

Measures of Academic Progress (MAP) AERO State-Aligned Version 1

The NWEA Goal Structure is a document that represents the content and structure of a state’s standards documents. Goal structures are created through an alignment process that links state standards documents to the NWEA item bank. The MAP tests and associated reports for teachers and students are based upon this structure and alignment.

The alignment process begins with a thorough review of a state’s standards documents by NWEA’s curriculum specialists. The general goal areas or strands within a state’s standards that appear across grade levels become the goals in the goal structure (indicated below as bold). Areas in a state’s standards documents that are determined to be sub-domains of the goals/strands become the sub-goals in the goal structure (indented under each goal below).

Goal and sub-goal names from the Goal Structure are shortened for technical reasons to create the headings in DesCartes. Report Names are shortened further to accommodate report specifications.

Concepts and Processes Goal Structure	Concepts and Processes DesCartes	Concepts and Processes Report Names
Scientific Inquiry: Process	Scientific Inquiry: Process	Scientific Inquiry: Process
Students will demonstrate their understanding of the importance of curiosity, honesty, open-mindedness, and skepticism in their own efforts to understand how and why universal phenomena exist and occur	Curiosity, Open-mindedness, Skepticism; Phenomena	
Students will communicate scientific ideas and activities clearly	Communicate Scientific Ideas	
Students will be familiar with the character of scientific knowledge and inquiry and how it is achieved	Character of Scientific Knowledge and Inquiry	
Students will be able to select and use tools and instruments to conduct scientific activities	Use Tools to Conduct Scientific Investigations	

Scientific Inquiry: System, Model, Change, Scale	Scientific Inquiry: System, Model, Change, Scale	System, Model, Scale
Students will understand and demonstrate the ideas of system, model, change, and scale in exploring scientific and technological matters	System	
Students will understand and demonstrate the ideas of system, model, change, and scale in exploring scientific and technological matters	Model	
Students will understand and demonstrate the ideas of system, model, change, and scale in exploring scientific and technological matters	Scale	

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General Science Goal Structure	General Science DesCartes	General Science Report Names
Physical Setting: Earth and Space	Physical Setting: Earth and Space	Phy. Setting: Earth, Space
Students will be familiar with current scientific theories about the universe and how those theories evolved	Scientific Theories About the Universe	
Students will understand how key features of the Earth influence climate, weather, and the water cycle	Earth Features: Influence on Climate and Weather	
Students will understand scientific theories of how the earth's surface is formed and how those theories developed	Scientific Theories of How Earth's Surface Formed	
Physical Setting: Matter and Energy	Physical Setting: Matter and Energy	Phy. Setting: Matter, Energy
Students will know and understand scientific theories of the nature of matter and how those theories developed	Scientific Theories of the Nature of Matter	
Students will be familiar with the forms and transformations of energy and the significance of energy in understanding the structure of matter and the universe	Forms and Transformations of Energy	
Students will understand how society uses and conserves various sources of energy	Use and Conservation of Energy	
Students will understand the relationship between force, mass, and the motion of objects	Force, Mass and the Motion of Objects	
Students will recognize gravitational, electrical, and magnetic forces as major kinds of forces acting in nature	Gravitational, Electrical and Magnetic Forces	
Students will be familiar with the wave nature of sound and electromagnetic radiation	Wave Nature of Sound and Electromagnetic Radiation	

Living Environment; Human Organism	Living Environment; Human Organism	Living Environments
Students will be aware of the diversity of living organisms and how they can be compared scientifically	Diversity of Living Organisms	
Students will understand the structure, functions, and reproduction of living cells and organisms; students will know and understand the biological, cultural, and social explanations for why human beings have important traits in common yet differ from one another; students will understand the basic processes of the human body	Structure and Function of Cells and Organisms	
Students will understand how and why organisms are dependent on one another and their environments	Organisms and Their Environments	
Students will understand the cycling of matter and the flow and transformation of energy through systems of living things	Matter and Energy in Systems of Living Things	
Students will understand how biological traits are passed on to successive generations; students will understand the arguments for natural selection as scientific explanation of biological evolution	Biological Traits and Evolution	