

Relevancy Modules for Microbiology within Connect®



With the help of our 9* Relevancy Modules within McGraw-Hill Connect, your students will be able to see how microbiology actually relates to their everyday lives.

For select microbiology titles, students and instructors can access the Relevancy Modules eBook at no additional cost!



1. Scientific Thinking in Everyday Life:



2. Fermentation: Applied Microbiology



3. Microbes and Cancer: Interaction of Microbes



4. Antibiotic Resistance: Life and Death of Microbes



5. Vaccines



6. Emerging and Reemerging Infectious Diseases



7. Biotechnology



8. Global Health

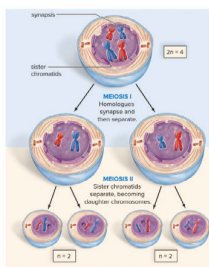


9. SARS-CoV-2

Auto-graded assessment questions which correlate to the modules are also available within Connect.

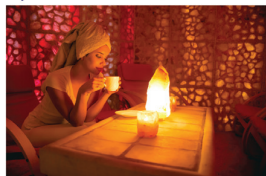
Genetics Begins with Meiosis

One of the signs that an individual has entered puberty is when their **germ cells** begin to undergo the process of meiosis. During meiosis, the cell will divide itself and its genetic material in half. Both cells will undergo meiosis II and divide the cells and their DNA in half again. In males, this will result in the production of four sperm cells, while females will produce one egg and three polar bodies. Each cell will contain the haploid (n) number of 23 chromosomes.



is to which one germ cell divides into 4 genetically unique cells.

Why Learn to Evaluate Scientific Claims?



Be sure to read the entire article for more information on this topic.

Every day, we are bombarded with advertisements for pills, powders, potions, and products that promise to improve health. Before you open your wallet, you should evaluate whether such products are based on sound science—that is, whether the claims are backed up by convincing evidence generated by rigorous research.

Being penny-wise is just one reason to determine if a health product has a scientific basis. Being dollar-wise health products can affect your health in multiple ways. First, if you are "hoarding" your health problems with a product that does not work, then you probably are not looking to learn as you could if you visited a doctor. Second, some over-the-counter health products may actually do harm, causing serious illness or even death. After all, many are neither tested nor regulated by the government.

Tumor cells

Place the following sentences in order to describe the progression of a regular skin cell to a cancerous tumor.

Healthy cells vs. cancer cells

Classify the following descriptions to distinguish healthy cells from cancer cells.

Healthy Cells

Have irregularly shaped nuclei with disorganized chromatin

Undergo apoptosis when old or no longer functioning

Have an abnormal shape with less cytoplasm

Are specialized to function differently in different places within the body

Become immortal and continue to grow

Growth is heavily regulated and orderly

Cancer Cells

Growth is heavily regulated and orderly

Undergo apoptosis when old or no longer functioning

Have an abnormal shape with less cytoplasm

Become immortal and continue to grow

Have irregularly shaped nuclei with disorganized chromatin

Drop the last blocks below into their correct order.

A mutation causes the cell cycle of a skin cell to continue unchecked.

The tumor reaches blood vessels and lymphatic vessels.

The tumor begins to invade surrounding tissues as it grows.

Cancerous cells can now enter the blood vessels and lymphatic vessels and spread to other areas of the body.

Skin cells line up in an orderly fashion.

Skin cells begin to pile up to form a tumor. They are less specialized and irregular in their appearance.

Reset

Each module consists of videos, an overview of basic scientific concepts, and then a closer look at the application of these concepts to the relevant topic.