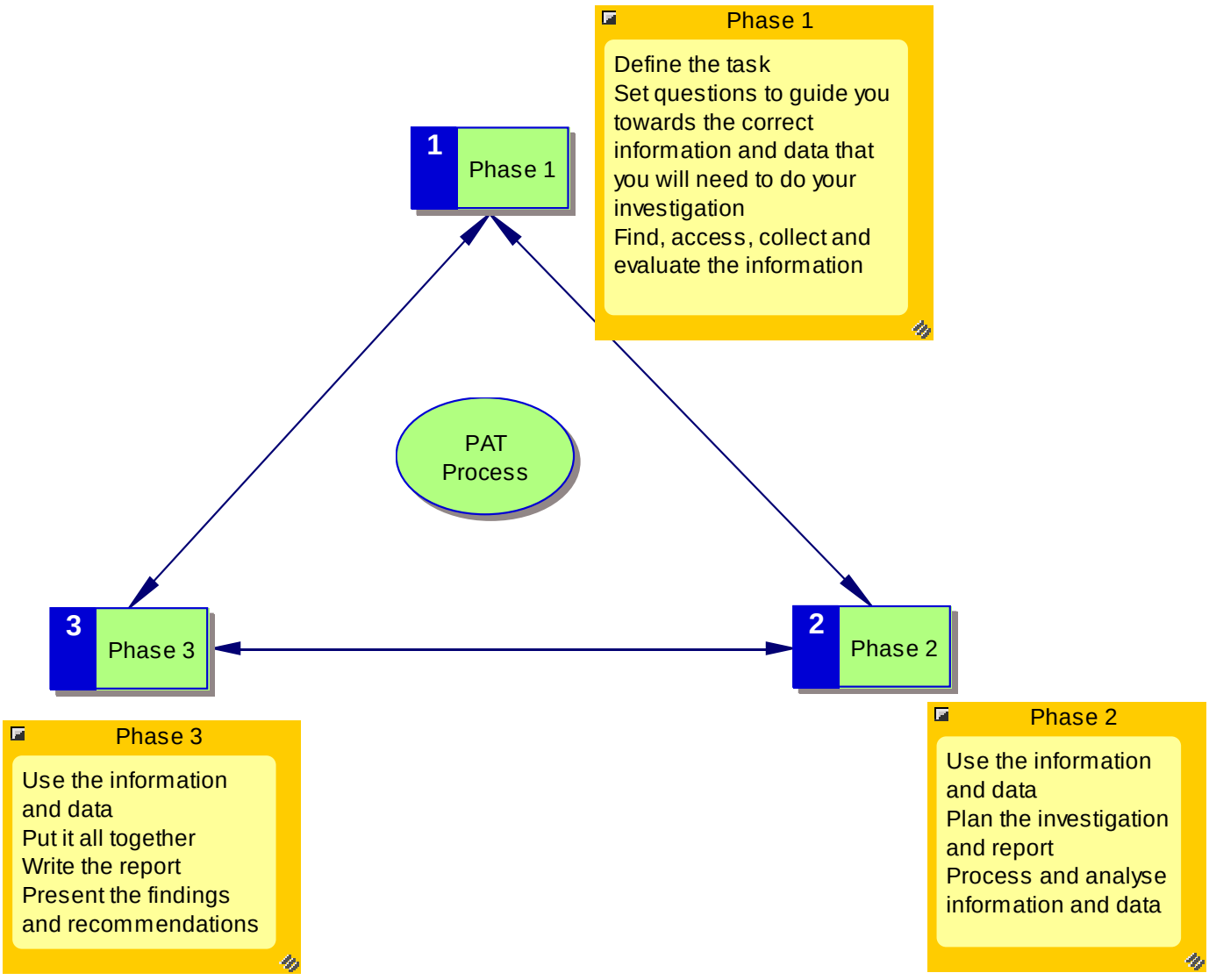
What is the PAT?

The PAT is a project in which you should demonstrate your Information Management skills by investigating a matter, writing a report in which you present your findings, make recommendations or propose your ideas using the application programs that you have studied.

It is a single, continuous project, done in phases. Each phase builds on the previous one and a subsequent phase informs a previous phase. The task defined in the first phase is the task completed in the final project.

The PAT uses a structured process that teaches good principles that help you to stay focused. It brings together the skills learnt in CAT. The PAT is the way in which the work taught in CAT is *applied* in an integrated fashion.

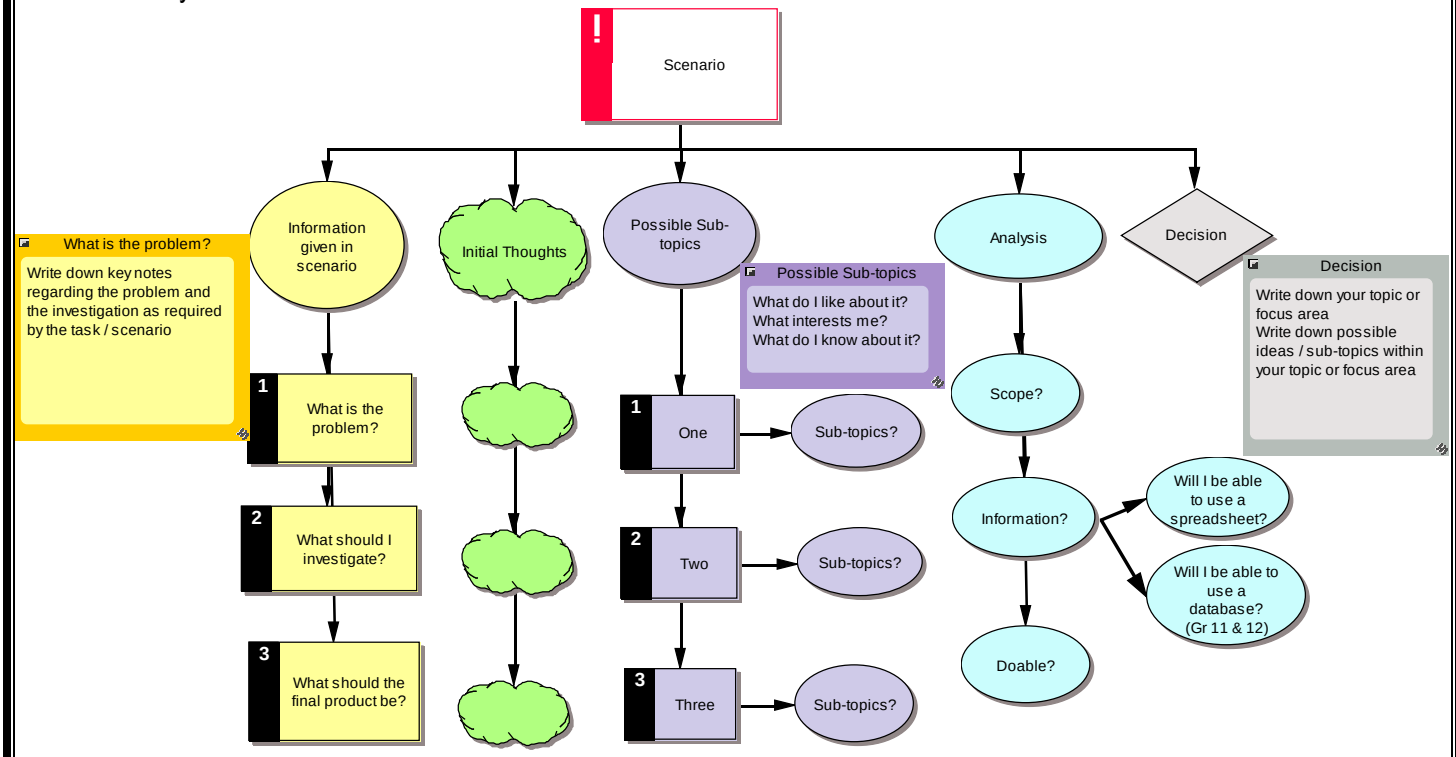
Overview of the PAT:



Preparing for the PAT

Where to begin and what to do first – some brainstorming

- Read the scenario
- Write down information given and required
- Write down initial thoughts
- Identify a possible topic/focus area within the scenario
- Write down possible sub-topics
- Do you have a clear overview?



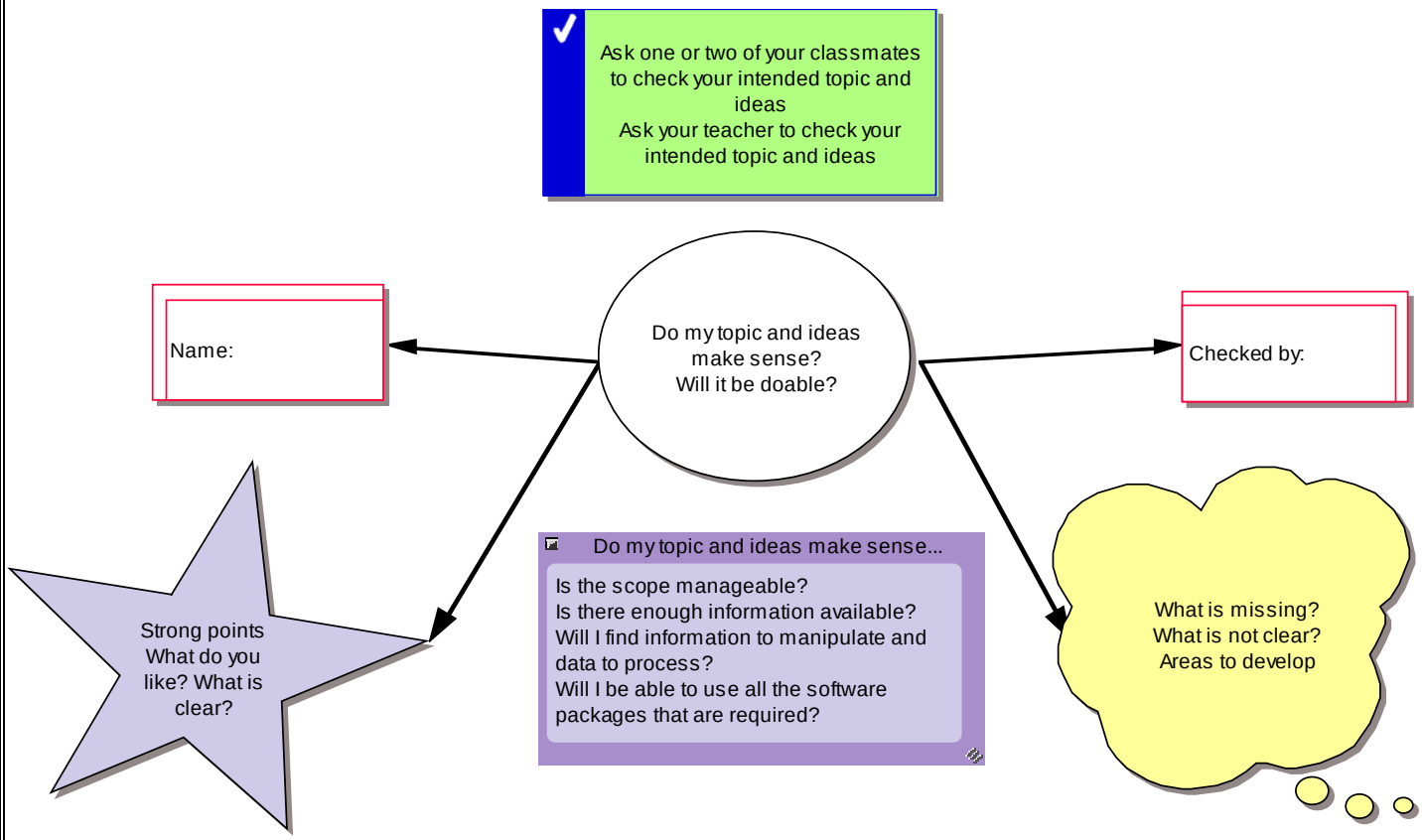
- Consider whether you will be able to do it:
  - Scope?
    - *Too wide:* You will have trouble of what to include, have to deal with too much information, might not be able to complete in time
    - Narrow down by focusing on only one or a few limited aspects
    - *Too narrow:* The chances are that you will not find enough to write about to fill the pages or to present a meaningful report
  - Information?
    - Will you be able to find the information required, considering available sources?
  - Is it doable? Will you be able to use a spreadsheet (Grade 10 – 12) and a database (Grade 11 & 12)?

