

Guidelines for students on the report format 2008

General

The project report should be written as you carry out the project activities and tasks.

Use the information in this booklet to help you complete the report.

Do not copy from other students.

If possible, use a computer to write your report but a hardcopy must be submitted for assessment.

PART A - Introduction

1. Front cover

Design your own cover using pictures and photographs.

You must also include your name, school and other details on the front of the file.

Your teacher will instruct you what to write.

2. Acknowledgements

Complete this at the end of the project.

In this part you can record your thanks to people who have helped you with your agriculture studies and this project.

3. Contents page

Complete this at the end of the project.

List the parts and sections of the project and their page numbers.

4. Introduction

Write in your own words:

why are you doing the project?

what will you be growing in your project?

what is the timing for the project (dates)?

5. Objectives (aims) of the project

List at least three objectives (or project aims):

what is the main aim of the project?

why are you doing the project?

what will you do with the product?

PART B - Project outline and planning

Complete this section **before** you start the practical work.

1. About the crop

Complete the information table about the crop you will grow.

You should use your own knowledge, reference books and other resources to find the answers.

Example:

English name; Malay name; scientific name; variety name; type of vegetable;

General description of the plant (height, colour of fruit, flower, etc);

Direct/indirect sown; Plant spacing etc. etc.

2. List of main project activities and the tools / equipment and materials required

Complete the table below by listing the main activities to be carried out during the project. Also list the tools, equipment and materials you will need to do each activity (task).

Example:

No.	Title of main activities (tasks)	Tools / equipment	Materials
1	Clearing garden bed	parang and wheelbarrow	
2	Liming	bucket	lime

3. Site plan

Draw a scale drawing (plan) of the project area to include: bed layout, water supply, surrounding features and the location of your garden bed.

PART C - Record of activities

To be completed as each task is carried out.

You will be given a report sheet for each task. It should be completed as each task is carried out.

You may use extra paper if you need it.

1. Report on each task

STUDENT REPORT - PART C: ACTIVITIES AND TASKS

Activity 1 - Bed Preparation

Task 1: Soil cultivation

(i) Technical information

1	When was the soil last cultivated or used?	
2	Is the soil surface hard or soft?	
3	How deep will you cultivate the soil?	
4	Will you make a raised bed, flat bed or mounds?	
5	What will be the size of your area? (in m ²)	

Complete the following sentences:

Soil is cultivated to:

(i) _____

(ii) _____

(iii) _____

The hardest soil to cultivate is a _____ soil.

Two tools used for cultivation are _____ and _____. It may also be done using a machine called a _____.

(ii) Report on the task

1	Date soil cultivation was done:
2	Tools used:
3	Describe how you carried out the task:
4	Additional information:
5	Photographs and diagrams (use extra page for these)

Task 2: Fertilizer Application (basal dressing)

(i) Technical information

1	What nutrients (3) will be needed by your crop?	i
		ii
		iii
2	Name inorganic fertilizers which contain these nutrients	
3	What does each fertilizer look like?	
4	Name an organic fertilizer which could be used as a basal dressing:	
5	How much fertilizer should be applied to your garden bed (g/m ²)?	

Complete the following sentences:

A basal dressing fertilizer is applied before _____.

The fertilizer should be mixed with the _____.

The young growing plants will use the _____ in the fertilizer. At the early stage, large amounts of _____ (name of nutrient) are needed for root and stem growth.

If organic fertilizer is used it will provide plant nutrients and also help to improve the soil _____.

(ii) Report on the task

1	Which fertilizers did you use?
2	When did you apply the fertilizer?
3	Describe how you carried out the task:
4	Additional information:
5	Photographs and diagrams (use extra page for these)

Activity 2 – Seed sowing

Task 3: Germination experiment (2 to 3 varieties – choose only one best variety for planting)

(i) *Technical information*

1	Name the two varieties which will be tested	(i) (ii)
2	Which seed company and country did each variety come from?	
3	How many seeds should be tested in the experiment?	
4	How is the germination rate (or %) calculated	
5	Why is it helpful to know the germination rate?	

Complete the following sentences:

Seeds need _____, _____ and _____ to germinate.

The first sign of germination is _____. Some seeds do not germinate because _____ or _____.

The germination rate or germination percentage is helpful to the farmer because it helps him to decide _____.

(ii) *Report on the task*

1	List the apparatus and materials used for the experiment	
2	Draw a small diagram of the set up	
3	How many seeds of each variety are tested?	
4	When did you start the experiment?	
5	Complete the table to record how many seeds germinate each day for each variety	

(Task 3 continued)

Results of experiment

Variety 1 – name:			Variety 2 – name:		
Date	No. of seeds germinating on this date	Running total - number of seeds germinated	Date	No. of seeds germinating on this date	Running total - number of seeds germinated
Calculate the germination rate and %			Calculate the germination rate and %		

7	<p>Draw conclusions.</p> <p>Which is the best variety? _____</p> <p>Give reasons why it the best? _____</p>
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Task 4: Choosing the variety and sowing the seed (direct)

(i) Technical information

1	What is the name of the variety you will grow?	
2	Why did you choose this variety?	
3	What is the recommended plant spacing?	
4	What is the planting depth?	
5	How many seeds will you put in each hole?	

Complete the following sentences:

The best seeds are the ones with the highest _____. If this 100% then _____ the seeds will grow. A farmer may still decide to plant two seeds per hole in case one of the seeds is _____. The correct spacing is important. If it is too close the growing plants will compete for _____, _____ and _____. If the space between plants is too far apart this is a waste of _____.

