

## **Evaluating sources of information**

The handouts on the following pages may be useful in preparing candidates to undertake a Case Study task for the Controlled Assessment unit of GCSE Science A (Unit A144).

To undertake any Controlled Assessment task, candidates will need a range of practical skills; for a Case Study task, it is important that they know how to evaluate sources of information found during their research into a topic.

How much can a source of information be trusted? Does it matter where and when a source of information was published, and by whom? Should we believe everything we read?

The handouts provided on the following pages may be used in homework or class exercises, and may help to illustrate a class discussion on how to critically evaluate sources of information.

**Dissecting an article**

What is the title of the article? .....

.....

Where was the article published? .....

.....

When was the article published? .....

What is the author's name? .....

What is the author's job?

*(Are they a scientist? A journalist? A salesman? A marketing person? A government official?)*

.....

.....

In the article, use coloured pens or pencils to highlight or underline:

- data and evidence – **in green**
- information about how the study was done – **in blue**
- the author's opinions and ideas – **in red**

Which pages in your textbook have information that helps you to understand the article?


*pages* .....

.....

.....

## Judging a source of information

Use this guide when comparing different articles in the media or other sources. It will help you to decide which articles are most likely to be giving reliable information to support any claims made or opinions given.

					
	The further to the right, the more reliable the source is likely to be				
Publication / source	Website or newsletter of a private individual, 'blog' or forum entry from unknown writer.	'Respectable' pressure group web-site or newsletter.	'Quality' media, e.g., the BBC, The Guardian.	School textbook or science magazine, e.g., New Scientist, Focus, Catalyst.	Peer-reviewed journal or government report.
Nature of the data	Little or no data given.	Data of doubtful reliability, e.g., based on small or unrepresentative sample.	Based on a single study, or little information about sample design or procedures.	Clear indication of valid design e.g. large samples, extended period of study.	Different studies give matching results.
Science explanations	No explanation or data to support claim.	Explanation not yet tested or confirmed.	Can be compared with other possible explanations.	Agreed by most of the scientific community.	Fully agreed by almost everyone.
Status of the author	Individual of unknown background, or known extremist.	Science student or well informed person.	Teacher / professional scientist with expertise in a different field.	Scientist working in this field.	Recognised expert in the field.
Author's affiliation or institution	Non-science related.	Representing a particular view only (e.g., manufacturer or pressure group).	Independent, science related source.	University, medical school, science institute.	Leading research centre / major company / government research centre.