Self-evaluation

Check your decision against the information given above

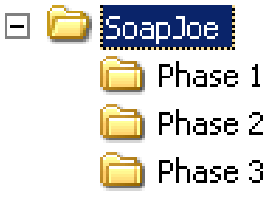
Checkpoint

Ask one or two of your peers to check your topic and ideas
Also, ask your teacher to check these.



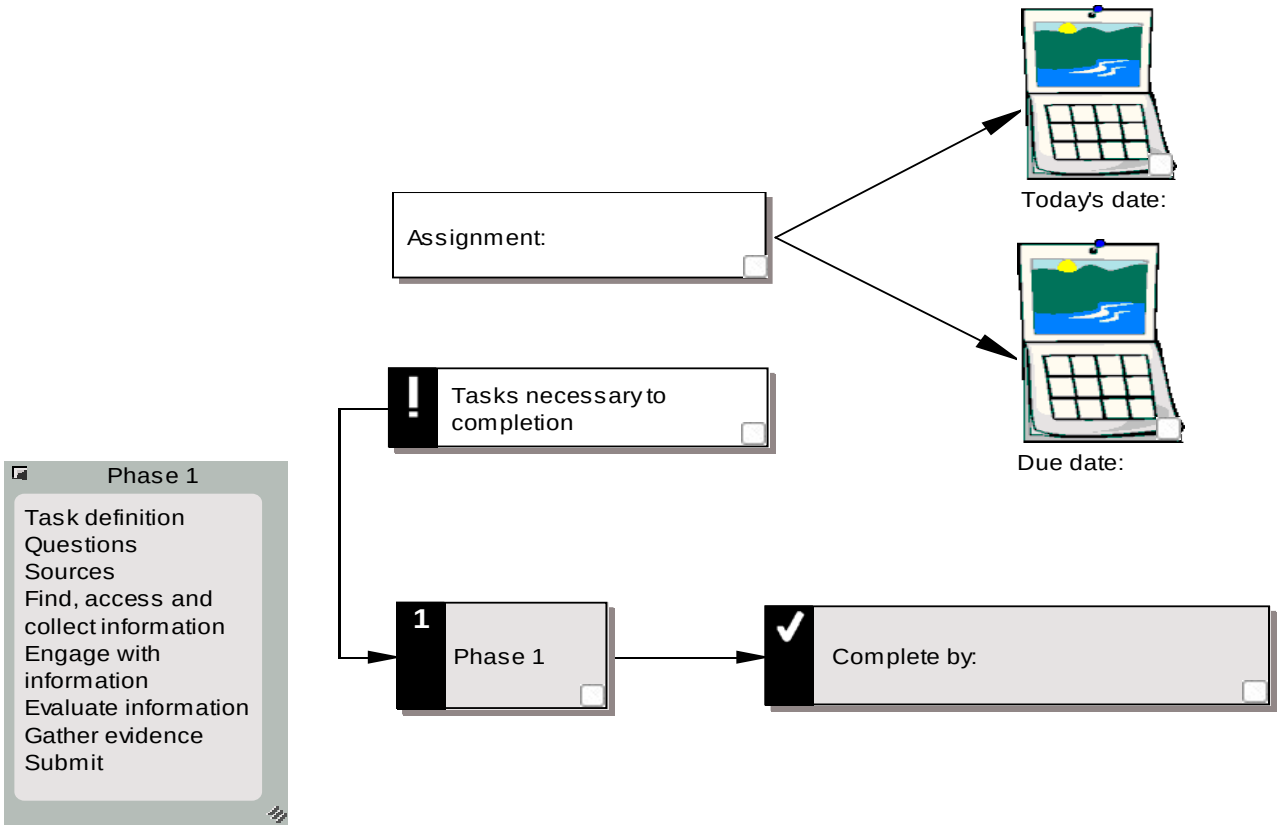
Prepare file structure

- Create folders and subfolders for saving relevant documents and evidence
- Label the main folder or briefcase using your surname and name
- Create a subfolder for each phase



- Create more subfolders within each folder as necessary to organise your documents

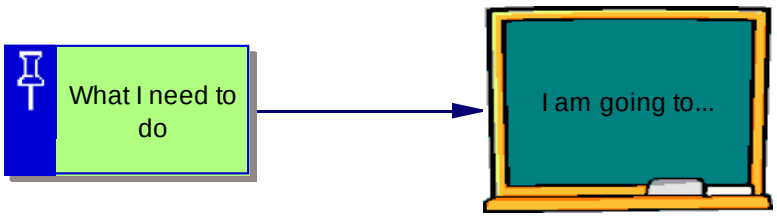
Planning – start preparing your documents for Phase 1



Phase 1

Task Definition

- Describe what needs to be done in your own words, taking into account what the problem is that you need to investigate and what the investigation would be about, by starting with the phrase: *I am going to…*



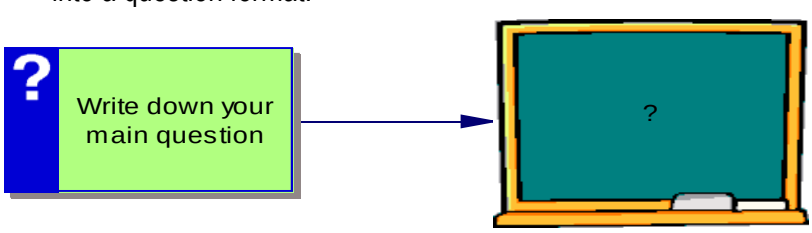
I am going to...

Investigate...
What? - What is the problem and what will the investigation be about?
How?
Tools
What will I present? How? To whom?
What will the final product be?
You must show that you are sure about the job you have to do

Do not provide any solution or make any recommendations here (that is done in the final report in Phase 3)
You first need to investigate to find the solution or to make recommendations

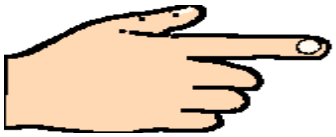
Main Question:

- Write down your main question by determining the essence and focus of the investigation and putting that into a question format:



?

It should tell the reader about exactly what your investigation will be and what you will focus on
It should keep you from getting lost or off-track when asking other questions
Keep it simple and clear



Factors to consider when you formulate your main question:
Will **you** be able to investigate it?
Is it of a manageable scope?
Can it be done in the time available?
Would you be able to do it with the resources that you have access to?

Note: Rather do something simple and do it right, than try to go overboard.

Checkpoint

Ask one or two of your peers to check your task definition and your main question
Also, ask your teacher to check these.

Ask one or two of your classmates to check your task definition and main question
Ask your teacher to check your task definition and main question

Name:

Do my task definition and main question make sense?
Do they show a clear path?

Checked by:

Strong points
What do you like? What is clear?

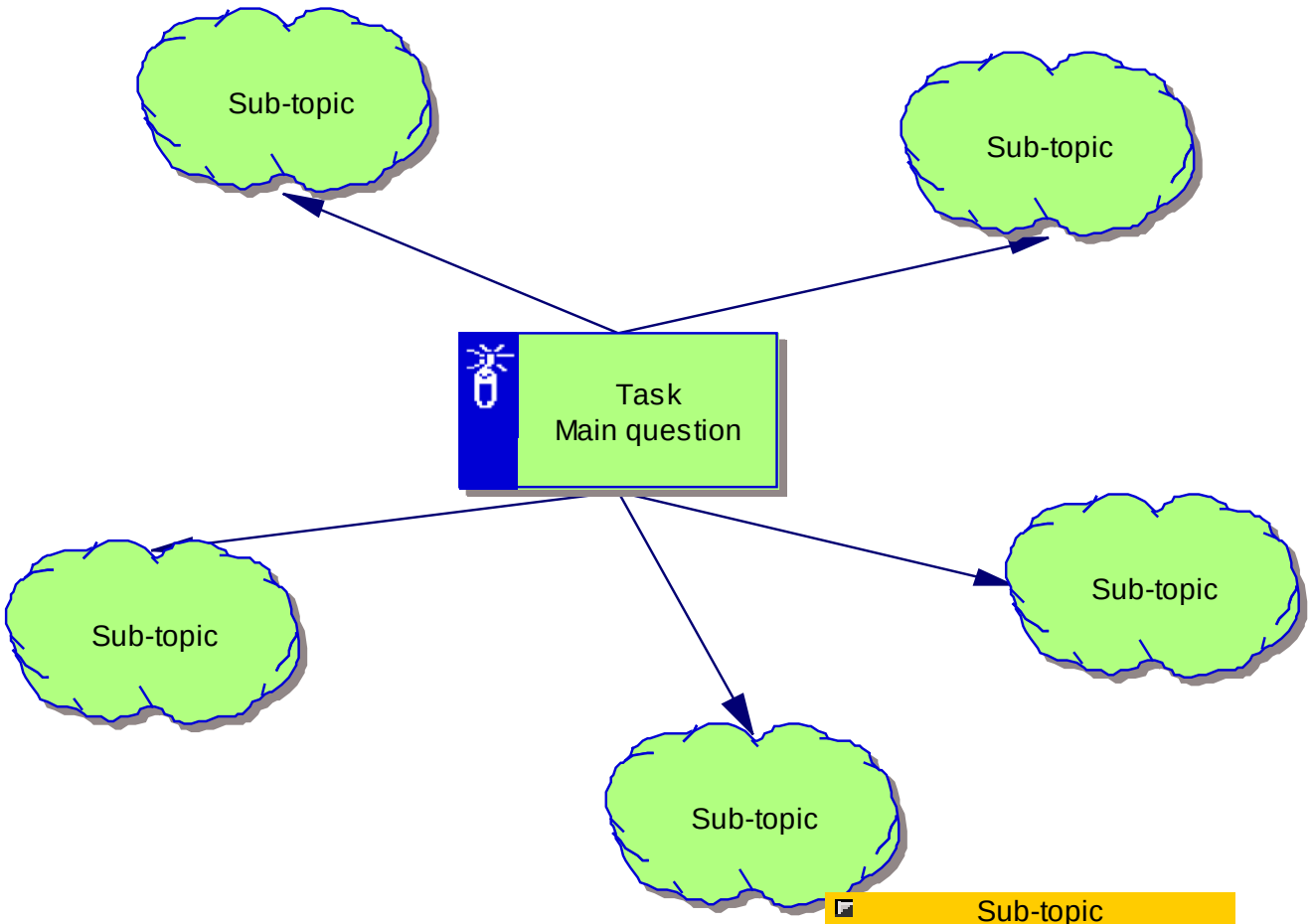
Do my task definition and main...