(ii) Report on the task

1	Name of the chosen variety:
2	List the tools equipment and materials which you used to sow the seed:
3	State the steps in sowing the seed:
4	Additional information
5	Photographs and diagrams (use extra page for these)

Activity 3 - Crop Maintenance

Task 5: Observing, identifying and controlling pests and diseases

(i) Technical information

1	Name two main pests of this crop	(i) (ii)
2	On which part of the plant is each pest found?	
3	Name one main disease of this crop	
4	Which part of the plant does this disease attack?	
5	State one method of pest control and one method of disease	Pest control: Disease control:

Complete the following sentences:

There are many pests of vegetables e.g. _____, _____, _____
 They attack different parts of the plant, e.g. inside the _____ and outside on the _____.
 A farmer will look for signs of damage caused by pests e.g. _____ and _____
 Plant diseases may be caused by f _____ b _____ or v _____. The disease often
 spreads to all parts of the _____. A farmer should control pests and diseases using different
 methods called IPM which means _____.

(ii) Report on the task

1	List the equipment and materials used for this task	
2	Complete the table shown below to record each pest and disease you find on your crop	

Name of organism	Pest or disease	Description of organism	Damage it causes
i.			

Task 5 (continued)

Name of organism	Pest or disease	Description of organism	Damage it causes
ii.			
Name of organism	Pest or disease	Description of organism	Damage it causes
iii.			
Name of organism	Pest or disease	Description of organism	Damage it causes
iv.			

3	Photographs and diagrams (use extra page for these)
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4	Explain briefly, how you controlled these pests	
5	Explain briefly, how you controlled these diseases	

Activity 4 – Other activities

Task 7: (Experiment on comparing yield for two different planting densities: 1 plant/hill and 2 plants/hill)

(i) *Technical information on the other variety to compare with the variety you are growing*

1	Name the other variety	
2	Date the other variety was sown	
3	How many seeds per planting hole?	
4	What was the spacing between plants?	
5	When did germination start?	

Complete the following sentences:

An experiment like this is sometimes called a crop trial. These trials are done to compare different _____. The method used for growing the two varieties should be the _____. When we do a trial many different characteristics are recorded.

Which three characteristics do you think are the most important when deciding the best variety to grow? _____, _____, _____.

(ii) *Report on observations and measurements comparing the two varieties*

Draw a table like the one shown below and record your findings. Some items will be repeated on different dates through the project e.g. plant height, number of leaves etc.

Date	Crop characteristic	Variety one	Variety two
	Germination rate		
	Plant height (growth rate)		
	Number of leaves		
	Days to first flowering		
	Days to first fruiting		
	Number of fruit per plant		
	Characteristics of fruit		
	Yield per plant		

Write a short paragraph to compare the two varieties and state which variety you think is the best.

Task 8: Harvesting, grading and marketing

(i) Technical information

1	What is the expected time (in days) from sowing to harvesting this crop?	
2	What signs will tell you that the crop is ready to be harvested?	
3	Will you grade the crop by size, colour, shape or other?	
4	Where will you sell the crop?	
5	What price do you hope to get for the crop?	

Complete the following sentences:

Crops should be harvested when _____. If it is harvested too early it will _____. If harvested too late, the crop may _____. After harvesting, the fruits should be graded by _____. This is done to _____.

(ii) Report on the task

1	Date when harvesting starts:
2	Complete the harvesting record:
3	Total weight of crop harvested:
4	Method used for grading the crop:
5	Unit price:
6	Describe how you carried out: Harvesting Grading
7	Additional information:
8	Photographs and diagrams (use extra page for these)

2. Regular maintenance activities

Every time you do one of these activities you must record the date in the table. You can add extra comments about the activity in the right hand column.

Example:

Date:	watering	weeding	fertilizing	pest control	disease control	other	comments
1/3/04		✓					Use a hand fork to remove mimosa
4/3/04					✓		Remove two diseased plants

PART D - End of project

1. Conclusions

The conclusions must be written at the end of the project. Write a short paragraph to include answers to the following:

- What was the total yield and income from the project?*
- Did you make a profit or loss?*
- Briefly explain some of the problems you had during the project.*
- What have you learnt during the project?*

2. Reference materials

List down the reference books, websites and sources of information you have used during the project.

No.	Title of book, reference materials, website etc.	Author	Topic
1			
2			

PART E – Report appendices

Four other records will be kept during the project.

- (i) stages of plant growth or rate of growth (general observations)
- (ii) financial records
- (iii) harvest record
- (iv) chart showing a summary of project activities and dates

Example of Gantt chart showing activities and tasks carried out during the vegetable project (2008)

Activity or task	April			May			June			July			August			September			
Land clearing			17																
Cultivation			20																
Liming				28															
Germination experiment																			
Fertilizer application (basal dressing)					12														
Mulching					12														
Sowing seed						15													
Watering							water garden bed regularly when there is no rain												
Staking / trellising								1											
Fertilizer application (side dressing)											5			28			20		
Variety experiment (trial)							carry out observations to compare the two varieties												
Weeding							regular weeding of the garden bed												
Observe and control pests							observe, collect and control pests												
Plant disease observation and control							observe, collect and control plant disease												
Harvesting																	3	9	16
Grading and marketing																			

Your teacher will give an outline layout for each record which you must complete.