

Grade 11, arranged by DCI	Content Alignment Level	Content Alignment	Cluster & Item Ranges - Operational					
			Min Clusters	Max Clusters	Min Stand Alone Items	Max Stand Alone Items	Min Clusters + Stand Alone Items	Max Clusters + Stand Alone Items
Discipline - Physical Science, PE Total = 24	Science Discipline	PS	2	2	4	4	6	6
DCI - Matter and Its Interactions	DCI	PS1	0	1	0	2	0	3
HS-PS1-1 Structure and Properties of Matter	PE	HS-PS1-1	0	1	0	1	0	1
HS-PS1-2 Structure and Properties of Matter	PE	HS-PS1-2	0	1	0	1	0	1
HS-PS1-3 Structure and Properties of Matter	PE	HS-PS1-3	0	1	0	1	0	1
HS-PS1-4 Chemical Reactions	PE	HS-PS1-4	0	1	0	1	0	1
HS-PS1-5 Chemical Reactions	PE	HS-PS1-5	0	1	0	1	0	1
HS-PS1-6 * Chemical Reactions	PE	HS-PS1-6	0	1	0	1	0	1
HS-PS1-7 Chemical Reactions	PE	HS-PS1-7	0	1	0	1	0	1
HS-PS1-8 Nuclear Processes	PE	HS-PS1-8	0	1	0	1	0	1
DCI - Motion and Stability: Forces and Interactions	DCI	PS2	0	1	0	2	0	3
HS-PS2-1 Forces and Motion	PE	HS-PS2-1	0	1	0	1	0	1
HS-PS2-2 Forces and Motion	PE	HS-PS2-2	0	1	0	1	0	1
HS-PS2-3 * Forces and Motion	PE	HS-PS2-3	0	1	0	1	0	1
HS-PS2-4 Types of Interactions	PE	HS-PS2-4	0	1	0	1	0	1
HS-PS2-5 Types of Interactions	PE	HS-PS2-5	0	1	0	1	0	1
HS-PS2-6 * Structure and Properties of Matter	PE	HS-PS2-6	0	1	0	1	0	1
DCI - Energy	DCI	PS3	0	1	0	2	0	3
HS-PS3-1 Energy	PE	HS-PS3-1	0	1	0	1	0	1
HS-PS3-2 Energy	PE	HS-PS3-2	0	1	0	1	0	1
HS-PS3-3 * Energy in Chemical Processes	PE	HS-PS3-3	0	1	0	1	0	1
HS-PS3-4 Energy Conservation and Transfer	PE	HS-PS3-4	0	1	0	1	0	1
HS-PS3-5 Relationship Between Energy and Forces	PE	HS-PS3-5	0	1	0	1	0	1
DCI - Waves and Their Applications in Technologies for Information Transf	DCI	PS4	0	1	0	2	0	3
HS-PS4-1 Wave Properties	PE	HS-PS4-1	0	1	0	1	0	1
HS-PS4-2 Wave Properties	PE	HS-PS4-2	0	1	0	1	0	1
HS-PS4-3 Wave Properties, Electromagnetic Radiation	PE	HS-PS4-3	0	1	0	1	0	1
HS-PS4-4 Electromagnetic Radiation	PE	HS-PS4-4	0	1	0	1	0	1
HS-PS4-5* Electromagnetic Radiation, Information Technologies	PE	HS-PS4-5*	0	1	0	1	0	1
Discipline - Life Science, PE Total = 24	Science Discipline	LS	2	2	4	4	6	6
DCI - From Molecules to Organisms: Structures and Processes	DCI	LS1	0	1	0	2	0	3
HS-LS1-1 Structure and Function	PE	HS-LS1-1	0	1	0	1	0	1
HS-LS1-2 Structure and Function	PE	HS-LS1-2	0	1	0	1	0	1
HS-LS1-3 Structure and Function	PE	HS-LS1-3	0	1	0	1	0	1
HS-LS1-4 Growth and Development of Organisms	PE	HS-LS1-4	0	1	0	1	0	1
HS-LS1-5 Organization for Matter and Energy Flow in Organisms	PE	HS-LS1-5	0	1	0	1	0	1
HS-LS1-6 Organization for Matter and Energy Flow in Organisms	PE	HS-LS1-6	0	1	0	1	0	1
HS-LS1-7 Organization for Matter and Energy Flow in Organisms	PE	HS-LS1-7	0	1	0	1	0	1
DCI - Ecosystems: Interactions, Energy and Dynamics	DCI	LS2	0	1	0	2	0	3
HS-LS2-1 Interdependent Relationships in Ecosystems	PE	HS-LS2-1	0	1	0	1	0	1
HS-LS2-2 Interdependent Relationships in Ecosystems	PE	HS-LS2-2	0	1	0	1	0	1
HS-LS2-3 Cycles of Matter and Energy Transfer in Ecosystems	PE	HS-LS2-3	0	1	0	1	0	1
HS-LS2-4 Cycles of Matter and Energy Transfer in Ecosystems	PE	HS-LS2-4	0	1	0	1	0	1