Will the reader understand what I am going to do?
Will the reader understand exactly what about?
Is the scope manageable?
Will I be able to investigate this?
Will I be able to find the information and data required for this investigation?

What is missing?
What is not clear?
Areas to develop

Identify the main aspects

- Look at your initial brainstorming
- Determine the sub-topics that you are going to address



Factors to consider when you identify headings / sub-topics:
Do these relate to my task definition and my main question?
Will **I** be able to investigate it?
Should I reduce the number of sub-topics?
Would **I** be able to find information for these with the resources that I have access to?

Note: Your main question and sub-topics should keep you from getting lost or off-track when asking other questions or when looking for information

Setting questions

- Write down questions that will help you do your investigation
  - You can write questions under each sub-topic or
  - simply write down questions and arrange them under each sub-topic at a later stage.
  - You may even identify a new sub-topic/heading at this stage when writing down your questions or find that some sub-topics/headings might not work
- Try to have questions starting with phrases such as:

Level 1: Questions that can be answered explicitly by facts, e.g. questions starting with words such as What? When? Where? Who? How many? etc.

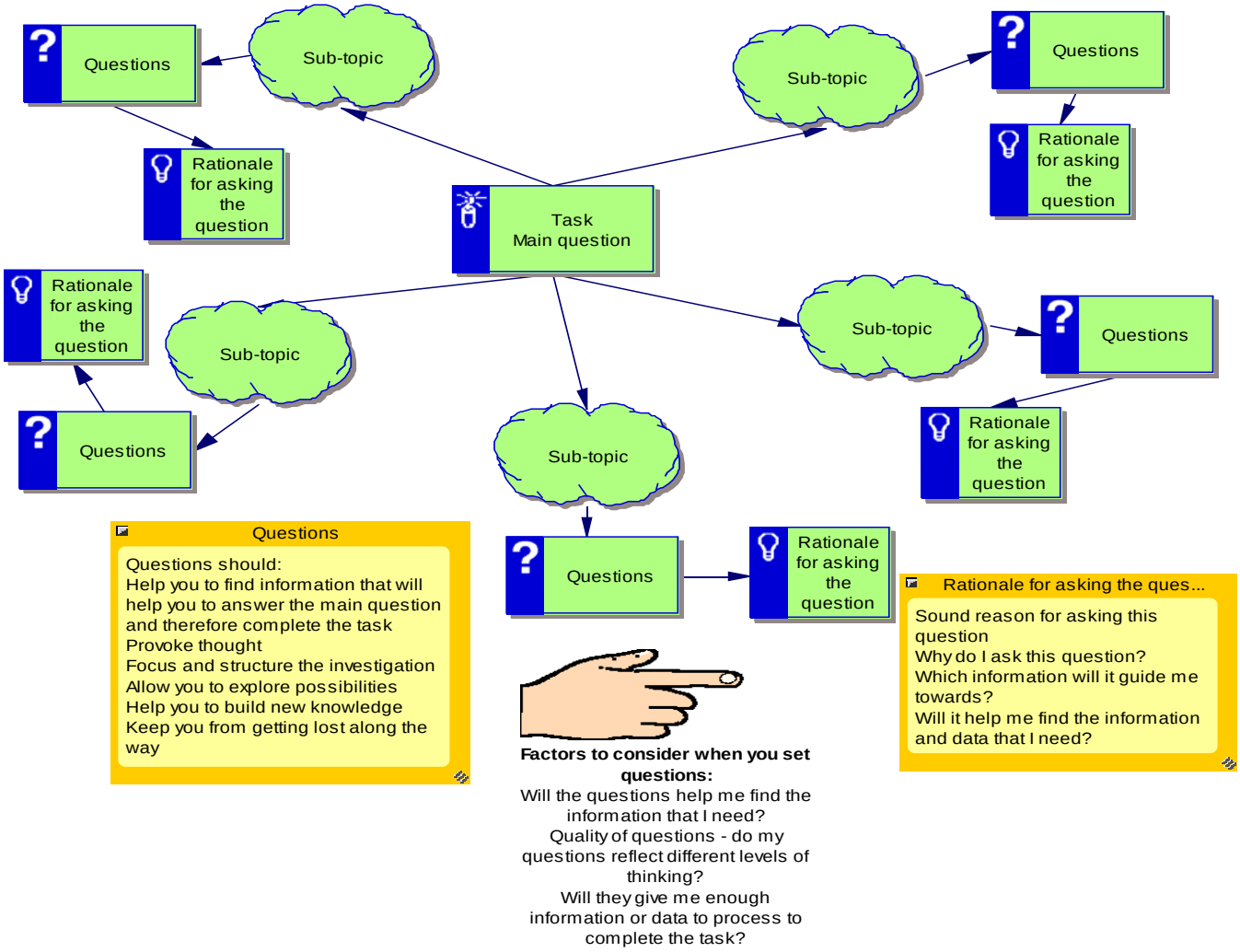
Level 2: Questions that will help you to examine, explore, query, e.g. questions starting with words such as Why? How? etc.

Level 3: Questions that will help you to adjust alter or predict, e.g. questions starting with words such as If? What if? etc.

Level 4: Questions that will help you to make a judgment, critique, review or find meaning of some sort, e.g. questions starting with words such as Would it be better if? What recommendation? How can I determine? What would be the best way? etc.

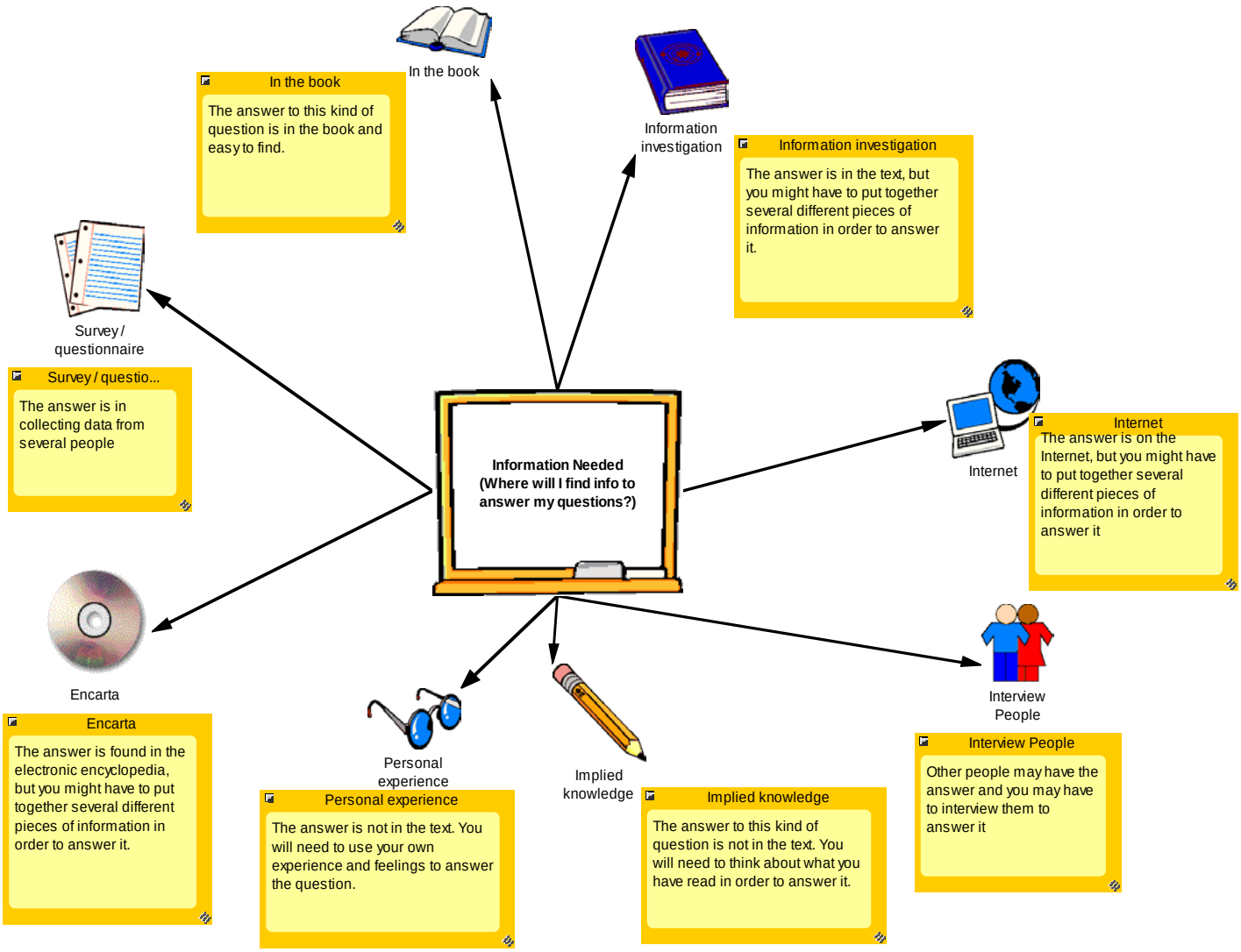
Rationale behind questions

- Indicate for each question how answering that question will help you to conduct the investigation by finding relevant information and data for processing – i.e. do not just add any question, make sure that you need it for your investigation



Sources

- Identify a possible source for each question
- Consider the different sources / tools.



