Stream Studies

Correlated Standards by Grade

NGSS=Next Generation Science Standards, ACOS=Alabama Course of Study, GPS=Georgia Performance Standards, Georgia Standards of Excellence,MSF=Mississippi Science Framework, TASS=Tennessee Academic Standards for Science



Middle School

NGSS

MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

MS-ESS2-4. Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

ACOS

SC.7.8. Construct an explanation to predict patterns of interactions in different ecosystems in terms of the relationships between and among organisms.

SC.6.16. Implement scientific principles to design processes for monitoring and minimizing human impact on the environment.

MFS

7.LS.3.A. Assess how an organism's chances for survival are influenced by adaptations to its environment.

8.LS.3.A.Analyze how adaptations to a particular environment can increase an increase an organism's survival and reproduction and relate organisms and their ecological niches to evolutionary change and extinction.

8.ESS,4,C. Examine weather forecasting and describe how meteorologists use atmospheric features and technology to predict the weather.

8.ESS.4.D. Research the importance of the conservation of renewable and nonrenewable resources, including Mississippi, and justify methods that might be useful in decreasing the human impact on global warming.

TASS

6.LS4.2. Design a possible solution for maintaining biodiversity of ecosystems while still providing necessary human resources without disrupting environmental equilibrium.

6.ESS2.4. Apply scientific principles to design a method to analyze and interpret the impact of humans and other organisms on the hydrologic cycle.

6.ESS3.2. Investigate and compare existing and developing technologies that utilize renewable and alternative energy resources.

GSE

S7L1. Obtain, evaluate, and communicate information to investigate the diversity of living organisms and how they can be compared scientifically.

S7L4. Obtain, evaluate, and communicate information to examine the interdependence of organisms with one another and their environments.

S6E4. Obtain, evaluate, and communicate information about how the sun, land, and water affect climate and weather. a. Analyze and interpret data to compare and contrast the composition of Earth's atmospheric layers and greenhouse gases.

S6E3. Obtain, evaluate, and communicate information to recognize the significant role of water in Earth processes. b. Plan and carry out an investigation to illustrate the role of sun's energy in atmospheric conditions that lead to the cycling of water.

GPS

S7L4. Students will examine the dependence of organisms on one another and their environments.

S7L1. Students will investigate the diversity of living organisms and how they can be compared scientifically.

S6E3. Students will recognize the significant role of water in earth processes.

High School

NGSS

HS-LS2-7. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

HS-LS2-6. Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.

ACOS

ES.HS.6. Obtain, evaluate, and communicate information to describe how human activity may affect biodiversity and genetic variation of organisms, including threatened and endangered species.

ES.HS.4. Engage in argument from evidence to evaluate how biological or physical changes within ecosystems affect the number and types of organisms, and that changing conditions may result in a new or altered ecosystem.

BIO.HS.7. Develop and use models to illustrate examples of ecological hierarchy levels, including biosphere, biome, ecosystem, community, population, and organism.

MSF

HS.Bot.4.D. Research factors that might influence or alter plant stability and propose actions that may reduce the negative impacts of human activity.

HS.ESS.3. Discuss the impact of human activities on the environment, conservation activities, and efforts to maintain and restore ecosystems.

HS.B.3.Investigate and explain how organisms interact with their environment.

HS.Zoo.3. Differentiate among animal life cycles, behaviors, adaptations, and relationships.

TASS

BIO1.LS2.5. Analyze examples of ecological succession, identifying and explaining the order of events responsible for the formation of a new ecosystem in response to extreme fluctuations in environmental conditions or catastrophic events.

GSE

SEV1. Obtain, evaluate, and communicate information to investigate the flow of energy and cycling of matter within an ecosystem.

GPS

SG5. Students will apply geologic knowledge to the use of resources in the Earth and the control of human impacts on Earth's systems.

SBO4. Students will explore the defense systems of plants and recognize the impact of plant diseases on the biosphere.

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