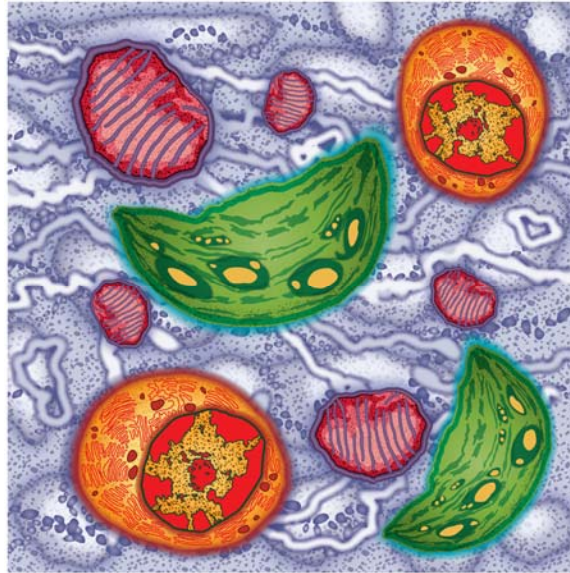


Research on Cells



Introduction

In the last few years, people have become increasingly aware of the many advances in all aspects of scientific research. There is an abundance of information on the Internet about new scientific discoveries involving cells, such as cloning and stem cell research, as well as answers to interesting questions about how the cells in our bodies work. People who write about scientific topics need to learn about the topics they are investigating in detail. They also need to use a writing style that is appropriate for the place where their pieces will be published. Writing articles for newspapers or magazines is different from writing for the Internet. What are some of the latest scientific discoveries about cells that are reported on the Internet? What types of scientific questions about the cells in the human body are answered on the Internet? How would you summarize this information for publishing on the Internet? In this WebQuest, you will explore new research involving different types of cells, read about how cells in the human body work, and write a summary of one of the topics you researched that is suitable for Internet publication.

Task

Your job in the WebQuest is to learn about current research involving different types of cells. You will investigate how scientists studying diverse scientific topics are adding to the current body of knowledge about cells. You also will explore questions and answers about the roles that different cells play in our bodies. You will answer a set of questions to demonstrate what you have learned. Once you've explored information to increase your knowledge of developments in cell studies and how cells work in the human body, you'll write a summary about one of the topics you investigated. The purpose of this summary is to write about a scientific topic using a style suited for posting on a Web site.

Process

Read through the following set of questions before you begin your Internet research. As you explore each site, look for answers to the questions.

1. What do researchers think is one cause of memory impairment related to growing older? What does new research show that may be able to help reverse this process?
2. How might fat cells be able to help people with spinal cord injuries?
3. How are frog eggs being used in research involving human cells?
4. What are Schwann cells? How are they affected in multiple sclerosis patients?
5. What role do cells play in preventing the stomach from digesting itself?

Next, visit the Web sites listed to find more information about another type of recent research involving cells. Keep in mind that not all Web sites are written specifically for students. Some of what you read might be challenging. Look for information that will be useful in completing this WebQuest.

Write a summary of that topic that includes more than the answer to one of the questions. Your summary should be written to appear on a Web page about cells, life science, scientific research, systems in the human body, or a related subject.

Resources

Look at the Web sites given here to find information that will help you answer questions about cell research, and to gather information to use as you write your summary.

How does your stomach keep from digesting itself?

<http://www.howstuffworks.com/question464.htm>

Frog Eggs Rejuvenate Human Cells

<http://www.nature.com/nsu/030714/030714-3.html>

Discarded Fat Cells are Showing Some Nerve

<http://www.ajc.com/health/content/shared-auto/healthnews/brai/507400.html>

Use the Web sites below to help you prepare your summary to be posted on a Web site.

Web Writing

<http://www.e-gineer.com/articles/web-writing-for-many-interest-levels.phtml>

Creating Good Web Sites

<http://www.leafdigital.com/class/lessons/writing/10.html>

Writing for the Web

<http://www.useit.com/alertbox/9703b.html>

Evaluation

Read this rubric to see how you will be evaluated on this project.

Criteria					Points
	1	2	3	4	
Task	The task was not completed.	It appears that some effort was made to complete the task, but important information is missing.	The task was completed as assigned, but some of the information was faulty.	The task was completed with great attention to detail. All the information was reported and is accurate.	
Process	The process was not followed.	The overall summary was lacking. Answers to questions were not complete.	Overall, the task was completed correctly. Student may have appeared to rush through project or not been thorough.	The results show that a lot of thought went into collecting and summarizing information.	
Web Summary	Summary was sloppy and not well prepared.	The summary included key information but lacked general cohesiveness.	Information was presented well, but lacked organization.	Summary was well organized; information was clearly and concisely stated.	

Conclusion

In the process of completing this WebQuest, you've read about recent research involving cells. You've found answers to questions about how the cells function in the human body. In the process of answering questions, your research gave you further insight to current and ongoing scientific study about cells. You've also enhanced your writing skills by preparing a summary about one of the research topics you investigated. The summary you wrote gave you the opportunity to understand more about the scientific content as well as present the information in a style compatible with publishing on the Web.