Note about surveys and interviews

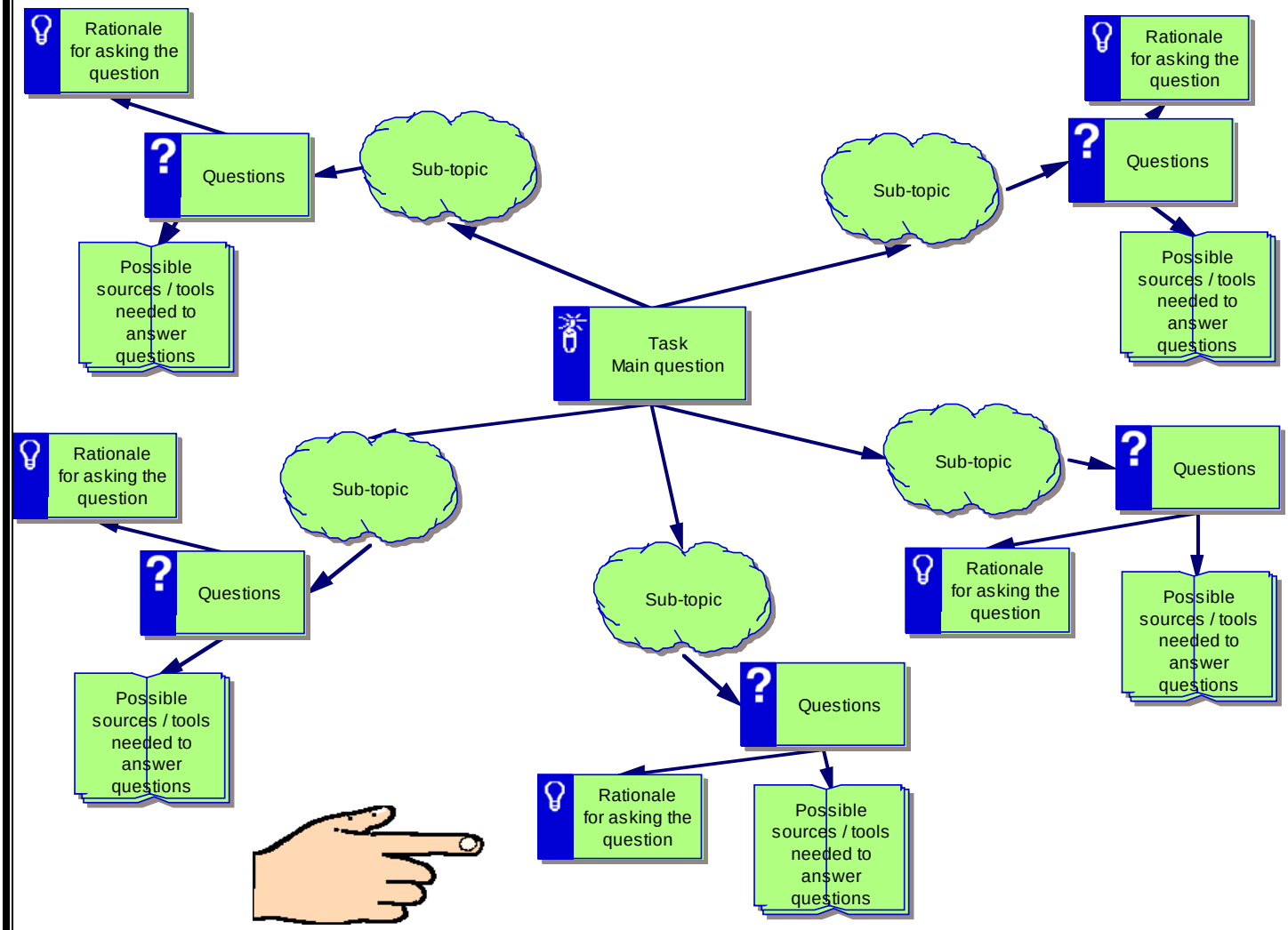
You will also need a survey/questionnaire or want to do an interview
You will need to set questions for your questionnaire/survey or your interview

Remember:

- 'Closed' questions are better for a questionnaire/survey, e.g. questions with only one answer or where people can select an answer from a list provided – open ended questions are sometimes difficult to analyse
- Try do do a trial run before doing a survey to make sure it can be analysed (calculations, graphs, etc.)
- You will have to decide what questions to ask in the interview and decide how you will use these answers.

You should now

- have decided on your sub-topics
- have questions for each sub-topic
- have reasons for asking the questions
- have identified a possible source for each question
- have set questions for your questionnaire / survey / interview
- create your questionnaire / survey form
- be ready to access the sources and find the information you need



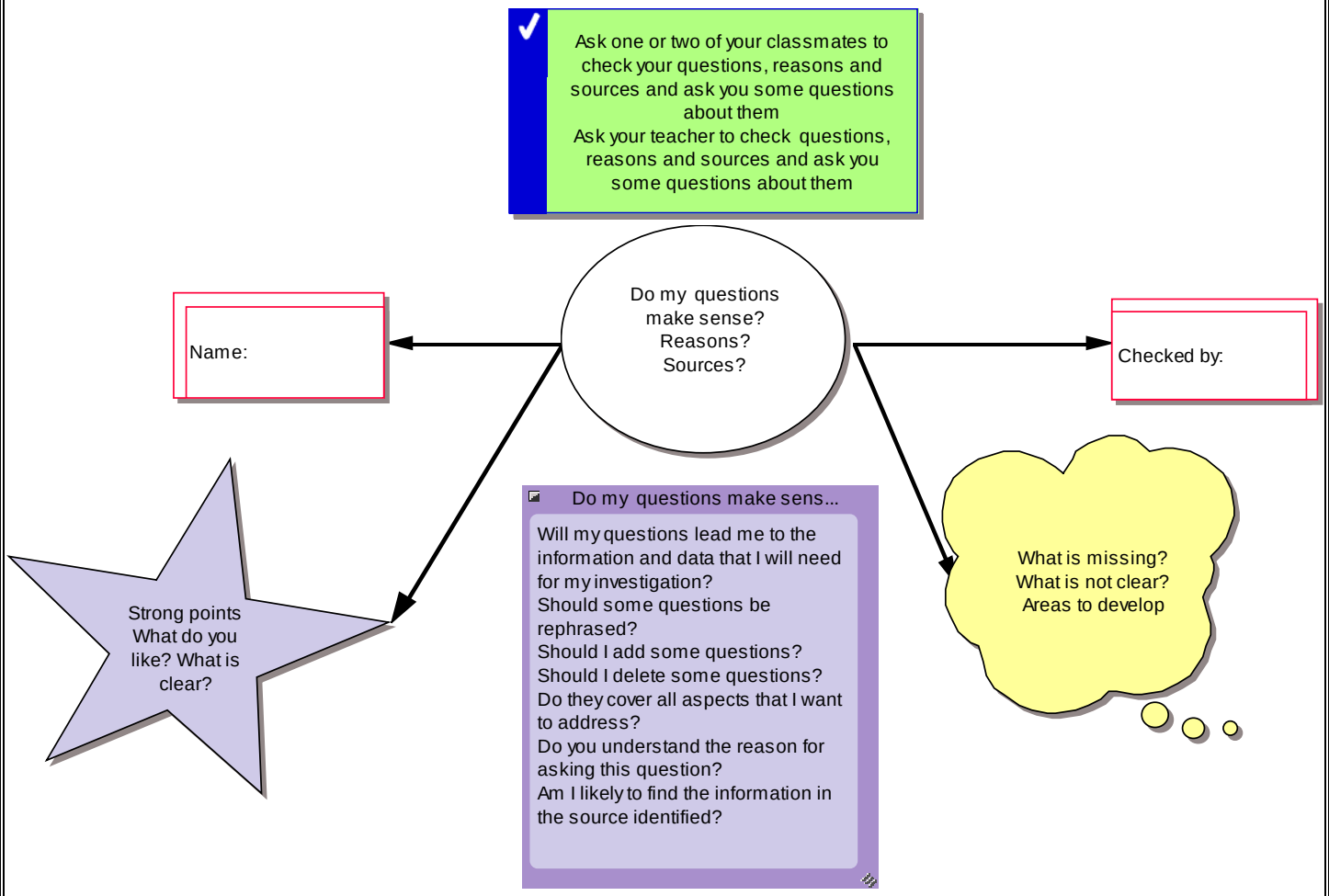
Factors to consider when you determine sources / tools:
Do I need a survey/questionnaire? What questions will I include in the questionnaire / survey form? Will I be able to process this information? Will it give me an answer or show me a trend?
Will I need to interview people to find some answers? What questions will I ask them? How will I use these answers?
Will I need access to the Internet? How will I conduct my search? Is the source reliable?

You could use the following table to write down what you have done so far:

Sub-topic	Question	Level	Rationale (Why did I ask this question?)	Possible Source (Where will I find the information?)

Checkpoint 3

Ask one or two of your peers to check your questions, reasons and your sources
Also, ask your teacher to check these.



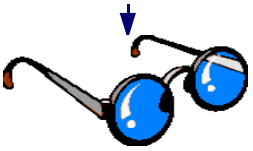
Find, access and collect the information

- Use the information finding strategies from previous steps to find, access and collect the information and data that you will need, e.g.
  - Hand out questionnaires / survey forms and collect after completion
  - Conduct interviews
  - Access Internet and other sources and collect relevant information – make notes
- Save documents and evidence electronically in the Phase 1 folder created

Engage with information

Engage with info...

Keep details of all bibliographic information to use when compiling your final report

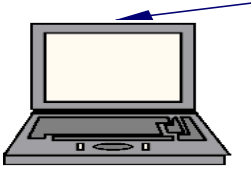


Read, read, read...

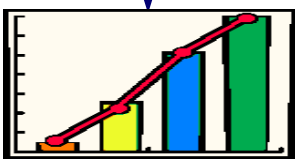
Determine...

Make notes, summarise

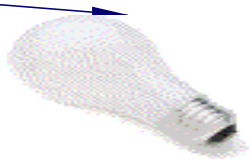
Determine which information is relevant - will answer your questions and which is irrelevant or inappropriate



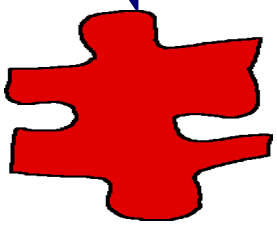
Determine which information will need to be manipulated and processed



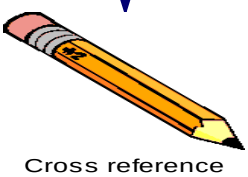
Which data can be processed into meaningful information? How could it be presented?



Which information would I be able to combine or rework to give me new knowledge and insights



Will the information complete the puzzle / provide the answers?



