

How to Write a Feature Article

What is the purpose of a scientific feature article?

Many magazines feature scientific articles from time to time to provide interesting reading material for the “lay” public. Time and Newsweek, for instances, regularly have science articles to keep people up to date on recent advances in science. Some magazines, such as Scientific American, publish nothing but feature articles. The Canadian Journal of High School Science publishes both scientific papers and feature articles. (See the pamphlet entitled, “How to Write a Scientific Paper”.)

What kind of topics do you write about?

Feature articles can be on any science or science-related topic provided it will be of interest to the general reading public of high school students, their parents and their teachers. Students who are good writers may wish to team up with students who have a greater background in science. Some general topic categories are listed below:

- **Science Topic or Research Area.** The author undertakes to bring the readers up to date on some area in research science (e.g., modern methods of DNA analysis, the latest theories of supernovas, modern bridge-building techniques, etc.) It is the author’s job to educate himself/herself to the point where he or she can write authoritatively on the topic. Rehashing of “old news” or standard textbook material is not publishable.
- **First-person Accounts of Scientific Activities or Programs.** The author, having participated in a science program (e.g., a summer research program) describes what the experience was like and what he or she got out of the experience. (Note: A limited number of these can be accommodated.)
- **Industrial Report.** The author investigates a “science company” and writes a profile of the company and its activities. The writing should be written in such a way that high school students will be able to understand the technical basis for the company and have some insight into future job opportunities in that or similar companies. The article should not read like a giant advertisement.

The Canadian Journal of High School Physics is a scientific journal in which high school science students and professional scientists writing for a high school audience may publish. No page fee is charged but CJHSS follows the same publishing guidelines as other professional journals. While not intended as a publication vehicle for teachers, articles which are co-authored by students and teachers may be considered provided the student is senior author.

What does a Feature Article Look Like?

A feature article is not a scientific paper although it does share many characteristics in common. Most articles are several (3 - 6) pages long and are highly visual (about 50% illustrations.) The article has a well-defined topic and is designed to both educate and entertain the reader. The article must feature something new (i.e., not generally known to the reading public) in order to justify publication. An example of a feature article is shown below.

The diagram illustrates the structure of a feature article with the following labeled components:

- Title:** "Playing GOD" with the subtitle "Man's flirtation with artificial LIFE" and author "Justin Barton".
- Authors' name(s):** Justin Barton.
- Photo of author(s):** A small portrait of Justin Barton.
- Short bio of author:** A short paragraph about the author's background and interests.
- Opening:** The first paragraph that hooks the reader.
- Lead-in:** A paragraph that provides more context and leads into the main body.
- Graphic elements to add visual interest:** Includes a photograph of a space shuttle launch and a diagram of a robot.
- Acknowledgements:** A section where the author thanks those who helped with the article.
- Further Reading:** A list of additional resources for the reader.
- Closing:** The final paragraph that wraps up the article.
- Inset with in-depth explanation:** A separate box providing detailed information on a specific topic related to the main article.

A feature article may also feature "side-bars" – individual topics set off from the main article. These can be used to tell interesting sub-stories or to provide a detailed explanation or definition.

GOOD ADVICE: Tell a story using interesting sentences and supporting diagrams or photographs.

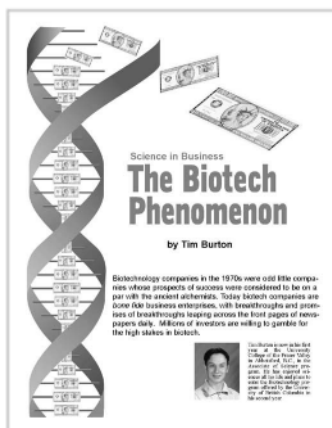
The Components a Feature Article

In this section you will learn some general guidelines on writing a feature article. To learn more, read a few articles from Scientific American or Discover.

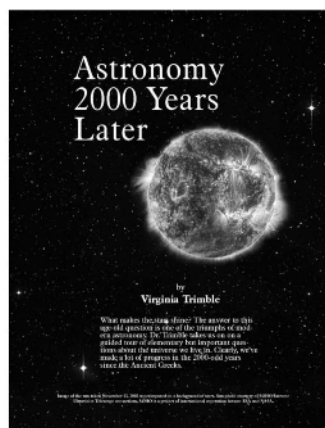
Title Page

GOOD ADVICE: Give your article a book-like title: not too short, not too long, but punchy. Keep it descriptive of the content of the article.

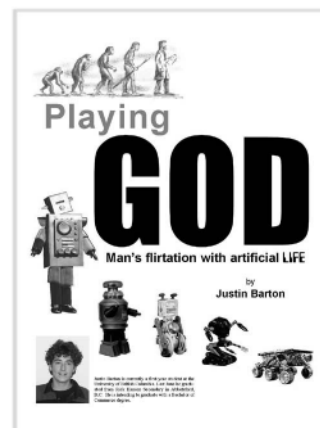
The **TITLE** of your article should be “catchy” without being lurid. After all, you are trying to attract readers. (But please refrain from National Enquirer-type headlines!) If the title is plain, it should at least be descriptive of the content. The title will appear on the first page of the article and will be accompanied by a photograph or illustration to give it visual appeal. Some examples of previous feature article title pages are shown below.



The Biotech Phenomenon shows a “DNA molecule” consisting of million-dollar bills instead of base pairs. This symbolizes the huge sums of money to be made by exploiting our knowledge of genetics.



Astronomy 2000 Years Later shows a detailed picture (taken in the ultra-violet) of the sun to illustrate the tremendous growth in our knowledge of what stars are made of.



Playing God shows the evolution of man leading to the creation of a scientist. The evolution of robots is also depicted from early 1950's sci fi movies to the Mars Rover.

Lead-in

GOOD ADVICE: Pretend that you are writing the book jacket for a science novel.

The lead-in for the article is one or more sentences, typically printed in large type, which will provide the reader who is flipping through the pages to stop and read the article. It does not tell so much what the content of the article is but rather piques the curiosity of the reader. For instance, on an article entitled “The Spread of Cancer”, the lead may be something like

Tracing the spread of cancer requires a Ph. D. in genetics and the sleuthing abilities of Sherlock Holmes.

The **OPENING** of an article is one of the most important parts of the article. Since the purpose of a scientific article is to get the reader to read the article, the opening paragraph and the opening sentence cannot be bland. There are several ways in which you could consider starting your article:

- ask a question (but don't make it silly or trite)
- make a bold statement
- use an interjection
- use a declarative statement which provides some distinctive fact

Here are a few samples of beginning sentences to feature articles:

Science is not my middle name. Rather, I like to think we have a good relationship, albeit a flirtatious one.

Most ways of counting and measuring involve numbers getting bigger as the quantity gets bigger, but that's not the way it is with the brightness of stars.

The Rocky Mountains are one of the world's great geological features but it's still not clear how they achieved their super-star status.

The introduction to your article should be a few paragraphs long – just how long depending entirely on the topic and the style of writing. It must, however, give the reader a clue as to why the topic is important, what the background to the topic is and where you are taking the topic. It should get to the point fairly quickly and not “beat around the bush”.

There is no one structure to a feature article. The style of writing, the sense of humor of the writer (some wit and humor is always appreciated if it is done skilfully) and the length of the article are all factors.

A feature article is not an essay but in some senses it has an essay-like structure. It has a top-level structure of 3 or 4 major sections and each may begin with a title. Each of the sections should discuss a topic to about the same depth, and should not read as if you simply got tired of writing or ran out of things to say. Plan each section beforehand so that you know you will be able to produce an equal amount of text in each section.

Build the body of the article around illustrations. Plan for a minimum of 25% of every page to be filled with photographs, diagrams, charts, etc. Readers will not generally read an article that is “wall-to-wall text”. Try to tell a story while still educating the reader to the topic. Use personal-interest examples and stories, etc., to “bring your article to life”. Avoid trying to write a textbook. (Textbooks are usually very authoritative but are also usually boring.)

Opening

GOOD ADVICE: Set the scene by saying something that will grab the reader's attention.

GOOD ADVICE: Find some feature articles and read them.

Body of the Article

GOOD ADVICE: Use high-level sections to give structure to your article.

GOOD ADVICE: Build your article around diagrams.

GOOD ADVICE: Use insets for ancillary (supporting) information or detailed explanations.

Illustrations

GOOD ADVICE: Sketch the illustrations while you are writing the text so you will have them in mind while you are writing.

Use illustrations, charts and photographs to give your article visual appeal. (In this sense a feature article is very different from a scientific paper.) The **ILLUSTRATIONS** each require a caption and the captions may be entire paragraphs. Together with the caption, each illustration should be more or less “stand-alone” (i.e., the illustration, with its caption, will make sense to the reader even if they don’t read the article.) The article should be discussed, mentioned or referred to in the text but not called out. (Unlike a scientific paper, you do not “call out” figures by introductions such as “... as seen in Figure 4. Rather, the caption and the content of the figure should make it visually clear when the illustration is to be referred to.

