Gymea Technology High School
INSPIRE. LEARN. SUCCEED.

Year 12, HSC INVESTIGATING SCIENCE

HALF YEARLY EXAMINATION NOTIFICATION

Due Date: **Term 1, W9/10 as per exam schedule**

Date Distributed: Tuesday, 18th March, 2025 **Task Weighting: 100% School**

Outcomes and Content – Students:	
INS 11/12 -1	Develops and evaluates questions and hypotheses for scientific investigation
INS 11/12-2	Designs and evaluates investigations in order to obtain primary and secondary data and information
INS 11/12-2	Conducts investigations to collect valid and reliable primary and secondary data and information
INS 11/12-4	Selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media
INS 11/12-5	Analyses and evaluates primary and secondary data and information
INS 11/12-6	Solves scientific problems using primary and secondary data, critical thinking skills and scientific processes
INS 11/12-7	Communicates scientific understanding using suitable language and terminology for a specific audience or purpose
INS 12-12	Develops and evaluates the process of undertaking scientific investigations.
INS 12-13	Describes and explains how science drives the development of technologies.
INS12-14	Uses evidence-based analysis in a scientific investigation to support or refute a hypothesis.

ASSESSMENT OUTLINE

1. WHAT AREAS OF LEARNING DOES THIS ASSESSMENT ADDRESS?

Student's knowledge, skills and scientific understanding of how models, theories and laws have been developed and applied in Investigating Science will be assessed, specifically in the topics of Module 5: **Scientific Investigations, Module 6: Technologies, & start of Module 7: Fact or Fallacy** (IQ 1 and 2). This will occur within a 2 hour examination.

2. WHY IS THE COMPLETION OF THIS ASSESSMENT IMPORTANT?

This task will draw together the above outcomes providing students with the opportunity to demonstrate their knowledge, understanding and skills in Investigating Science. This will allow them to gain feedback on areas of strength and limitations in order for their knowledge to be refined for the final HSC examination. Students will utilise their problem-solving skills to solve real world Investigative Science based problems.

3. WHAT STEPS DO I TAKE TO COMPLETE THIS TASK?

Task Outline

Using syllabus outcomes and content as a guide from **Scientific Investigations, Technologies, Fact or Fallacy** topics, students will need to formulate logical and coherent responses to a range of questions to achieve full marks.

The examination is 2 hours in duration with 5 minutes reading time. It will consist of:

- **Section 1**: 20 multiple choice

  Students should allow **30 minutes** to complete this section.

- **Sections 2:** 54 marks of short responses (marks indicated per question).

  Students should allow **1 hour 30 minutes** to complete this section.

All working out must be shown to be awarded full marks.

As this is an examination, you will need to prepare for this task by:

- Make summary notes of each topic listed above.
- Regularly complete practice examination questions.
- Seek teacher assistance on unclear work.
- Ensure all set work is up to date.

Details for Submission

Students will need to bring pens, pencils, a ruler and a board approved calculator to this examination. All answers are to be completed on the exam paper. Student name needs to be written on the front of the examination paper. The examination paper and answer sheet will be provided. Students are NOT permitted to bring notes into the exam.

Any student who is absent on the day of the examination must follow the illness/misadventure procedures in the school's assessment policy. Non-completion of the task without successful illness/misadventure appeal will receive a zero-mark and an N-Warning notification, as outlined in the Year 12 Assessment Booklet. Students are to complete the task on the first day they return to school.

---

4. HOW WILL MARKS BE AWARDED TO MEASURE MY LEARNING?

Marks will be indicated on the paper for each question. The examination consists of both multiple choice and extended response questions. Students will need to show all working to achieve maximum marks.

Worked solutions including feedback will be provided with the marked paper.