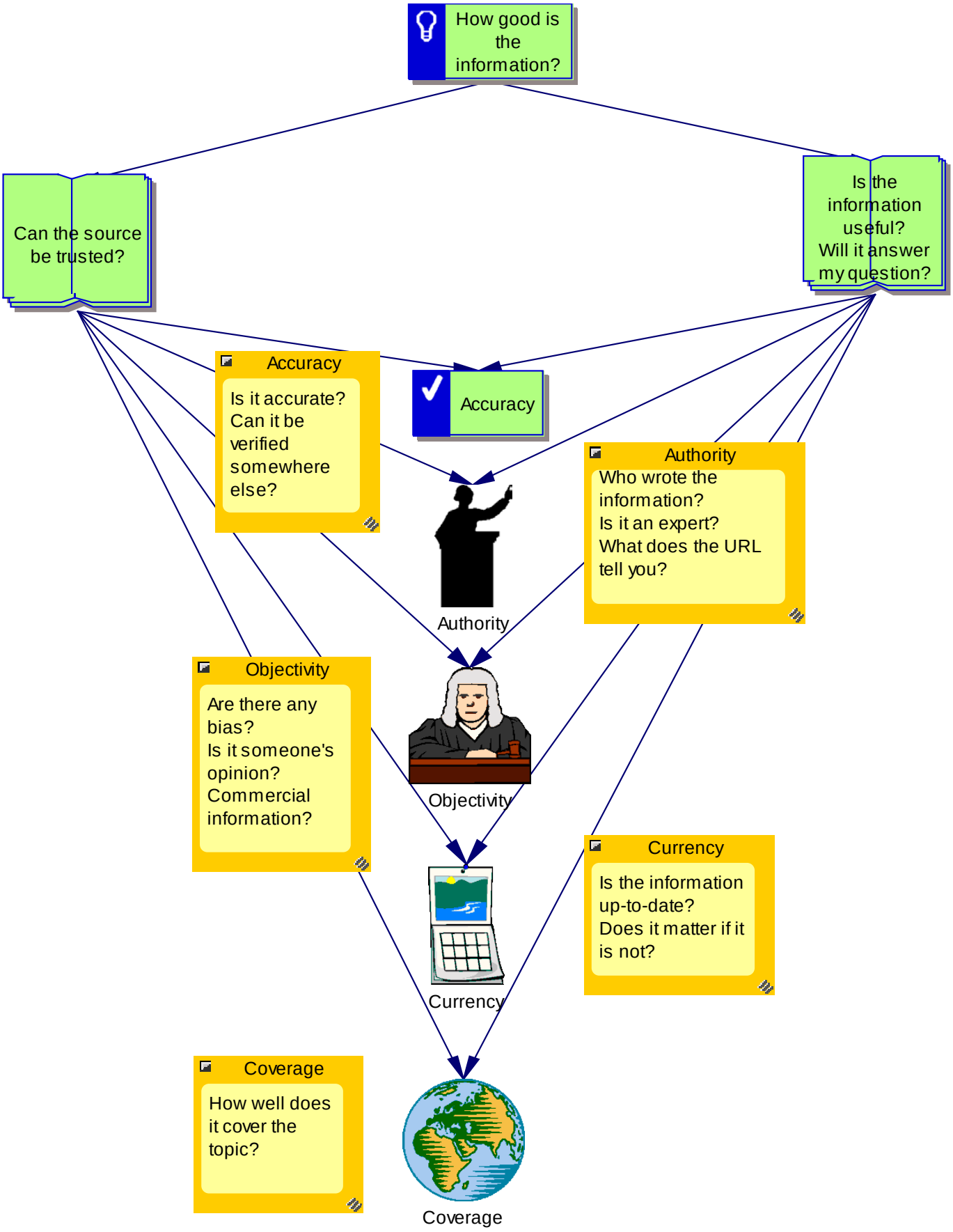
Cross reference the data/ information with the questions

Cross reference t...

Colour tags
Comments
Highlight
Hyperlink
Bookmark

Evaluate sources

- Check if the information is trustworthy
- Evaluate the sources



Checkpoint

Check if you have done all that is required before you hand in your document for Phase 1. Also, ask a peer to check these.

Task	Self	Peer	Comment
Task definition?			
Makes sense?			
According to scenario?			
Main question?			
Makes sense?			
Focused?			
Directs investigation?			
Sub-topics?			
Questions			
Enough?			
According to topic/heading?			
Labeled according to level?			
Reason?			
Possible source?			
Sources and information			
Evaluated?			
Bibliographic information?			
Answer questions?			
Variety?			
Tools, e.g. questionnaire/survey?			
Evidence			
Available?			
Hyperlinked / cross referenced?			
File structure?			
Well organised?			

Hand in

- Finalise your document to be handed in for Phase 1

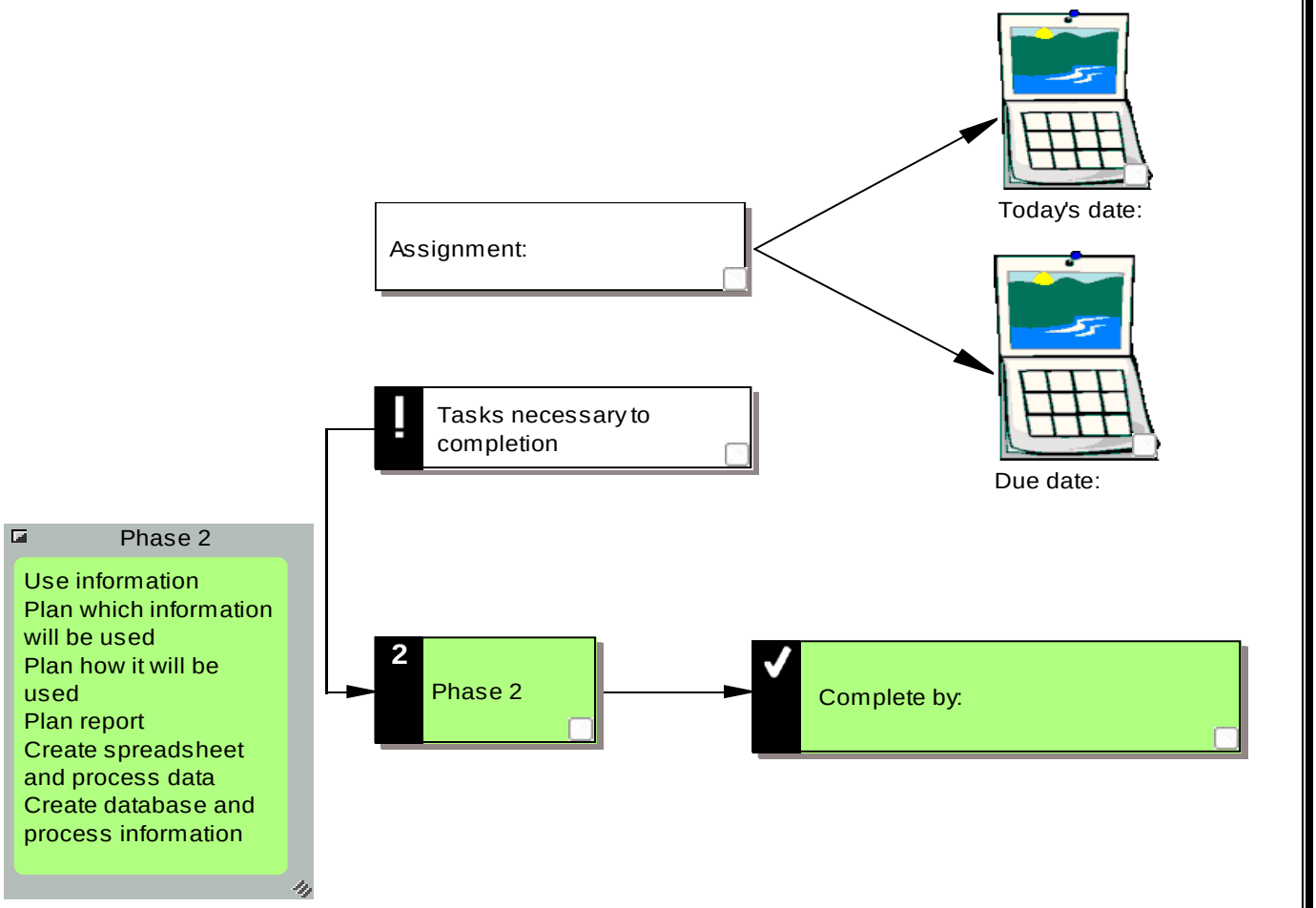
You could expand your table to provide for all the information:

Heading / sub-topic	Question	Level	Rationale (Why did I ask this question?)	Possible Source (Where will I find the information?)	Is this information trustworthy? Write motivation	Evidence of information (Hyperlink, screen dump, reference, etc) and bibliographic information

- Insert a screenshot of your folder structure
  Provide a list of evidence.

Planning / overview Phase 2

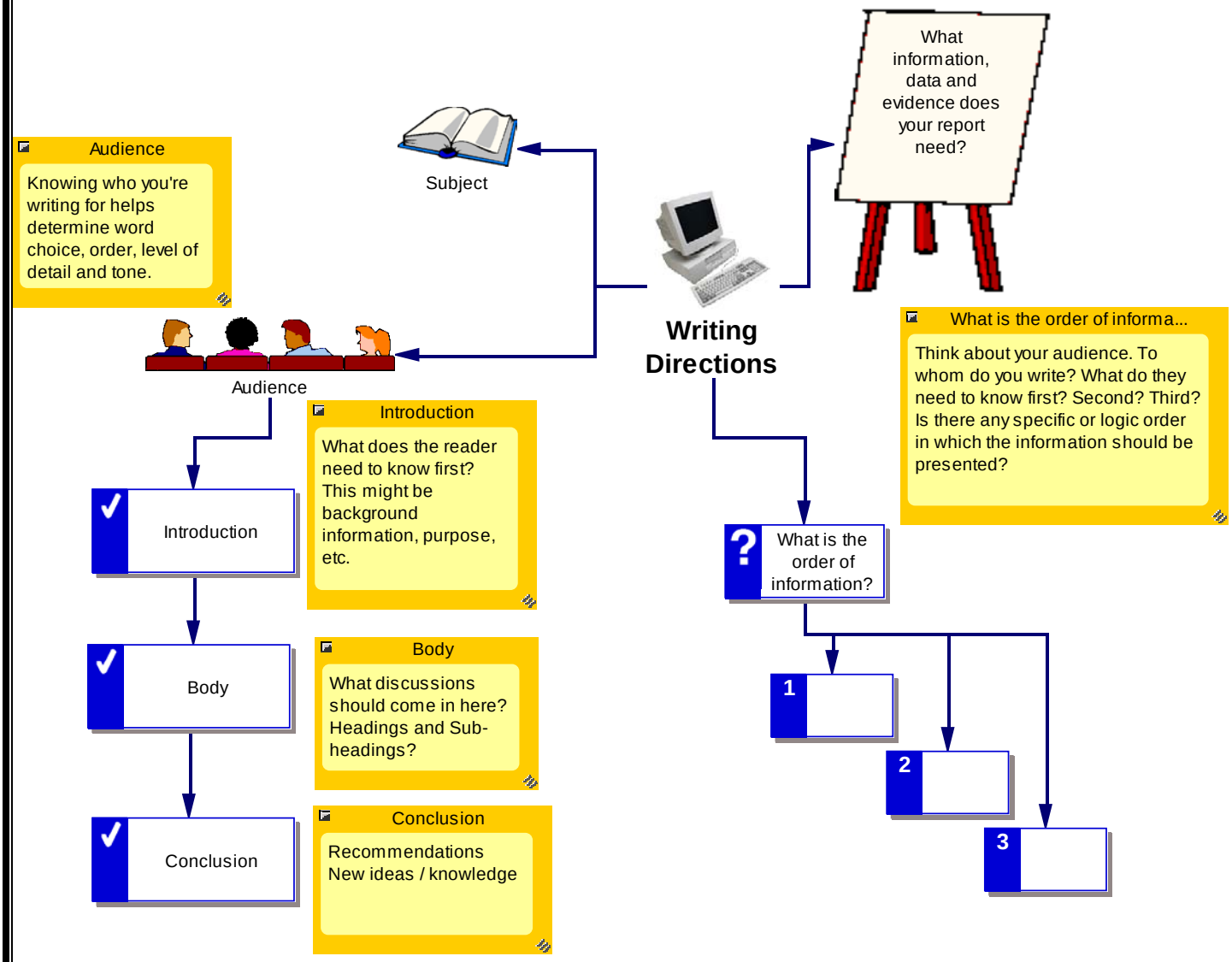
- Get a clear overview of the following step in the process and due dates



