

ACT	NGSS	Looks Like in 6th Grade	Looks Like in 7th Grade	Looks Like in 8th Grade	Looks Like in 9th Grade	Looks Like in 10th Grade	Looks Like in 11th Grade
LIFE SCIENCE/BIOLOGY							
Animal behavior	MS-LS1-4., HS-LS2-8.						
Animal development and growth	MS-LS1-4.						
Body systems	MS-LS1-8., MS-LS1-3., HS-LS1-2.						
Cell structure and processes	MS-LS1-2., HS-LS1-4., HS-LS1-6., HS-LS1-7., HS-LS2-3.						
Ecology	MS-LS2-1., MS-LS2-2., MS-LS2-3., MS-LS2-4., HS-LS2-1., HS-LS2-2., HS-LS2-4., MS-LS2-5., HS-LS2-5., HS-LS2-6., HS-LS4-6.						
Evolution	MS-LS4-1., MS-LS4-2., MS-LS4-3., MS-LS4-4., HS-LS4-1., HS-LS4-2., HS-LS4-3., HS-LS4-4., HS-LS4-5.						
Genetics	MS-LS3-1., MS-LS3-2., MS-LS4-4., MS-LS4-5., MS-LS4-6., HS-LS3-1., HS-LS3-2., HS-LS3-3.						
Homeostasis	HS-LS1-3.						
Life cycles	MS-LS1-4.						
Molecular basis of heredity	HS-LS1-1.						
Origin of life	MS-LS1-1.						
Photosynthesis	HS-LS1-5.						
Plant development, growth, structure	MS-LS1-4.						
Populations	MS-LS4-4., HS-LS4-4., HS-LS4-5.						
Taxonomy	MS-LS1-1.						
PHYSICAL SCIENCE/CHEMISTRY, PHYSICS							
Atomic structure	HS-PS1-1, HS-PS1-2, HS-PS1-8						
Chemical bonding, equations, nomenclature, reactions	MS-PS1-6., HS-PS1-2, HS-PS1-3, HS-PS1-4, HS-PS1-5, HS-PS1-6,						
Electrical circuits							
Elements, compounds, mixtures	MS-PS1-1., MS-PS1-3., HS-PS1-2, HS-PS1-7						
Force and motions	MS-PS2-1., MS-PS2-2.						
Gravitation	MS-PS2-4., MS-ESS1-2.						
Heat and work							
Kinetic and potential energy	MS-PS3-1., MS-PS3-2., MS-PS3-3., MS-PS3-4., MS-PS3-5.						
Magnetism	MS-PS2-3., MS-PS2-5						
Momentum							
The periodic table	HS-PS1-1, HS-PS1-2						
Properties of solutions							
Sound and light							
States, classes, and properties of matter	MS-PS1-4., MS-PS1-5.,						
Waves	MS-PS4-1., MS-PS4-3.						
EARTH AND SPACE SCIENCE							
Earthquakes and volcanoes	MS-ESS2-2., MS-ESS3-2., HS-ESS3-1						
Earth's atmosphere	HS-ESS2-6, HS-ESS2-7, HS-ESS3-4, HS-ESS3-5, HS-ESS3-6						
Earth's resources	MS-LS2-3., MS-ESS3-1., MS-ESS3-3., MS-ESS3-4.						
Fossils and geologic time	MS-ESS1-4.						
Geochemical cycles	MS-ESS2-1.						

