

Science Journals

What are science journals?

Science journals are collections of published works by scientists. If you have done any research project in the past, you would probably have seen some science journals. They are more advanced than a typical blog or newspaper article because they contain more technical information, which is useful if you want to go deeper into a scientific topic. Some well-known journals include *Nature* and *Science*.

How to find science journals

Many science journals are now online, so you can just Google a journal or a topic that you are interested in. There are also databases that you can search which contain a large collection of articles from various journals, such as PubMed, JSTOR, or Google Scholar.

Tips for checking the reliability of a journal

There are many journals to choose from, but how can you know which ones are reliable? Here are some tips you can use to check the reliability of a journal online:

1. Look for journals that are peer-reviewed, which means that their articles were reviewed by several experts in the field before being published. These articles are more likely to be accurate because they are verified.
2. Make sure that the authors of the article are from accredited universities or research institutions, because there are unreliable institutions out there whose research might be agenda-driven or biased.
3. Consider the date that the article was published. The scientific community is always advancing and gathering more information, so the more recent, the better.

How to cite journals

In most citation styles, such as APA or MLA, the journal name, either full or abbreviated, is required and usually comes after the title of the article. You will also find a digital object identifier (DOI), which is an identification code for that particular article and journal that someone else can use to directly access it. The Purdue OWL website has some citation examples and is a great resource if you want to learn more about how to cite journal articles.

Types of articles

There are two main types of articles found in science journals: primary research articles and review articles. Primary research articles are where scientists can share the findings of an experiment that they had done. Review articles gather data from multiple primary research articles and summarize them together, creating a more holistic view of research in a certain topic.

Sections of a journal article

A journal article is typically made up of five sections:

1. Abstract
2. Introduction
3. Methods
4. Results
5. Conclusions/Interpretations/Discussion

This guide will not go into each section in detail, because each section has its own specifications. The abstract is the first section of an article and helps you determine whether that article has the information you need. After, you can look at the figures or skim through the discussion. As you read more journals, you will get used to this standard structure and come up with your own way of looking for information. To fully understand an article, you will need to understand the methods and how they arrived at the results. You should think about the advantages and limitations of the study and compare it to other studies that it references. As a

scientist, you should be able to critically analyze journal articles to build your own understanding.

Further reading

<https://www.angelo.edu/services/library/handouts/peerrev.php>

<https://www.sciencemag.org/careers/2016/03/how-seriously-read-scientific-paper>

https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_articles_in_periodicals.html