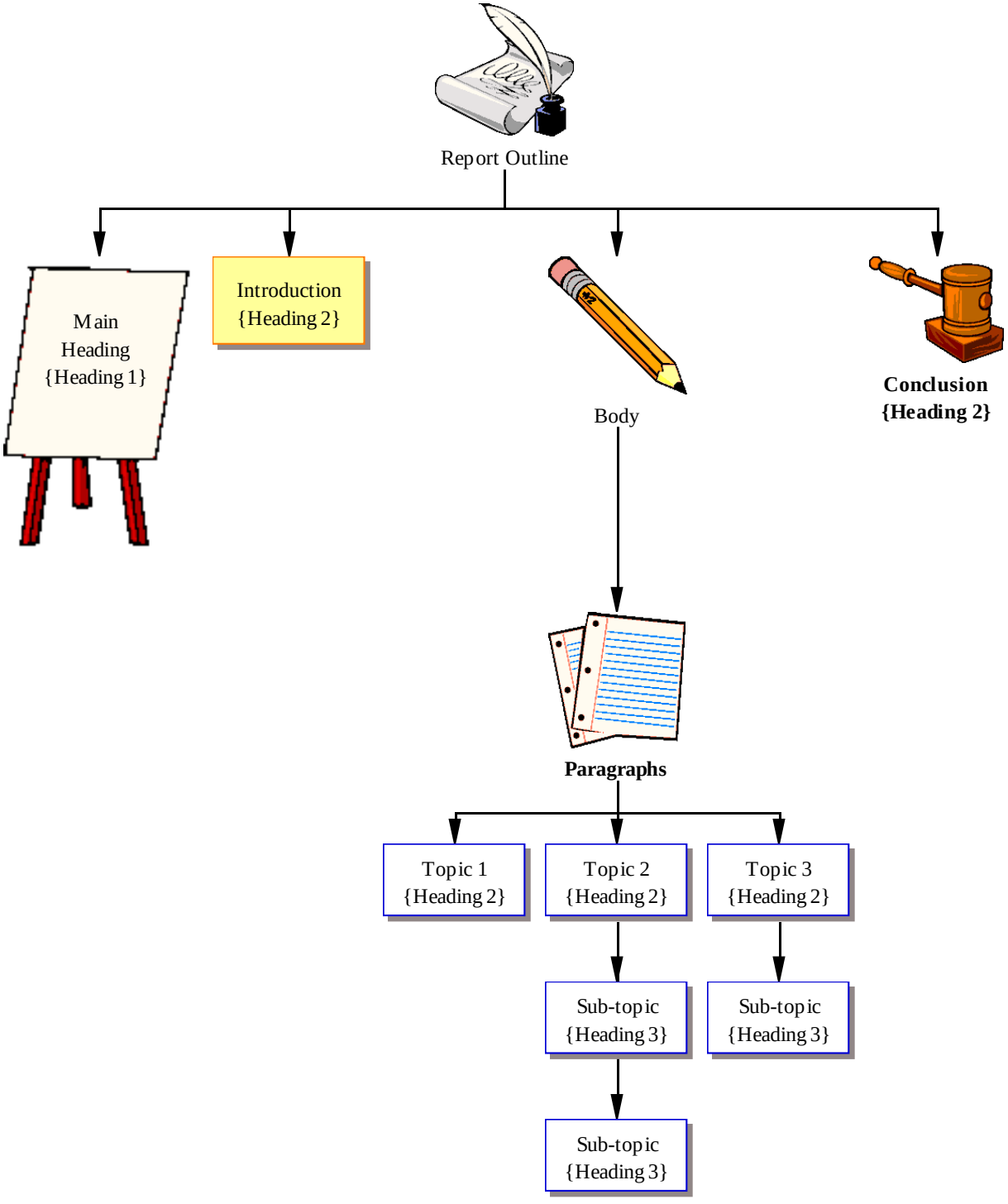
Phase 2

Use information – Planning the report

- Create a framework to show how you are going to use the information and data in your report
  - Which headings and sub-headings will you use? Refer to sub-topics in phase 1.
  - How and where will you use the answers to the questions?
  - How will you integrate the different packages?
  - Which evidence will you use to support your findings and recommendations?
  - How will you use the evidence?
  - What will the order be?



- Plan each section and each paragraph



Report Outline

1. Main Heading {Heading 1}
2. Introduction {Heading 2}

   State purpose, give overview / background, give context of report
3. Body

   Paragraphs

   Topic 1 {Heading 2}
   Key words of information regarding this topic that will go here
   Supporting evidence that will go here, e.g. graph

   Topic 2 {Heading 2}
   Key words of information regarding this topic that will go here
   Supporting evidence that will go here, e.g. query

   Sub-topic {Heading 3}
   Key words of information regarding this sub-topic that will go here

   Sub-topic {Heading 3}
   Key words of information regarding this sub-topic that will go here
   Supporting evidence that will go here, e.g. graphic

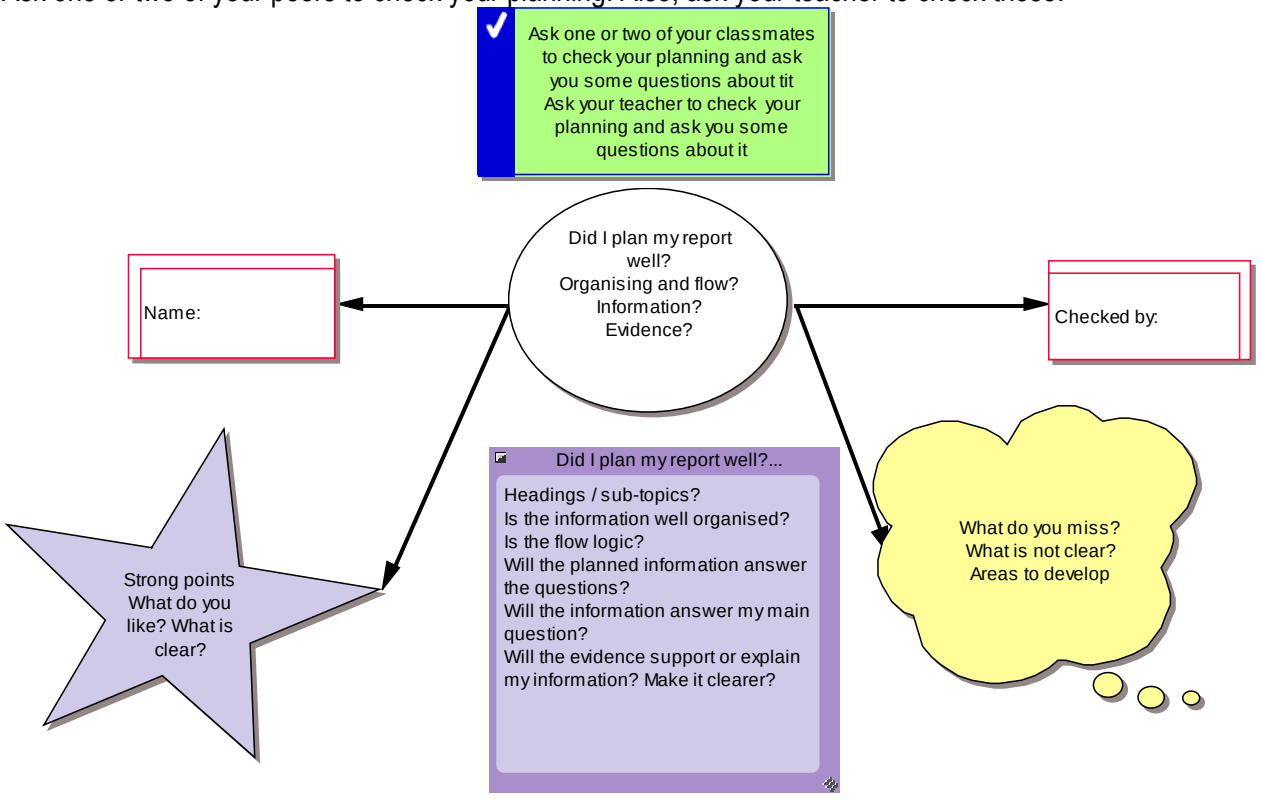
   Topic 3 {Heading 2}
   Key words of information regarding this topic that will go here
   Supporting evidence that will go here, e.g. graph

   Sub-topic {Heading 3}
   Key words of information regarding this topic that will go here
4. Conclusion {Heading 2}

   Key notes

Checkpoint

Ask one or two of your peers to check your planning. Also, ask your teacher to check these.