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Groundwater							
Lakes, rivers, oceans							
Mass movements	MS-ESS2-2.						
Plate tectonics	MS-ESS2-2., MS-ESS2-3.						
Rocks, minerals	MS-ESS2-1.						
Solar system	MS-ESS1-1., MS-ESS1-3.						
Stars, galaxies, and the universe	MS-ESS1-2.						
Water cycle	MS-ESS2-1., MS-ESS2-4.						
Weather and climate	MS-PS2-1., MS-PS2-2., MS-ESS1-2., MS-ESS2-5., MS-ESS2-6., MS-ESS3-2., MS-ESS3-5.						
Weathering and erosion	MS-ESS2-2.						
Interpretation of Data (IOD)							
IOD 201. Select one piece of data from a simple data presentation (e.g., a simple food web diagram)	MS-LS1-6.						
IOD 202. Identify basic features of a table, graph, or diagram (e.g., units of measurement)	MS-LS2-1.,MS-LS4-1.,MS-ESS1-4.						
IOD 203. Find basic information in text that describes a simple data presentation	MS-LS1-4., MS-ESS2-2.						
IOD 301. Select two or more pieces of data from a simple data presentation	MS-LS2-1., MS-PS2-3., MS-PS2-4., MS-PS3-1., MS-PS3-5., MS-ESS2-3., MS-ESS2-5., MS-ESS3-1., MS-ESS3-2., HS-LS4-5.,						
IOD 302. Understand basic scientific terminology							
IOD 303. Find basic information in text that describes a complex data presentation	MS-LS2-4.						
IOD 304. Determine how the values of variables change as the value of another variable changes in a simple data presentation	MS-LS2-4.						
IOD 401. Select data from a complex data presentation (e.g., a phase diagram)							
IOD 402. Compare or combine data from a simple data presentation (e.g., order or sum data from a table)	MS-PS1-2., MS-PS4-1.						
IOD 403. Translate information into a table, graph, or diagram	HS-LS2-2., HS-LS2-4.						
IOD 404. Perform a simple interpolation or simple extrapolation using data in a table or graph							
Scientific Investigation (SIN)							
SIN 201. Find basic information in text that describes a simple experiment	MS-LS1-5.						
SIN 202. Understand the tools and functions of tools used in a simple experiment	MS-PS2-5, MS-PS3-1., MS-PS3-4., HS-LS1-3.,						
SIN 301. Understand the methods used in a simple experiment	MS-PS2-2., MS-PS3-1., MS-PS3-2., MS-PS3-3., MS-PS3-4., HS-LS1-3.,						
SIN 302. Understand the tools and functions of tools used in a complex experiment							
SIN 303. Find basic information in text that describes a complex experiment							
SIN 401. Understand a simple experimental design	MS-PS2-2., MS-PS2-3., MS-PS2-5, HS-LS1-3.						
SIN 402. Understand the methods used in a complex experiment							
SIN 403. Identify a control in an experiment							
SIN 404. Identify similarities and differences between experiments							
SIN 405. Determine which experiments utilized a given tool, method, or aspect of design							

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Evaluation of Models, Inferences, and Experimental Results (EMI)							
EMI 201. Find basic information in a model (conceptual)	MS-LS1-6., MS-LS2-3., MS-LS1-4., MS-PS1-4., MS-PS4-2., MS-ESS1-1., MS-ESS1-2., MS-ESS2-1., MS-ESS2-4., MS-ESS2-6., HS-LS1-4., HS-LS1-5., HS-LS1-7.						
EMI 301. Identify implications in a model	MS-LS1-6., MS-LS2-1., HS-LS2-4., MS-LS2-5., MS-PS1-4., MS-PS1-5., MS-PS3-2., MS-ESS1-2.						
EMI 302. Determine which models present certain basic information	HS-LS2-5., MS-LS4-3., MS-PS4-2., MS-ESS1-3.						
EMI 401. Determine which simple hypothesis, prediction, or conclusion is, or is not, consistent with a data presentation, model, or piece of information in text	MS-LS2-5., MS-LS4-3., HS-LS1-2., HS-LS2-1., HS-LS4-2., HS-LS4-3., HS-LS4-4.,						
EMI 402. Identify key assumptions in a model	HS-LS2-4.						
EMI 403. Determine which models imply certain information	HS-LS2-7.						
EMI 404. Identify similarities and differences between models	MS-LS4-3.						