HS-LS2-5 Cycles of Matter and Energy Transfer in Ecosystems	PE	HS-LS2-5	0	1	0	1	0	1
HS-LS2-6 Ecosystem Dynamics, Functioning, and Resilience	PE	HS-LS2-6	0	1	0	1	0	1
HS-LS2-7 * Ecosystem Dynamics, Functioning and Resilience	PE	HS-LS2-7	0	1	0	1	0	1
HS-LS2-8 Social Interactions and Group Behavior	PE	HS-LS2-8	0	1	0	1	0	1
DCI - Heredity: Inheritance and Variation of Traits	DCI	LS3	0	1	0	2	0	3
HS-LS3-1 Structure and Function, Inheritance of Traits	PE	HS-LS3-1	0	1	0	1	0	1
HS-LS3-2 Variation of Traits	PE	HS-LS3-2	0	1	0	1	0	1
HS-LS3-3 Variation of Traits	PE	HS-LS3-3	0	1	0	1	0	1
DCI - Biological Evolution: Unity and Diversity	DCI	LS4	0	1	0	2	0	3
HS-LS4-1 Evidence of Common Ancestry and Diversity	PE	HS-LS4-1	0	1	0	1	0	1
HS-LS4-2 Natural Selection, Adaptation	PE	HS-LS4-2	0	1	0	1	0	1
HS-LS4-3 Natural Selection, Adaptation	PE	HS-LS4-3	0	1	0	1	0	1
HS-LS4-4 Adaptation	PE	HS-LS4-4	0	1	0	1	0	1
HS-LS4-5 Adaptation	PE	HS-LS4-5	0	1	0	1	0	1
HS-LS4-6 * Adaptation, Biodiversity and Humans	PE	HS-LS4-6	0	1	0	1	0	1
Discipline - Earth and Space Science, PE Total = 16	Science Discipline	ESS	2	2	4	4	6	6
DCI - Earth's Place in the Universe	DCI	ESS1	0	1	0	2	0	3
HS-ESS1-1 The Universe and Its Stars, Energy in Chemical Processes	PE	HS-ESS1-1	0	1	0	1	0	1
HS-ESS1-2 The Universe and Its Stars, Electromagnetic Radiation	PE	HS-ESS1-2	0	1	0	1	0	1
HS-ESS1-3 The Universe and Its Stars	PE	HS-ESS1-3	0	1	0	1	0	1
HS-ESS1-4 Earth and the Solar System	PE	HS-ESS1-4	0	1	0	1	0	1
HS-ESS1-5 The History of Planet Earth, Plate Tectonics	PE	HS-ESS1-5	0	1	0	1	0	1
HS-ESS1-6 The History of Planet Earth	PE	HS-ESS1-6	0	1	0	1	0	1
DCI - Earth's Systems	DCI	ESS2	0	1	0	2	0	3
HS-ESS2-1 Earth Materials and Systems, Weather and Climate	PE	HS-ESS2-1	0	1	0	1	0	1
HS-ESS2-2 Earth Materials and Systems, Plate Tectonics	PE	HS-ESS2-2	0	1	0	1	0	1
HS-ESS2-3 Earth Materials and Systems, Weather and Climate	PE	HS-ESS2-3	0	1	0	1	0	1
HS-ESS2-4 The Roles of Water in Earth's Surface Processes	PE	HS-ESS2-4	0	1	0	1	0	1
DCI - Earth and Human Activity	DCI	ESS3	0	1	0	2	0	3
HS-ESS3-1 Natural Resources, Natural Hazards	PE	HS-ESS3-1	0	1	0	1	0	1
HS-ESS3-2 * Natural Resources	PE	HS-ESS3-2	0	1	0	1	0	1
HS-ESS3-3 Human Impacts on Earth Systems	PE	HS-ESS3-3	0	1	0	1	0	1
HS-ESS3-4 * Human Impacts on Earth Systems	PE	HS-ESS3-4	0	1	0	1	0	1
HS-ESS3-5 Global Climate Change	PE	HS-ESS3-5	0	1	0	1	0	1
HS-ESS3-6 *Global Climate Change	PE	HS-ESS3-6	0	1	0	1	0	1
PE Total = 67			6	6	12	12	18	18

*These PE's have an Engineering component