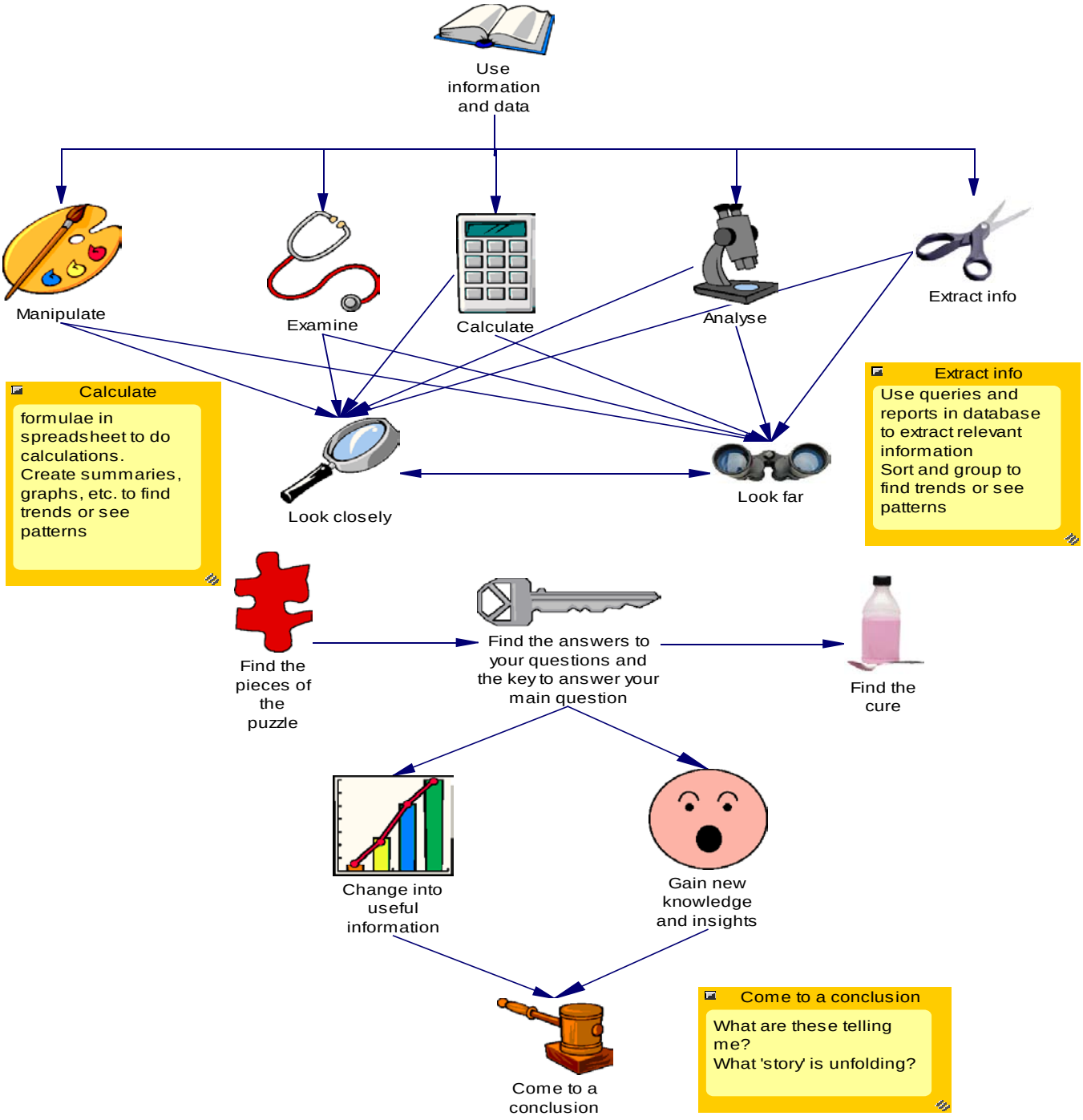
Use information – Process and analyse information and data

Create spreadsheet

- Type in data from survey, transfer or import data gathered elsewhere
- Use functions and formulae to process the data into meaningful information – to help answer the questions and support your findings
- Make summaries
- Create meaningful graphs – to help answer the questions and support your findings/recommendations

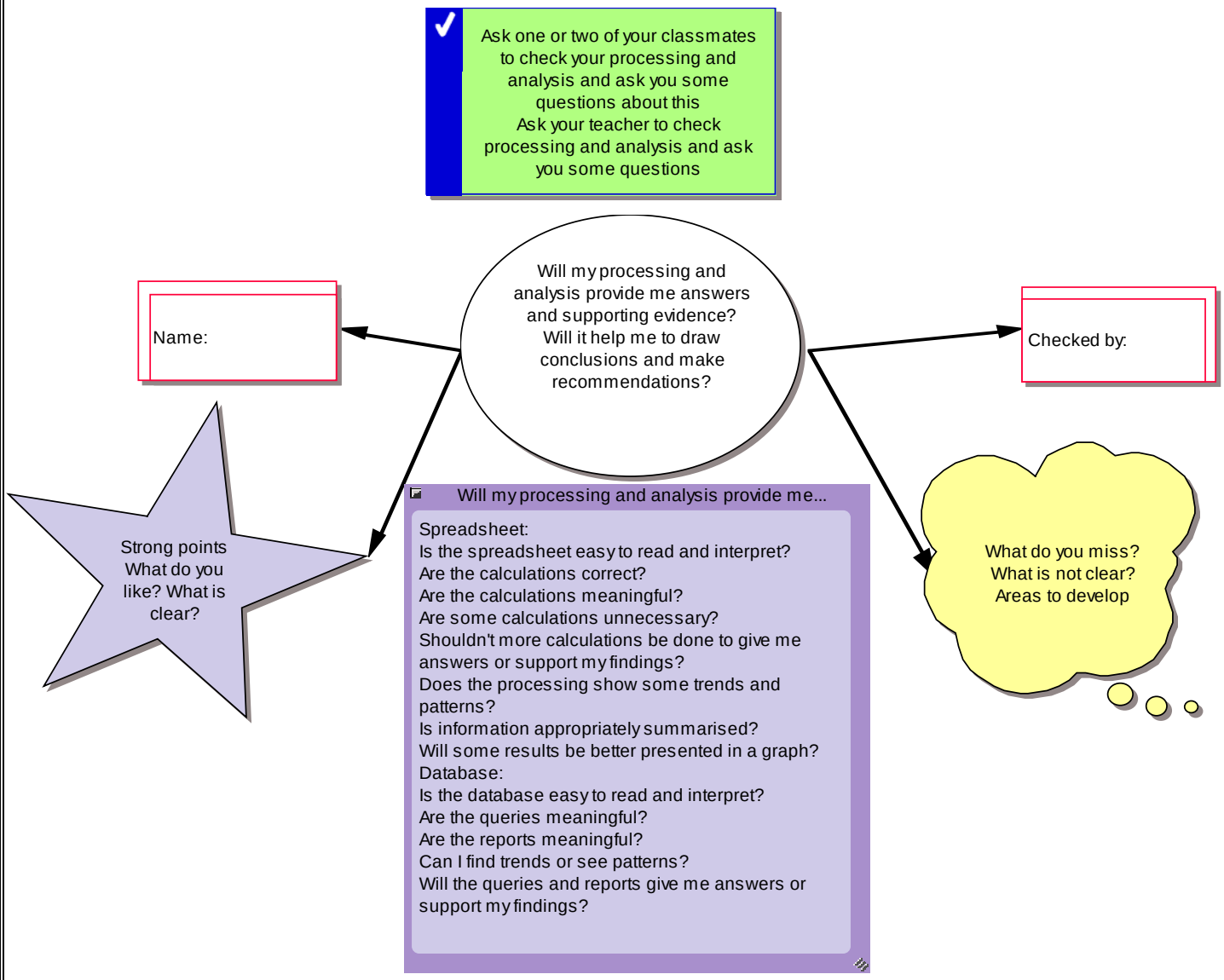
Create database

- Type in, transfer or import information gathered
- Create meaningful queries – to help answer the questions and support your findings/recommendations
- Create meaningful reports – to help answer the questions and support your findings/recommendations



Checkpoint

Ask one or two of your peers to check your processing. Also, ask your teacher to check these.



Checkpoint

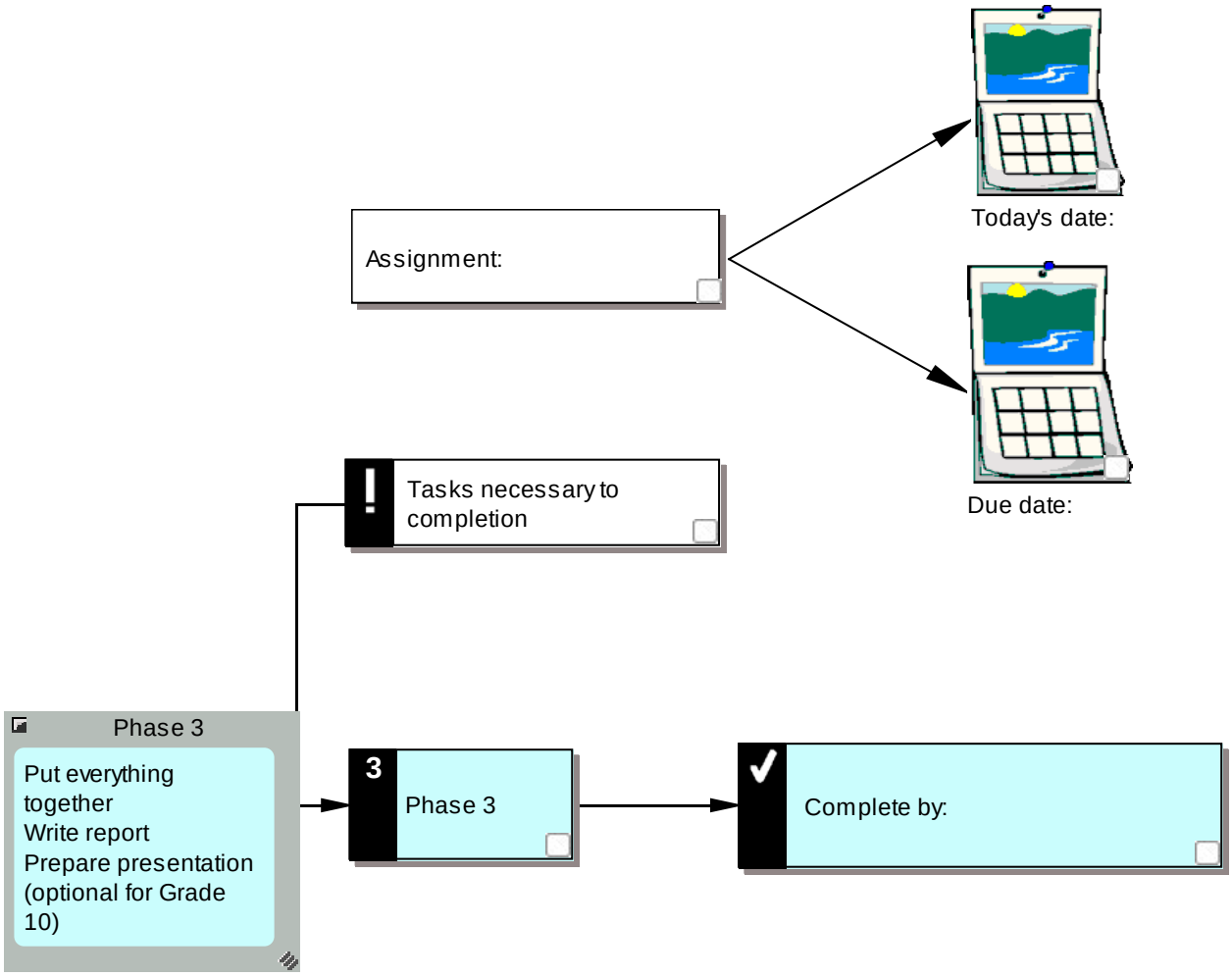
Check if you have done all that is required before you hand in your document for Phase 2. Also, ask a peer to check these.

