







ingineering Extreme Environments (E3) pace History (Early Rocketry-Shuttle) stronomy Night-Celestial Marathon **Next Generation Science** pace Race/Languages of the nternational Space Programs Thermal Protection Systems **Standards** lodel Rocket Challenge pace Suits - Advanced **Advanced Academy** 10th-12th Grade light Hardware 1.A.R.S. Lab ntro to Flight Space Meds 2019 Rovers - AA SLS/Orion Earth and Space Science ESS1.A: The Universe and Its Stars X X X Χ X X X X X ESS1.B: Earth and the Solar System ESS1.C: The History of Planet Earth Χ ESS2.A: Earth Materials and Systems X ESS2.B: Plate Tectonics and Large-Scale System Interactions ESS2.C: The Roles of Water in Earth's Surface Processes ESS2.D: Weather and Climate X ESS2.E: Biogeology ESS3.A: Natural Resources ESS3.B: Natural Hazards ESS3.C: Human Impacts of Earth Systems ESS3.D: Global Climate Change **Physical Science** PS1.A: Structure and Properties of X PS1.B: Chemical Reactions X X X **PS1.C Nuclear Processes** X X PS2.A: Forces and Motion X X X X X X X X Χ PS2.B: Types of Interactions PS2.C: Stability and Instability in X Physical Systems PS3.A: Definitions of Energy X X X X PS3.B: Conservation of Energy and X X **Energy Transfer** PS3.C: Relationship Between Energy X and Forces PS3.D: Energy and Chemical X X Processes in Everyday Life PS4.A: Wave Properties X PS4.B: Electromagnetic Radiation X









Next Generation Science Standards Advanced Academy 10th-12th Grade 2019	Astronomy Night-Celestial Marathon	Engineering Extreme Environments (E3)	Flight Hardware	International Space Programs	Intro to Flight	M.A.R.S. Lab	Model Rocket Challenge	Rovers - AA	SLS/Orion	Space History (Early Rocketry-Shuttle)	Space Meds	Space Race/Languages of the ISS	Space Suits - Advanced	Thermal Protection Systems
PS4.C: Information Technologies and Instrumentation	X	X				X						X		
Life Science														
LS1.A: Structure and Function											X		X	
LS1.B: Growth and Development of Organisms											X			
LS1.C: Organization for Matter and Energy Flow in Organisms		Х												
LS1.D: Information Processing														
LS2.A: Interdependent Relationships in Ecosystems			Х											
LS2.B: Cycles of Matter and Energy														
Transfer in Ecosystems LS2.C: Ecosystem Dynamics,														
Functioning, and Resilience LS2.D: Social Interactions and Group Behavior														
LS3.A: Inheritance of Traits														
LS3.B: Variation of Traits														
LS4.A: Evidence of Common Ancestry														
LS4.B Natural Selection														
LS4.C: Adaptation														
LS4.D: Biodiversity and Human														
Engineering Design, Technology, and the Application of Science														
ETS1.A: Defining and Delimiting an Engineering Problem		Х				Х	Х	Х					Х	Х
ETS1.B: Developing Possible Solutions		Х				Х	Х	X					X	Х
ETS1.C: Optimizing the Design Solution		X				Х	X						Х	X