## Disciplinary Core Ideas

Life Science	Earth & Space Science	Physical Science
From molecules to organisms: Structures and processes LS1.A: Structure and function LS1.B: Growth and development of organisms LS1.C: Organization for matter & energy flow in organisms LS1.D: Information processing	Earth's place in the universe ESS1.A: The universe and its stars ESS1.B: Earth and the solar system ESS1.C: The history of planet Earth	Matter and its interactions PS1.A: Structure and properties of matter PS1.B: Chemical processes PS1.C: Nuclear processes
Ecosystems: Interactions, energy, and dynamics LS2.A: Interdependent relationships in ecosystems LS2.B: Cycles of matter and energy transfer in ecosystems LS2.C: Ecosystem dynamics, functioning, and resilience LS2.D: Social interactions and group behavior	Earth's systems  ESS2.A: Earth materials and systems 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 ESS2.E: Biogeology	Motion and stability: Forces and interactions PS2.A: Forces, fields, and motion PS2.B: Types of interactions PS2.C: Stability and instability in physical systems
Heredity: Inheritance and variation of traits LS3.A: Inheritance of traits LS3.B: Variation of traits	Earth and human activity  ESS3.A: Natural resources ESS3.B: Natural hazards ESS3.C: Human impacts on Earth systems ESS3.D: Global climate change	Energy PS3.A: Definitions of energy PS3.B: Conservation of energy and energy transfer PS3.C: Relationship between energy and forces & fields PS3.D: Energy in chemical processes and everyday life
Biological change: Unity and diversity LS4.A: Evidence of common ancestry LS4.B: Natural selection LS4.C: Adaptation LS4.D: Biodiversity and humans		Waves and their applications in technologies for information transfer PS4.A: Wave properties PS4.B: Electromagnetic radiation PS4.C: Information technologies and instrumentation

## Engineering, Technology, and the Application of Science

ETS1: Engineering design

ETS2: Links among engineering, technology, science, and society

ETS3: Applications of science