

Extended Science Investigation Reports

What is an extended science investigation report?

An extended science investigation report is written by scientists to formally communicate the **results of their scientific experimentation and research** to other scientists in the scientific community.

Voice

Third person is used as the author is writing in the formal role of a scientist.

Language & Grammar

- Language choice is formal.
- Mixture of past, present and future tense, depending on section of report.
- Procedural language and statements used for the Aim and Method sections.
- Variety of long and short sentences, paragraphs and bulleted points.
- Contractions are not appropriate.
- Relevant scientific language adds authenticity to information, analysis and conclusions presented.
- Cause and effect language and phrases used when discussing results.

Structure and Organisation

Title Page	<ul style="list-style-type: none">• A title that indicates the focus of the investigation, date, prepared by and prepared for statements.
Abstract	<ul style="list-style-type: none">• A concise summary of the project for the reader.
Introduction	<ul style="list-style-type: none">• The topic of research is introduced in an interesting and informative paragraph/s.
Research Question	<ul style="list-style-type: none">• State the research question being investigated. This should be posed as a question, rather than a statement.
Research Review	<ul style="list-style-type: none">• Provides an overview of the theory on which the investigation is based. Written in paragraphs.
Aim	<ul style="list-style-type: none">• Explains the purpose of the experiment concisely. Usually one to two sentences.
Hypothesis	<ul style="list-style-type: none">• Provides an explanation in sentences of the predicted outcome/s of the experiment, with justification for the decision. This will make reference to sources consulted in establishing the investigation.
Materials	<ul style="list-style-type: none">• A complete list of the materials, including the amounts, and equipment need to complete the experiment. Is presented as a bulleted list.
Method	<ul style="list-style-type: none">• Numbered list of instructions to demonstrate the steps that were conducted to complete the experiment, including the materials and techniques used, so that the reader could replicate the experiment.• A diagram may be included to show the required set-up of equipment or how to perform the procedure.

Improvements	<ul style="list-style-type: none"> • Identification of the ways in which specific factors could have affected results gathered
Results	<ul style="list-style-type: none"> • Presents a summary of the data gathered from the experiment, usually in table, chart or diagram format. Must be clearly titled and labelled.
Discussion	<ul style="list-style-type: none"> • Data collected is critically analysed. This will include a discussion of the how the aims of the experiment and an explanation of why the hypothesis was (or was not) correct. Links will be drawn between the data and the theory on which the hypothesis was based. Written in paragraphs.
Conclusion	<ul style="list-style-type: none"> • A summary of the experiment conducted and final statement of validity of hypothesis. No new information is included.
Reference List	<ul style="list-style-type: none"> • An alphabetical list of all sources referred to in the report.