

PHYSICAL SCIENCES Level 3

Common Assessment Task

Work Requirements:

Predominant sources of energy

Assessment Type:

Essay

Criteria being assessed:

- Criterion 1 – elements 3, 4, 5, 6 and 7.
- Criterion 3 - all elements

Suggested conditions:

- This task should take learners 2.5 hours of class time.
- The response should be no more than 1200 words maximum.
- The response should be submitted electronically.
- This task requires an individual response by each learner.

Task Description:

Energy is an important resource in modern society. It is used for:

- transport
- in the home for heating, lighting, entertainment and cooking
- in industry for production of raw materials and for manufacturing of goods.

There are many sources of energy that are currently in use, such as fossil fuels, photovoltaics (solar panels), and hydro. Each type of energy source has benefits and drawbacks. Concerns such as environmental, cost, baseload and response to demand, storage, transmission and scale are but a few things to consider.

What you need to do:

Your task is to identify the predominant sources of energy used in Australia and write a **persuasive argument** (1200 words maximum) for why a particular form of energy is best.

You may present this argument as a broad investigation of energy use, or as a specific application such as, but not limited to, the examples given above.

The response should include:

1. an argument as to which source of energy is the best, by evaluating evidence and assessing the relative impact of influences on your decision making

2. a brief overview of the different energy sources that are used in Australia
3. the main benefits of your chosen energy source, and how it is superior to other sources.
4. downsides to other sources which are commonly used in Australia.
5. outline the relevant science behind the production of your chosen energy source. For example, how is the energy produced?
6. Consider economic, political, environmental and ethical factors
7. A bibliography referenced using an accepted style chosen by your teacher a reference list with at least 4 sources.

Remember to compare and contrast your source with other sources and to convince your audience why your chosen source is the best.

Teacher use only - What needs to be submitted for assessment?

Learners respond to the questions in a separate document, clearly identifying each section they are responding to.

The referencing style should be communicated to learners and be commonly accepted, for example Harvard or APA.

The response should be no more than 1200 words maximum