Sample Assignment: Unit 8 Investigating the Scientist's Work

ASSIGNMENT BRIEF

Unit Name:	Investigating the Scientist's Work	**Unit Number:**	Unit 8
Assignment Title:	Information Pack for a Scientific Vocational Investigation	**Assignment Number:**	8.0
Date Set:		**Due Date:**	See plan
Assessment Objective(s): AO1, AO2, AO3			

Brief:

Plan and carry out a scientific vocational investigation.

The topic is to be chosen by you but can be based on work covered in the units already studied.

The investigation will involve:

- Research to obtain knowledge about the topic
- Practical work to obtain data to confirm or disprove your original ideas.

The practical work must be carried out safely by you in the laboratories that you usually work in. If possible, several practical techniques should be used in the investigation.

Task:

You have (x) weeks in which to research, carry out and write up your investigation.

The investigation is divided into 2 main tasks:

Task 1: Planning (AO1)

- Write a detailed and workable plan for your chosen investigation. In your plan you need to include everything you need to do (this includes your research/practical work and the write-up), how your investigation links to the requirements in the assessment grid, how long you are going to spend on each task and a check on target dates.
- Record evidence of any research you carry out with details of sources used.
- Record the aims of your investigation and details of how you are going to achieve this. Include full details of experimental work and also record any constraints under which you work.

Give details showing checks for the validity of the information chosen.

Task 2a: Carrying out the plan (For AO3)

- Carry out safely all the experimental work detailed in your plan.
  - (i) Check that while you are completing your experimental work your supervisor completes the Assessment Record and that this is added to your report
  - (ii) Check that risk assessments are completed for all your practical work.

- Complete detailed evidence of the practical part of your plan with evidence of any changes or modifications recorded and carried out.

- Write a scientific report on your investigation (see AO3 b d e). So that you can reach the highest marking band possible, include in your report:
  - (i) The aim of the investigation and how it will be carried out
  - (ii) Background information and scientific research
  - (iii) Details of practical work carried out
  - (iv) Outcomes of your investigation suitable for technicians to understand and use
  - (v) Records of any changes/modifications to practical work with explanations
  - (vi) An interpretation of the data collected
  - (vii) How well the investigation achieved the aims and objectives
  - (viii) A critical evaluation of the investigation.

Task 2b: Presentation of data (For AO2)

- Record the data from your practical work in a suitable form
- Process your data so it can be easily understood
- Carry out and record any calculations needed to help interpret your data.

Max marks possible for this task: 50

Resources: