

How to use the *InfoMark* Web Page Generator in *Science Resource Center*

The *InfoMark* Web Page Generator (IWPG) can be used with any search result, and is particularly useful in conjunction with a Science Standards Search. The IWPG function allows users to create a Web page of hyperlinked documents aligned to state standards, in a format that includes due dates and other useful information. Students may e-mail or print the articles, or review them from home via remote access.



PRACTICE SEARCH: BIOLOGY 101

In this practice search, you will find and save articles to supplement lesson plans designed to meet the North Carolina standard Biology, 1.03: *"Compare and contrast the structure and function of prokaryotic and eukaryotic cells."* Plus, create a reading list for students in Biology 101.

FROM THE SCIENCE STANDARDS SEARCH

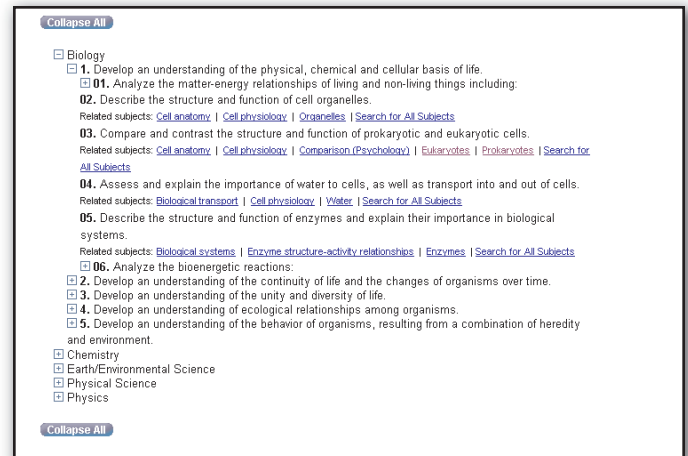
- Select North Carolina
- Expand the standards twice, first from Biology, and second from Standard 1: *"Develop an understanding of the physical, chemical and cellular basis of life"*
- Standard 1.03 is indexed to five related subjects from the Thomson Gale vocabulary, including prokaryotes and eukaryotes
- Select specific subjects; or to view all related results, search all subjects simultaneously (Note: an "all subjects" search may result in a large number of results. Individual subject searches will offer more targeted results)

REVIEW AND SAVE RESULTS

- Click on the subject prokaryotes. Click on the Reference tab and open the first article, "Prokaryote" from *World of Genetics*.
- Click on the IWPG icon above the reference tab and select "Add to InfoMark Web Page."

A new window opens with a template that allows you to customize your *InfoMark* results. All default language may be changed, and annotations can be added to offer additional explanation.

- In the IWPG window, change the default *InfoMark* Web Page Title to *Biology 101*
- Scroll down to the first *InfoMarked* item. Add the description, *Read before class*
- Click the Update button and close the IWPG



Find national and state science standards correlated to *Science Resource Center* content

ADD RESULTS FROM OTHER TABS

- Click on the Magazines tab and open the last article, "The Invisible Emperors" from U.S. News and World Report
- Click on the IWPG icon above the reference tab and select "Add to InfoMark Web Page"
- In the IWPG window, scroll down to the newly marked item. Add the description, *Read before class*
- Click the Update button and close the IWPG

FIND AND MARK RESULTS FROM OTHER SUBJECTS

- Return to the North Carolina standard Biology 1.03 and click on the subject Eukaryotes
- Click on the Reference tab and open the first article, "Eukaryotes" from *World of Microbiology*
- Click on the IWPG icon above the reference tab and select "Add to InfoMark Web Page"

InfoMark Web Page Generator

This InfoMark Web Page will be maintained until the session expires (30 minutes of inactivity).

Here is a preview of your InfoMark web page:

Biology 101		
Interesting articles to supplement your textbook		
"Eukaryotes." <i>World of Microbiology and Immunology</i> , 2 vols. Gale, 2003.	Read before class Sept. 21	Document
Reading eukaryotic barcodes.	Read before class Sept. 23	Document
"Prokaryote." <i>World of Genetics</i> , 2 vols. Gale Group, 2002.	Read before class Sept. 27	Document

Options Instructions

Edit	Edit your InfoMark web page.
Save as HTML	Retrieve an HTML version of this page as it appears above and save it.
E-mail	E-mail your InfoMark web page (as an attachment).
Clear Form	Clear contents of your InfoMark Web Page and close it.

Easy-to-use Web Page Generator lets you locate, save and share full-text articles

Science Resource Center

Enter search term(s): Subject Search SEARCH Search History

Home > Science Standards > North Carolina > Search Results > Document

To view additional results for the current search, click on any active tab

Reference **Magazines** Academic Journals Newspapers Multimedia Websites

Document 1 of 1

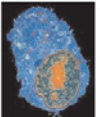
Eukaryotes

Table of Contents [Source Citation](#) [View Multimedia File\(s\)](#)

Related Subjects:

[Cell nucleus](#) [Eukaryotes](#) [Mitochondria](#)

Media:

 A eukaryotic cell

Eukaryotic organisms encompass a range of organisms, from humans to single-celled microorganisms such as protozoa. Eukaryotes are fundamentally different from prokaryotic microorganisms, such as bacteria, in their size, structure and functional organization.

The oldest known eukaryote fossil is about 1.5 billion years old. Prokaryote fossils that are over 3 billion years old are known. Thus, prokaryotic cells appeared first on Earth. The appearance of eukaryotic cells some 1.5 billion years ago became possible when cellular function was organized into regions within the cell called organelles.

The eukaryotes are organized into a division of life that is designated as the Eukaryota. The Eukaryota are one of the three branches of living organisms. The other two branches are the Prokaryota and the Archaea.

The evolutionary divergence of life into these three groups has been deduced in the past several decades. Techniques of molecular analysis have been used, in particular the analysis of the sequence of a component of ribonucleic acid (RNA), which is known as 16S RNA. This RNA species is highly conserved in life forms. Thus, great differences in the sequence of 16S RNA between a eukaryotic and a prokaryotic micro-organism, for example, indicate that the two organisms diverged evolutionarily a very long time ago. A similar 16S RNA indicates the converse; that evolutionary branching is a relatively recent event.

Eukaryotic cells are about 10 times the size of all but a few prokaryotes. This translates to an internal volume which is very much larger, some 1000 times, that the internal volume of a bacterium. In order to survive, eukaryotes evolved a highly organized internal structure, in order that all the tasks

Find full-text results from acclaimed reference sources

ADD RESULTS FROM OTHER TABS

- Click on the Magazines tab and open the last article, "Reading Eukaryotic Barcodes" from The Scientist
- Click on the IWPG icon above the reference tab and select "Add to InfoMark Web Page"
- In the IWPG window, scroll down to the newly marked item. Add the description, *Read before class*

PREVIEW AND DETAIL YOUR WEB PAGE

With four documents selected, click on the Continue button at the bottom of the IWPG screen. A preview of your InfoMark Web Page appears. At this point, you may add some section headings to indicate due dates.

- Click on the Edit button
- Add the introductory text, *Interesting articles to supplement your textbook*
- Scroll down the page to the prokaryotes article and click on the Insert Section Heading button
- Add *Tuesday, Sept. 21* to the text box
- Scroll down to the eukaryotes article and click on the Insert Section Heading button
- Add *Thursday, Sept. 23* to the text box
- Click on the Continue button

At this point, you may continue to add *InfoMarks* to your Web page or choose to save the *InfoMark* Web Page as an HTML file to your hard drive or floppy disk.

You can also e-mail the file as an attachment. This file can be loaded to the class home page, giving students hyperlinks to the articles they need to read prior to the classes indicated. (Teachers and others needing help loading HTML files may need to contact their organization's Technical Support staff.)

Any page with an *InfoMark* icon may be marked and saved to the Web Page Generator, including pages with individual documents and result lists. When saving a result list, the search is refreshed each time the *InfoMark* is opened — great for following current events! Users may change the fonts, edit the text and perform other functions prior to saving the file.