

THE RISE OF THE LEGENDS

ALIGNMENT STANDARDS BY CHAPTER

CHAPTER	PAGE	STANDARDS DOCUMENT	STANDARD NUMBER	STANDARD
5	29	NGSS	MS-PS4-2	Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.
7	42	NGSS	MS-PS2-3	Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
8	47-48	MATH Common Core	CCSS.MATH.CONTENT.6.NS.C.8	Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.
8	47-48	MATH Common Core	MS-PS2-3	Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
8	47-48	MATH Common Core	MS-LS1-8	Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.
17	91	CSTA	1A-CS-02	Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware).
17	92	MATH Common Core	CCSS.MATH.CONTENT.7.RP.A.3	Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.

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18	95	CSTA	1A-CS-01	Select and operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use.
19	100	NGSS	MS-ESS1-1	Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.
19	104	MATH Common Core	CCSS.MATH. CONTENT.6. NS.B.3	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
19	104	NGSS	MS-PS4-1	Use mathematical representations to describe a simple model for waves that includes how the amplitude of a wave is related to the energy in a wave.
20	111	CSTA	1A-CS-02	Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware).
20	111	NGSS	MS-ESS1-1	Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.
21	114	MATH Common Core	CCSS.MATH. CONTENT.7. G.A.1	Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.
21	115	MATH Common Core	CCSS.MATH. CONTENT.6. NS.B.3	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
21	115	MATH Common Core	CCSS.MATH. CONTENT.6. NS.B.2	Fluently divide multi-digit numbers using the standard algorithm.

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21	115	NGSS	MS-ESS3-5	Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.
21	117	MATH Common Core	CCSS.MATH. CONTENT.5. OA.A.2	Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.
23	125	MATH Common Core	CCSS.MATH. CONTENT.7. G.A.2	Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.
24	144	NGSS	MS-ESS2-4	Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.
24	145	NGSS	MS-PS1-3	Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
24	145	NGSS	MS-ETS1-1	Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
26	155	NGSS	MS-PS2-3	Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.

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26	155	NGSS	MS-ETS1-1	Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
28	173	SEL	Relationship Skills	Practicing teamwork and collaborative problem-solving
28	173	SEL	Self-Management	Using planning and organizational skills
28	175	SEL	Self-Awareness	Developing interests and a sense of purpose
29	182	SEL	Responsible Decision-Making	Reflecting on one's role to promote personal, family, and community well-being
30	183	SEL	Relationship Skills	Standing up for the rights of others
34	215	SEL	Relationship Skills	Resisting negative social pressure
34	215	SEL	Responsible Decision-Making	Identifying solutions for personal and social problems
34	215	SEL	Self-Awareness	Integrating personal and social identities
36	224	SEL	Self-Management	Identifying and using stress-management strategies
36	224	SEL	Self-Awareness	Identifying one's emotions

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37	226	SEL	Self-Management	Demonstrating personal and collective agency
37	226	SEL	Self-Awareness	Developing interests and a sense of purpose
37	232	SEL	Self-Management	Demonstrating personal and collective agency
38	241	SEL	Social Awareness	Understanding and expressing gratitude
39	245	SEL	Responsible Decision-Making	Reflecting on one's role to promote personal, family, and community well-being
39	245	SEL	Self-Awareness	Developing interests and a sense of purpose
41	267	NGSS	MS-ESS1-1	Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.
42	270	NGSS	MS-ETS1-1	Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
42	275	NGSS	MS-LS2-1	Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
49	316	CSTA	1A-CS-02	Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware).

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50	322	NGSS	MS-PS2-3	Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
50	322	NGSS	MS-PS3-3	Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.
50	323	NGSS	MS-PS2-5	Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.
51	326	NGSS	MS-PS1-2	Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.
51	326	NGSS	MS-PS1-4	Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.
ALL CHAPTERS		CSTA	1A-DA-07	Identify and describe patterns in data visualizations, such as charts or graphs, to make predictions.
ALL CHAPTERS		CSTA	1A-AP-08	Model daily processes by creating and following algorithms (sets of step-by-step instructions) to complete tasks.
ALL CHAPTERS		CSTA	1A-AP-09	Model the way programs store and manipulate data by using numbers or other symbols to represent information.
ALL CHAPTERS		CSTA	1A-AP-12	Develop plans that describe a program's sequence of events, goals, and expected outcomes.

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ALL CHAPTERS		ELA Common Core	CCSS.ELA-LITERACY.RL.6.10	By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
ALL CHAPTERS		ELA Common Core	CCSS.ELA-LITERACY.RL.7.10	By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.
ALL CHAPTERS		ISTE	1.2.b	Students engage in positive, safe, legal and ethical behavior when using technology, including in social interactions online or when using networked devices.
ALL CHAPTERS		ISTE	1.3.a	Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
ALL CHAPTERS		ISTE	1.7.c	Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.
ALL CHAPTERS		ISTE	1.6.c	Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
ALL CHAPTERS		ISTE	1.5.b	Students collect data or identify relevant data sets, use digital tools to analyze them and represent data in various ways to facilitate problem-solving and decision-making.
ALL CHAPTERS		ELA Common Core	CCSS.ELA-LITERACY.RL.8.10	By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6-8 text complexity band independently and proficiently.