Insets are separate blocks of text which may provide an example, a piece of ancillary information or perhaps give an in-depth discussion on some particular point. It is set off from the body of the article and is usually surrounded by a box to indicate that it is stand-alone.

Closing

GOOD ADVICE: Finish of your article as if you were ending a novel. Don’t leave the reader “hanging”.

A feature article does not have a section called “summary” or “conclusion”. It does, however, have a **CLOSING**. A closing should be obvious; it leaves the reader with the distinct impression that there is no more text to follow. Do not just “stop writing”. (That is the most common mistake to make.)

You have taken the reader on a journey in your article, and now you must bring the journey to an end. Finish it off with something “punchy”, something distinct which will leave the reader with a good feeling. It should also refer back in some general sense to the opening so that the reader feels that the end of the article dealt with the same topic as the beginning of the article.

Acknowledgements

GOOD ADVICE: Don’t thank everyone you know.

In the **ACKNOWLEDGMENTS** section you can thank anyone who helped you significantly in researching or writing the paper (for instance, your English teacher). In particular you should acknowledge the support of your teacher sponsor.

FURTHER READING

GOOD ADVICE: Give 3 or 4 books (not websites) as suggestions to the reader.

A feature article should have a bibliography called **FURTHER READING** which gives the reader a starting point if they wish to learn more about the topic. You may list three or four books or papers which will give the reader a place to learn more about the topic. Do not provide website addresses unless they are the only reference and are also stable. Most websites constantly change and therefore do not make good references of any kind. A bibliographical reference will look like

Karner, N. and Ling, V., “Multidrug Resistance in Cancer”, *Sci. Am.* **260**, No. 3, pp. 44-51, March 1989.

What Kind of Writing to Use

There are two requirements to be a good “science writer”: first, you have to understand what you are writing about, and second, you need to make it sound interesting. Writers like Isaac Asimov and Stephen J. Gould made successful careers of bringing science to the general public. Who knows? You, too, may join them.

There are two generally accepted styles for writing scientific writing

1. **The passive voice.** The writer states what is done but does not state who did it:

Physical trapping of molecules at the site of metastasis is not the whole story, however.

2. **The “First Person” form.** This form is used occasionally by writers who are referring primarily to their own research backgrounds or to work down in their own research establishments. It is used when the writer has a personal involvement with the material or if a personal account of some event is being presented:

We use a large library of peptides (small pieces of protein) as the source of our compounds.

Of the above styles, the impersonal or “passive voice” is the most commonly used form. It provides the most flexibility and is the easiest to write. It can, however, also be the most boring. It can be spiced up with quotations, dialogue or interjections:

Crack! The cable parted suddenly, relegating to the depths of the sea a relic that had briefly made its way into the twentieth century.

Writing Style

GOOD ADVICE: Imitate someone’s style that you admire. Eventually you will create your own style.

General Writing Hints

GOOD ADVICE: Get someone to proof-read your text who is capable and willing to provide you good advice on writing. Then follow it.

The reader has a right to expect that a paper at least be written with good grammar. There is perhaps nothing which puts a reader off more than having to wade through page after page of poorly crafted or ungrammatical sentences. Have someone proof-read your text; it is sometimes difficult for an author to see his or her own grammatical short-comings.

Robert Day, in his well-known book called "How to Write and Publish a Scientific Paper" provides some facetious tips on good writing:

The Ten Commandments of Good Writing.

- Each pronoun should agree with their antecedent.
- Just between you and I, case is important.
- A preposition is a poor word to end a sentence with.
- Verbs has to agree with their subjects.
- Don't use no double negatives.
- A writer musn't shift your point of view.
- When dangling, don't use particles.
- Join clauses good, like a conjunction should.
- Don't write a run-on sentence because it is difficult when you got to punctuate it so it makes sense when the reader reads what you wrote.
- About sentence fragments.

How to Write and Publish a Scientific Paper, 5th edition by Robert A. Day. Phoenix, AZ, Oryx Press, 1998. 275p., ISBN 1-57356-164-9

It takes a while to learn how to write scientific English. Don't feel discouraged if this is your first attempt. Get help from your English teacher on the basics of grammar (see the Ten Commandments above). Have a few science teachers read it (especially your teacher sponsor). When it is submitted to CJHSS more comments will be given. If you follow the advice given in this document you will at least avoid a great deal of red ink on the manuscript.