ORANGE HIGH SCHOOL

ASSESSMENT TASK NOTIFICATION

Subject	Agriculture
Topic	First Hand Investigation - Animal Production
Class Teacher	D Wait
Head Teacher	D Wait
Year	Year 12
Date Given	Week 11 Term 2 2025
Date Due	Week 8 Term 2 2025
Weighting	20%
OUTCOMES ASSESSED	H2.2, H4.1

Assessment Outline

Students are to design and conduct a first hand investigation that investigates the impact of different feed types on the growth rates of chickens for a given period of time. Students are required to collect data from the experiment to determine the most effective feed type.

Following the completion of the trial, students are required to complete a Scientific Report that includes the following sections.

1. Introduction - examining the research that already exists regarding feed type and the growth rates of chickens.
2. Aim - State the purpose of the investigation
3. Hypothesis - Make a statement outlining your expected results based on independent and dependent variables.
4. Materials - List the materials being used
5. Method - Outline the process to ensure a fair test was being conducted. List the steps to carry out the experiment, including diagrams.
6. Results - List the results collected including a table that include the mean of each group and the standard deviation.
7. Statistical Analysis - to be completed together.
8. Discussion - Critically analyse the experiment using the standard deviation to measure the variance and account for issues/errors in your results
9. Conclusion - Accept of reject the hypothesis stated in your experiment
10. Suggestions for further research**.**

Plagiarism:

Plagiarism, the using of the work of others without acknowledgement will incur serious penalties and may result in zero award. Any cheating will also incur penalties.

Outcomes Assessed

H2.2, H4.1

Failure to follow the above procedures may result in a zero award. **The policies and procedures that are outlined on the HSC assessment booklet will be followed regarding the non-completion of assessment tasks.**
Feedback: students will be provided with written feedback at the completion of the task. Student can complete drafts

Supporting Information to conduct a first-hand investigation

Scientific Report

Part 2 required students to produce a scientific report that demonstrates how the experiment was carried out, the collection and the analysis of results. It must include the following information

1. Aim: Statement outlining the purpose of the experiment
2. Hypothesis: A statement outlining what the predicted outcome will be making reference to the dependent and independent variables. This should also be chosen as a result of information provided in the literature view
3. Materials: Write a list outlining the equipment that is used to conduct the experiment
4. Method: The method needs to outline how the experiment was set up including how results are going to be collected. A diagram showing the use of a control, randomisation and replication are also used here to improve the quality of the information included.
5. Results: Students should include the results they have collected. Including tables showing the average results for each trial group over the given period. This data should be graphed. Students must also conduct a statistical analysis of results to determine if they support the hypothesis.
6. Discussion: A discussion analyses all components of the report. The main focuses includes analysis of results including any patterns or trends, sources of error and what could have be done to minimise any sources of error.
7. Conclusion and recommendations for further research: Students must write a conclusion outlining which states findings and a statement supporting or rejecting the hypothesis.

MARKING GUIDELINES - Scientific Report

Introduction	- Thoroughly examines current research around feed type and the impact on chicken growth. - provides sound research that examines feed type and the impact on chicken growth. - Provides basic or no research examining feed type and the impact on chicken growth. - Poor completed	10-8 7-5 4-1 0
Aim	Student states the purpose of the experiment including reference	1
Hypothesis	- State in the third person, past tense, the hypothesis in terms of a relationship between an independent and a dependent variable - State the hypothesis in terms of a relationship between an independent and a dependent variable - State the hypothesis in terms of a relationship, identifying one variable	3 2 1
Materials	- Students provide a list of all materials used - Student provides a list of some materials used - Student provides a list of few materials used - No equipment listed	3 2 1 0
Method	- Students show the steps required to conduct the experiment including the setup of materials, use of a control, randomisation and replication. Method includes a diagram to show how the method is set out. - Students show the steps required to conduct the experiment including the setup of materials, use of a control, randomisation and replication. - Student includes a method with some of the components listed above - Method not completed or a few components are correct.	8-6 5-4 3-2 2-0
Results	- Accurate, appropriate measurements, including units, of both correct variables, recorded in a table or other appropriate form. Graphical representation of results are included. Validity attained through repetition of tests recorded and averages taken. - Accurate measurements, including units, of both variables, recorded in a table or other appropriate form. Some graphical representation of results are included. Validity attained through repetition of tests recorded. - Measurements, of a variable, recorded in a table or other appropriate form. Some graphical representation of results are included. - Some measurements recorded in a table or other appropriate form.	10-8 7-5 4-3 2-0
Statistical Analysis	- Students correctly use a test to determine if the results are significant. A statement is included to support test - Student use a test to determine if they test is significant without explanation - No test of significance is included.	10 9-5 0
Discussion	- In the discussion references are made to the experiment and any problems encountered. Analysis of results recorded, including an explanation for any unexpected results. Explanation of any changes made to the design. Interpretation of the results from both table and/or graph. - In the discussion references are made to the experiment and any problems encountered. Discussion of results, including an explanation for any unexpected results. Interpretation of the results recorded from table and/or graph. - In the discussion references are made to the experiment. Some discussion of results. Some interpretation of the results recorded from table and/or graph. - In the discussion some references are made to the experiment. Some discussion of results. - In the discussion little reference is made to the experiment. No discussion of results	15-13 12-10 9-7 6-3 2-0
Conclusion	- Conclusion clearly stated in terms of the two variables tested in the experiment. Statement made to support/reject or partially support the hypothesis. - Conclusion stated in terms of the two variables tested in the experiment. Statement made about the hypothesis. - Conclusion stated in terms of a variable tested in the experiment. - Attempts to write a conclusion	5 4-3 2 1-0
Recommendations	- Following completion of the report, the student identifies further areas for research. - Following completion of report student identifies some further areas for research but areas are not of high quality - Following completion of report students fails to identify areas for further research.	5-4 3-2 1-0
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