Task	Self	Peer	Comment
Planning			
Each section?			
Introduction			
Body			
Conclusion			
Headings / sub-headings?			
Paragraphs?			
Key notes on what will be in each paragraph?			
How questions will be answered?			
How packages will be used?			
Where supporting evidence will be placed?			
Organisation?			
Analysis			
Spreadsheet			
Calculations (formulae and functions)?			
Graphs?			
Easy to interpret?			
Meaningful?			
Provides answers?			
Easy to read and interpret?			
Database			
Design?			
Table – number of records?			
Queries?			
Reports?			
Calculations?			
Meaningful?			
Provides answers?			

Hand in:

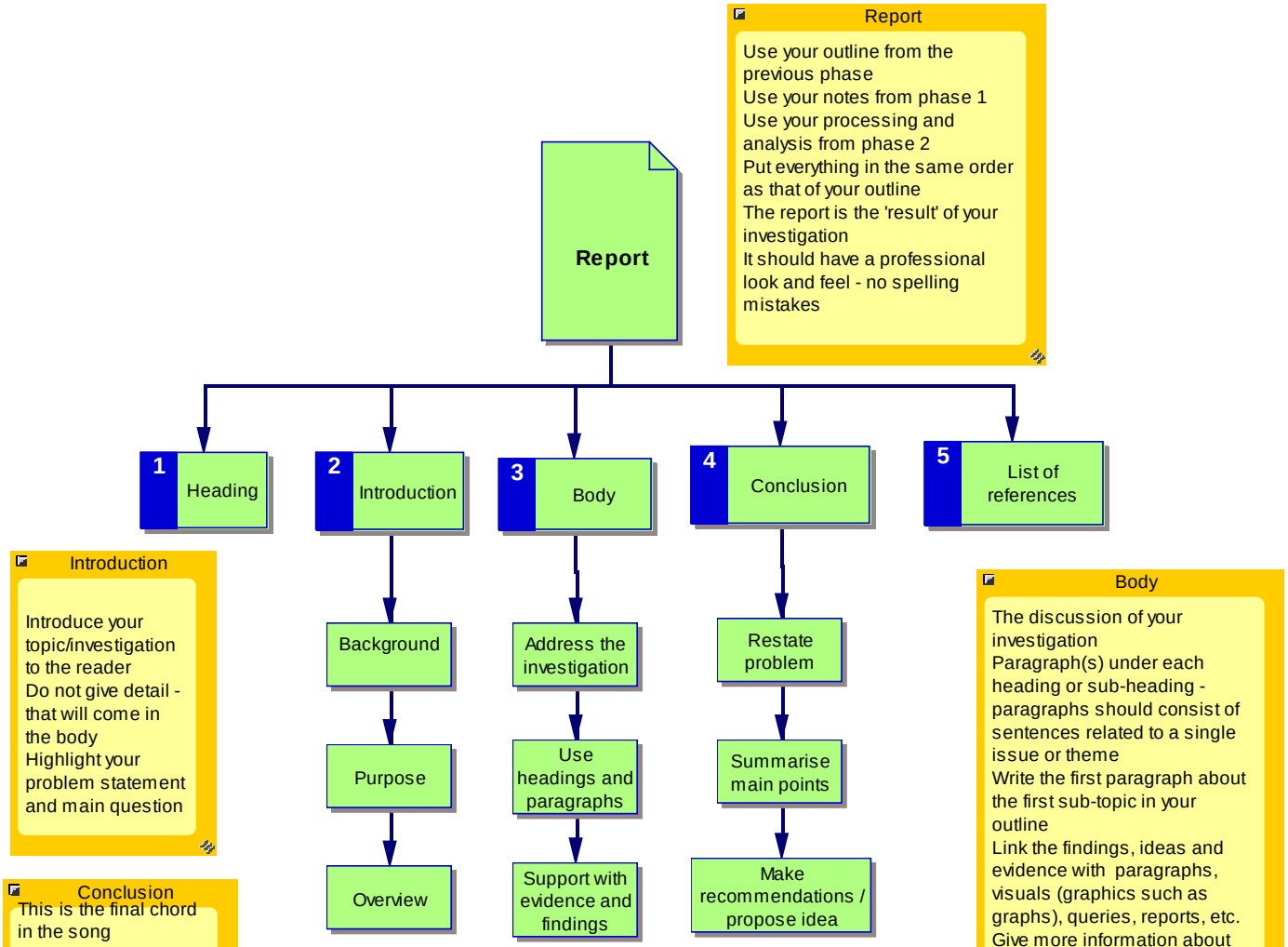
- Planning document with the report outline and information
  - on how you intend to use the information
  - where you intend to use it
  - how it will be organised
- Completed spreadsheet where you processed and analysed the information and data
- Completed database where you analysed the information and data

Planning / overview Phase 3



Phase 3: Use information – Put it all together, complete the puzzle

- Write the report
- Use the outline and write the report using the information, data and supporting evidence from previous phases.



Factors to consider in compiling your report:

Information or material should not be copied from web sites or anywhere else - it should have been reworked, processed or analysed

Graphs, queries, should be woven into your report

Graphs must have a caption - the caption should not be a 'story' but is a 'heading' for an image

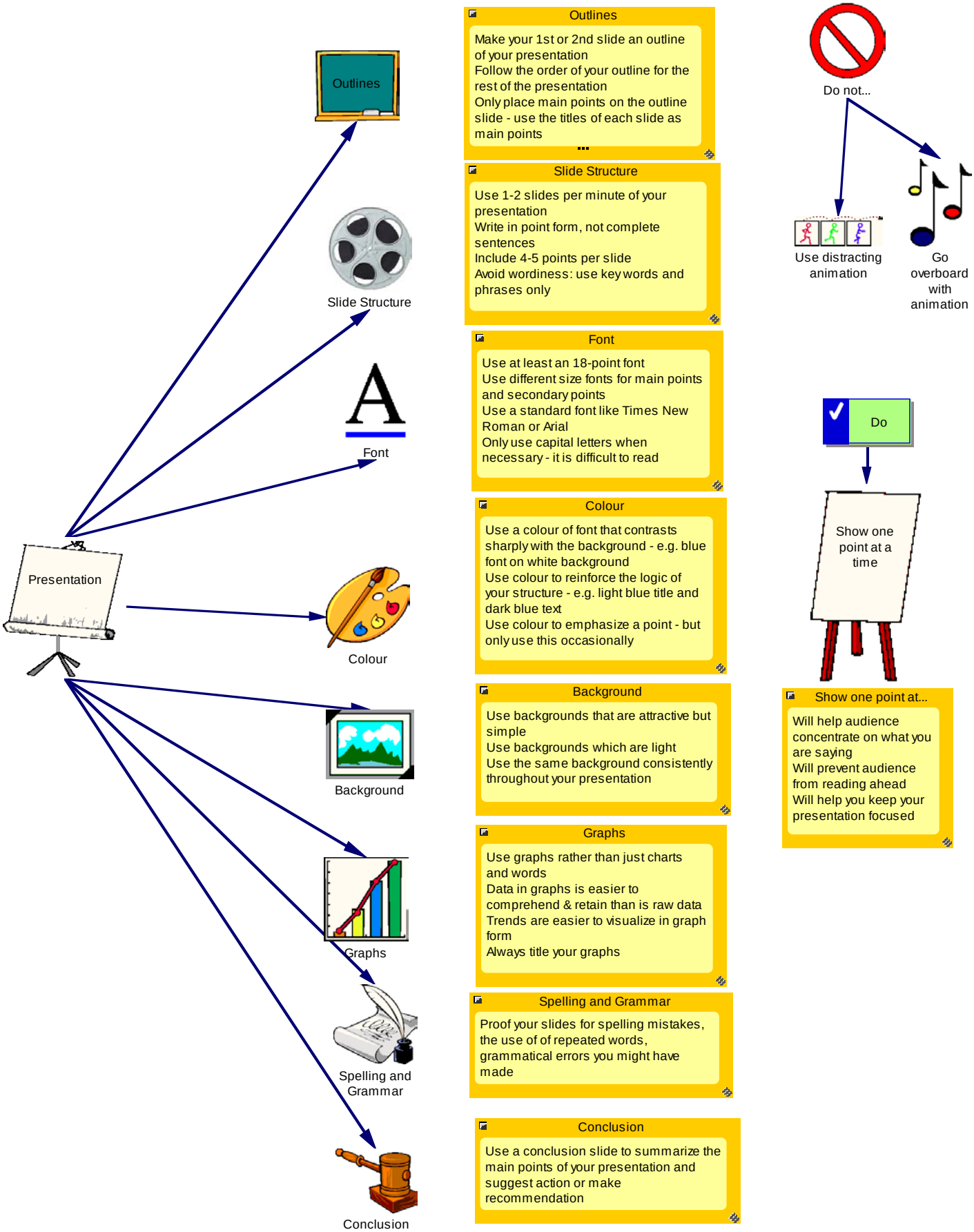
Pictures, if used, must be described or referred to in the text - it should support your text, else do not use

Page numbers are required - especially when you have a table of contents

Check the formatting of headings, etc

Prepare the presentation

Prepare a summary of the report or create a presentation on any related matter



Checkpoint

At this point, you will have to check if you have done all that is required for phase 3. Also, ask a peer to check these.

Task	Self	Peer	Comment
Introduction			
Context of investigation?			
Clear overview?			
Body			
Headings and sub-headings?			
Organisation:			
Sequence?			
Supporting evidence?			
Unity? (related info together?			
Coherence?			
No duplication?			
New knowledge and insight?			
Graphics / images			
Support text?			
Correctly placed?			
Captions?			
Conclusion			
Main points?			
Recommendation?			
Title Page?			
Table of contents?			
Page numbers?			
Reference?			
Integration of packages?			
APA or Harvard method?			
Presentation?			
Readable?			
Good taste? / suitable to target audience?			
Not too busy?			
Outlines are used?			
Slide structure?			
Title slide?			
Menu or table of contents?			
Introduction?			
Body?			
Conclusion/findings?			
Font?			
Alignment / styles?			
Colour?			
Background?			
Graphs / graphics / images ?			
Multimedia effects?			
Action buttons / hyperlinks / hotspots?			
Integration?			
Transitions / animations?			
Spelling and grammar?			

Hand in

1. Your final report containing
    - Introduction
    - Body/Paragraphs discussing the task and the recommendations including information, graphics/images, tables, graphs, queries, reports created in Phase 2 to support the discussion, recommendation or findings
    - Conclusion –present your findings, idea or recommendation

    The report should include:
    - Title page
    - Table of contents
    - List of references
    - Hyperlinks to documents/evidence from previous phases
2. Your presentation

A summary of the report/findings/recommendation or a visual presentation on any related matter using the fourth package that you studied: