

# Appendix 1: Assessment information for candidates

This assessment applies to the following Unit:

Researching Chemistry (Higher)

## Outcome 1

**1 Apply skills of scientific inquiry and draw on knowledge and understanding to research the underlying chemistry of a chosen topic by:**

1.1 Gathering and recording information from two sources relating to the chosen topic

## Outcome 2

**2 Apply skills of scientific inquiry to investigate, through experimentation, the underlying chemistry of a chosen topic by:**

2.1 Planning/designing the practical investigation, including safety measures.

2.2 Carrying out the practical investigation safely, recording detailed observations and results including units

To pass this assessment you will have to show that you have met these Outcomes and Assessment Standards.

Your assessor will let you know how the assessment will be carried out and any required conditions for doing it.

## Candidate guide

These assessment activities apply to the *Researching Chemistry* (Higher) Unit.

With guidance from your assessor, you will select a topic related to the Higher Chemistry Course to research.

There are two assessment activities for this research:

- ◆ Assessment activity 1 — literature research
- ◆ Assessment activity 2 — practical research

You can carry out the literature research and practical research activities in any order. Information/data gathered should be recorded.

Your assessor will let you know how the assessment will be carried out and any required conditions for doing it. Your assessor will provide you with the resources you need. You may be able to work in a group to do the practical work, but your assessor will need you to show that you have met the Assessment Standards including following procedures safely.

## Assessment activity 1 —literature research

You should:

- ◆ select a topic with agreement from your assessor
- ◆ clearly describe the chemistry of your research topic
- ◆ carry out research on your chosen topic
- ◆ record at least two of the sources you have used in your research
- ◆ make notes from these sources

You must use at least two sources of information such as two different websites and you must record these sources of information in enough detail to allow someone else to find these sources easily. You may use a referencing system.

## Assessment activity 2 — practical research

You should:

- ◆ plan your practical research investigation

Your **plan** must include:

- ◆ a clear aim for the practical research investigation
- ◆ the plan for the practical research investigation detailing:
  - the experiments to be carried out
  - the apparatus and materials required
  - any relevant points that are required to ensure consistency and a 'fair' experiment

If working in a group the plan should also include the individual roles and responsibilities of all members of the group.

- ◆ clear and detailed description(s) of how the practical(s) should be carried out. This could be taken from references, eg the SSERC documentation
- ◆ safety considerations where appropriate
- ◆ observations/measurements to be made

**Checkpoint:** Ask your assessor to check your plan before you start the experimental work.

You must also ensure that the experimental procedure is carried out effectively. If working as part of a group, the tasks must be shared in discussion with members of your group. It is recommended that each person within the group is allocated a particular task, where appropriate.

- ◆ You should carry out your experimental work safely.
- ◆ Record your observations/measurements in an appropriate way, including repeat measurements where appropriate.
  - This will probably be a table but could be a line graph, summary or other appropriate format.
  - You should include labelling and SI units; standard abbreviations are acceptable.