Explorer (Life Science Standards)

MS-LS1-4
I can use arguments and scientific reasoning to show how animal behaviors and plant structures increase successful reproduction.

MS-LS2-1
I can analyze and interpret data that shows how resource availability affect populations in an organism.

MS-LS2-2, MS-LS2-3
I can explain how energy flows through living and nonliving parts of an ecosystem, and how organisms interact in competitive, predatory, and mutually beneficial ways.

MS-LS2-4
I can argue how changes to physical and living parts of an ecosystem affect populations.

MS-LS4-1, MS-LS4-2
I can explain how the fossil record provides evidence for the evolution of life forms in the earth's history, and I can show how fossils link species from the past to the present.

MS-LS4-3
I can visualize similarities in the development of embryo's across many species.

MS-LS4-4
I can explain how genetic variations of traits in a population increase an individual's chances of successful reproduction.

MS-LS4-6
I can use mathematical models to explain how natural selection may change traits over time.

Explorer (Earth Science Standards)

MS-ESS2-5
I can use evidence to show mixing air masses change weather conditions.

MS-ESS2-6

I can use data to explain how uneven heating and rotation cause air and ocean currents on Earth.

MS-ESS2-5, MS-ESS-6
I can collect data and make a model that shows how air masses change weather conditions and determine climate.

MS-ESS3-5
I can question and evaluate factors that have caused global climate change.

MS-ESS1-1
I can explain the reasons for the moon's phases, eclipses and seasons.

MS-ESS1-2
I can use a model to describe how gravity holds galaxies and solar systems together.

MS-ESS1-3
I can explain the similarities and differences between objects in the solar system.

<u>Explorer</u> (Physical Science Standards)

MS-PS2-1
I can apply Newton's third law to the motion of colliding objects.

MS-PS2-2
I can gather evidence to show that the change in an object's motion depends on the sum of forces and mass of objects.

MS-PS2-4
I can use evidence to explain how gravitational interactions depend on mass and distance.

MS-PS3-1
I can demonstrate the relationships of kinetic energy to mass and speed.

MS-PS3-2
I can use models to show how position affects amounts of potential energy.