

EMERGING AND RE-EMERGING INFECTIOUS DISEASES

Mississippi Competencies for Biology

Activity	Competency	Description
3	1.a	Demonstrate the proper use and care for scientific equipment used in biology.
3	1.b	Observe and practice safe procedures in the classroom and laboratory.
2, 3, 5	1.c	Apply the components of scientific processes and methods in the classroom and laboratory investigations.
2, 3, 5	1.d	Communicate results of scientific investigations in oral, written, and graphic form.
3	5.b	Identify and illustrate how changes in DNA cause mutations and evaluate the significance of these changes.
2, 3	6.f	Analyze the results of natural selection in speciation, diversity, adaptation, behavior and extinction.
2, 3, 4, 5	7.e	Examine long and short-term changes to the environment as a result of natural events and human actions.

Mississippi Competencies for Pre-Algebra

Activity	Competency	Description
4, 5	1.b	Solve real-life problems involving addition, subtraction, multiplication, and division of rational numbers (i.e., integers, decimals, fractions, and mixed numbers.)
4, 5	1.d	Add, subtract, multiply, and divide rational numbers (i.e., integers, decimals, fractions, and mixed numbers) with and without calculators.
4	5.a	Construct and interpret histograms, bar graphs, line graphs, frequency tables, circle graphs, stem-and-leaf plots, box-and-whisker plots, and scatter plots from given data.
All activities	5.b	Predict patterns or generalize trends based on given data.
4	5.c	Explain the role of fair and bias sampling and its effect on data.
All activities	5.g	Collect data. Select and justify the most appropriate representations to organize, record and communicate data.

Mississippi Competencies for Algebra I

Activity	Competency	Description
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MISSISSIPPI ALIGNMENT FOR NIH SUPPLEMENT EMERGING AND RE-EMERGING INFECTIOUS DISEASES

4, 5	1	Understand relationships between numbers and their properties and perform operations fluently.
4	2.d	Explain and illustrate how a change in one variable may result in a change in another variable and apply to the concepts of independent and dependent variables.
All activities	5.a	Collect, organize, graph, and interpret data sets.

Mississippi Competencies for Language Arts – Grades 9 & 10

Activity	Competency	Description
All activities	3	The student will produce, analyze, and evaluate effective communication.
All activities	3.c	The student will compose responses to literature, position papers, and expository essays in the informative mode clearly expressing a main idea thoroughly developed by relevant supporting details, which are well elaborated and sufficient in number.
All activities	4	The student will use standard English grammar, mechanics, and sentence structure to communicate.

Mississippi Competencies for Comprehensive Health – Grades 9 - 12

Activity	Competency	Description
2, 3, 4, 5	3.a	Evaluate how environmental health problems impact personal and community health.
2	3.c	Relate connections between human and environmental factors to the risk of accidents.
3, 4, 5	3.e	Describe how individuals can help reduce the misuse and abuse of drugs.
3, 4, 5	3.f	Explain how drugs and medicines have affected the life span of human beings.
3, 4, 5	3.g	List future positive effects of drugs and medicines on society.
3, 4, 5	7.b	Demonstrate the ability to work cooperatively when advocating for healthy individuals.
3, 5	7.c	Illustrate how drug use, misuse, and abuse cause problems in society.