



Priority Standards

Science Priority Standards – Horticulture

Below is a table of the priority standards.

Priority Standards	Description
HS-ESS2 Earth's Systems	
HS-ESS2-5	Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
HS-ESS3 Earth and Human Activity	
HS-ESS3-1	Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.
HS-ESS3-2	Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.*
HS-ESS3-3	Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.
HS-ESS3-4	Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.*
HS-LS1 From Molecules to Organisms: Structures and Processes	
HS-LS1-4	Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms.
HS-LS2 Ecosystems: Interactions, Energy, and Dynamics	
HS-LS2-1	Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.
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.
HS-LS2-7	Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.*
HS-LS3 Heredity: Inheritance and Variation of Traits	
HS-LS3-2	Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.
HS-ETS1 Engineering Design*	
HS-ETS1-1	Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
HS-ETS1-2	Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.
HS-ETS1-3	Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety,

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	reliability, and aesthetics as well as possible social, cultural, and environmental impacts.
HS-ETS1-4	Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.