

Name and Form: _____

Year 9 Science: Plant Growth Assignment Planning Form

1. What are the variables that could affect the growth of your plants? (Variables are the conditions like sunlight, or temperature, that the plant will face.)

2. You will need to set up several groups of plants. Each group will be subjected to the same conditions except for one condition (or variable). Which ONE of the above variables are you going to change between the groups of plants?

3. List three aspects of plant growth that you will record whilst your plants are growing.

4. How often are you going to take these measurements, and for how long?

5. State the **aim** of your experiment.

6. What is the **purpose** and reason for conducting the investigation? Of what use will the results be?

7. State the **hypothesis** of your experiment.

8. What type of plants will you be using? How long will they take to grow to maturity from seedlings?

9. How many plants will be in each group? (The fewer the number of plants in each group, the less **reliable** your results are. A collection of results that have been averaged is preferable and more **valid**).

10. How many groups of plants will you have?

11. How many plants will you need in total?

12. What will be the total cost, including any other materials you may need to purchase (fertiliser, potting mix, etc)?

13. List the conditions that each group will experience. You will need to explain how variables will be controlled.

Group 1

Group 2

Group 3

Group 4

Group 5

Group 6

14. Explain how you are going to minimise the effects of:

a) Random errors

b) Systematic errors
