



Stage 5 Agricultural Technology

Name:

Experimental design and analysis: Worms

Design an experiment to investigate the effects of **one** factor on the worm farm.

Examples include:

- Which food do worms prefer?
- The effect of different bedding materials on worm activity.
- The effect of different covering materials on bedding temperature.

Make a list of any factors that you could investigate and discuss with your teacher.

Record the aim, method, and what things you will be measuring for the results of your experiment. Make sure you include how you will incorporate the important experimental design factors of control, randomisation, replication and standardisation.

Experiment title:

Aim:

Method:



Control:

Randomisation:

Replication:

Standardisation:

Results:



Experimental report: Worms

As a class, select and conduct **one** of the experiments outlined above or another one that has been discussed. Conduct the experiment and record the report below.

Experiment title:

Aim:

Method:

Control:

Randomisation:

Replication:

Standardisation:



Diagram:

Results:

Diagram, table or graph



Discussion of results:

Conclusion:

Recommendations and further research or experiments:



Questions

1. Why is experimental design important?

2. Explain why the following experimental design factors should be incorporated into every experiment:

Control:

Randomisation:

Replication:

Standardisation:
