Interdisciplinary Connections are made in the core subject areas below in alignment with the New Jersey Student Learning Standards (NJSLS) to enhance student learning and understanding.

These connections facilitate a comprehensive educational approach by integrating cross-curricula concepts and skills.

**Table of Contents** | Click the Title to Jump to the Section

**English | Math & Science connections** 

**English: SS & VPA connections** 

Math | ELA & Science connections

Science | Math & ELA connections

Social Studies | ELA & VPA connections

Social Studies | Math & Science connections

Core Subject: English   Math & Science									
ELA Standard	Math Connection	Science Connection	ELA NJSLS 2023	Math NJSLS 2023	Science NJSLS 2020				
Integrate Information: Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.	Students can analyze and interpret data from graphs and charts related to a math concept or real-world issue, then write a report or summary explaining the data.	Graphs, charts, and images can be used to identify patterns in data.	II Anchor Std	7.SP.A.1, 8.SP.A.1, HSS.ID.A.1, HSS.IC.B.6	MS-PS1-4, HS-ESS2-4				
Sources of Evidence: Gather relevant information and evidence from multiple sources to support analysis, reflection, and research, while assessing the	Research a mathematical concept (e.g., fractions, probability) across different sources and write an informative essay or present findings that synthesize this	Models can be used to represent systems and their interactions.	SE Anchor Std	7.RP.A.2, 8.F.A.2, HSF.IF.C.7, HSA.CED.A.1	MS-PS3-2, HS-LS2-8				

	Core Subject: English   Math & Science								
ELA Standard	Math Connection	Science Connection	ELA NJSLS 2023	Math NJSLS 2023	Science NJSLS 2020				
credibility and accuracy of each source, and integrating the information while avoiding plagiarism.	information.								
Informative and Explanatory Writing: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Write explanations of mathematical procedures or concepts, such as how to solve a particular type of problem or the real-world application of a math concept.	Constructing explanations and designing solutions based on scientific knowledge.	IW Anchor Std	7.EE.B.4, 8.EE.C.7, HSA.REI.B.4H SG.GPE.B.7	SEP.6, MS-LS1-6, HS-PS1-7				
Analysis of an Argument: Evaluate the argument and specific claims in a text, including the validity of the reasoning, the credibility and accuracy of each source as well as the relevance and sufficiency of the evidence.		Evaluating scientific arguments and evidence.	AAI Anchor Std		HS-LS4-6, MS-ESS3-4				
Argumentative Writing: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	Develop argumentative essays where students use statistical data to support their claims on a given issue (e.g., the importance of budgeting and the benefits of healthy eating habits supported by nutritional data).	Engaging in argument from evidence to support scientific claims.	AW Anchor Std	7.SP.B.2, 8.SP.B.4, HSS.ID.B.6, HSS.IC.A.1	SEP.7, MS-PS2-2, HS-LS2-7				
Present Information: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate	Present findings from a math-based research project, such as the results of a survey or an analysis of a mathematical concept's real-world application.	Presenting findings from scientific research and investigations.	PI Anchor Std	7.SP.C.8, 8.SP.C.9, HSS.IC.B.4, HSS.IC.B.5	SEP.8, MS-ESS3-1, HS-ESS1-2				

Core Subject: English   Math & Science								
ELA Standard	Math Connection	Science Connection	ELA NJSLS 2023	Math NJSLS 2023	Science NJSLS 2020			
to task, purpose, and audience.								
Use Media: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.	Create presentations that incorporate graphs, charts, and other visual data to support a mathematical argument or explain a mathematical concept.	Using models, diagrams, and simulations to support scientific explanations and presentations.	UM Anchor Std	7.G.A.2, 8.G.B.6, HSG.MG.A.3, HSG.SRT.C.8	SEP.2, HS-LS3-1, MS-PS4-2			
Adapt Speech: Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.	Use domain-specific vocabulary related to mathematics in writing assignments and presentations, enhancing both mathematical understanding and language skills.	Using scientific vocabulary accurately in explanations and discussions of scientific concepts.	AA Anchor Std	7.EE.B.3, 8.EE.C.8, HSA.CED.A.2, HSN.Q.A.1	SEP.8, HS-ESS2-7, MS-ESS1-4			
Text Structure: Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.	Analyze patterns within stories, such as the frequency of character actions or events, and create graphs or charts to represent these patterns. Write analyses based on the data.	Analyzing patterns and structures in natural systems and describing how they function based on their structure.	TS Anchor Std	7.SP.A.1, 8.SP.A.3, HSS.ID.A.3, HSS.IC.B.3	MS-LS1-1, HS-LS1-3, HS-ESS2-5			

	Core Subject: English   SS & VPA							
ELA Standard	Social Studies Connection	VPA Connection	ELA NJSLS 2023	Social Studies NJSLS 2020	VPA NJSLS 2020			
Integrate Information: Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.	Analyzing historical data through charts, graphs, and other visual tools.		II Anchor Std	6.1.8.A.4.b, 6.1.12.A.14.a				
Sources of Evidence: Gather relevant information and evidence from multiple sources to support analysis, reflection, and research, while assessing the credibility and accuracy of each source, and integrating the information while avoiding plagiarism.	Using multiple historical sources to understand different perspectives on events.	Combining multiple artistic sources to create a comprehensive analysis or presentation of an artistic theme.	SE Anchor Std	6.1.8.D.5.d, 6.2.12.D.5.d	1.1.8.Re7a, 1.2.12.Cr2a			
Informative and Explanatory Writing: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Writing explanations of historical events, processes, and their significance.	Writing explanatory texts about artistic techniques, historical contexts, and thematic interpretations in visual and performing arts.	IW Anchor Std	6.1.8.A.3.g, 6.1.12.B.2.a	1.3.8.Cn10a, 1.4.12.Cn11a			
Analysis of an Argument: Evaluate the argument and specific claims in a text, including the validity of the reasoning, the credibility and accuracy of each source as well as the relevance and sufficiency of the evidence.	Evaluating historical arguments and evidence in primary and secondary sources.		AA Anchor Std	6.1.8.D.2.b, 6.2.12.C.3.e				
Argumentative Writing: Write arguments to support claims in an analysis of	Developing arguments based on historical evidence and differing viewpoints.	Developing arguments regarding the significance of a particular artwork or	AW Anchor Std	6.1.8.D.4.c, 6.2.12.C.6.b	1.4.8.Cr3a, 1.4.12.Cr3b			

	Core Subject: English   SS & VPA							
ELA Standard	Social Studies Connection	VPA Connection	ELA NJSLS 2023	Social Studies NJSLS 2020	VPA NJSLS 2020			
substantive topics or texts, using valid reasoning and relevant and sufficient evidence.		performance, supported by evidence and analysis.						
Present Information: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	Presenting historical research findings and recounting significant historical events with detail.	Presenting artistic analysis and critiques in a clear and logical manner, using evidence from the artworks to support claims.	PI Anchor Std	6.1.8.A.2.a, 6.1.12.C.16.a	1.3.8.Pr4a, 1.3.12.Pr5a			
Use Media: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.	Creating presentations with historical data, multimedia, and visual aids to support historical arguments.	Creating presentations that incorporate various multimedia elements to enhance the understanding and appreciation of visual and performing arts.	UM Anchor Std	6.1.8.C.3.b, 6.1.12.D.5.d	1.1.8.Cr2a, 1.2.12.Pr4a			
Central Ideas and Themes of Texts: Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.	Analyzing historical events, settings, and figures based on specific historical texts and accounts.		CI Anchor Std	6.1.8.B.2.b, 6.1.12.A.7.c				
Interactions Among Text Elements: Analyze how and why individuals, events, and ideas develop and interact over the	Understanding cause and effect in historical events and their connections.		IT Anchor Std	6.1.8.D.3.b, 6.2.12.A.3.c				

Core Subject: English   SS & VPA								
ELA Standard	Social Studies Connection	VPA Connection	ELA NJSLS 2023	Social Studies NJSLS 2020	VPA NJSLS 2020			
course of a text.								

	Core Subject: Math   ELA & Science								
Math Standard	ELA Connection	Science Connection	Math NJSLS 2023	ELA NJSLS 2023	Science NJSLS 2020				
Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.	Close Reading of Text: Read closely to determine what the text says explicitly and make logical inferences.		7.EE.B.4	CR Anchor Std					
Recognize and represent proportional relationships between quantities.		Proportional relationships provide information about the magnitude of properties and processes.	7.RP.A.2		MS-PS1-1, MS-LS1-1				
Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.		Analyzing and Interpreting Data: Empirical evidence is needed to identify patterns.	7.SP.B.3		SEP.4				
Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or	Diverse Media and Formats: Synthesize content presented in diverse media and formats, including visually and quantitatively, as well as in words.	Graphs, charts, and images can be used to identify patterns in data.	8.F.B.5	MF Anchor Std	MS-ESS1-4				

	Core Subject: Math   ELA & Science							
Math Standard	ELA Connection	Science Connection	Math NJSLS 2023	ELA NJSLS 2023	Science NJSLS 2020			
nonlinear).								
Make sense of problems and persevere in solving them.	Participate Effectively: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners.	Planning and Carrying out Investigations: Scientists and engineers plan and carry out investigations in the field or laboratory, working collaboratively as well as individually.	MP.1	PE Anchor Std	SEP.3			
Construct viable arguments and critique the reasoning of others.	Participate Effectively: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners.	Construct and revise an explanation based on valid and reliable evidence obtained from a variety of sources.	MP.3	PE Anchor Std	SEP.6			
Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.		Mathematical representations are needed to identify some patterns.	A-CED.2		SEP.5			
Represent data with plots on the real number line (dot plots, histograms, and box plots).	Diverse Media and Formats: Synthesize content presented in diverse media and formats, including visually and quantitatively, as well as in words.	Analyzing and Interpreting DataPatterns in rates of change and other numerical relationships can provide information about natural and human-designed systems.	S-ID.1	MF Anchor Std	SEP.4			
Write a function that describes a relationship between two quantities.	Informative and Explanatory Writing: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately.	Developing and Using Models: Models can be used to simulate systems and interactions—including energy, matter, and information flows—within and between systems at different scales.	F-BF.1	IW Anchor Std	SEP.2			

	Core Subject: Math   ELA & Science								
Math Standard	ELA Connection	Science Connection	Math NJSLS 2023	ELA NJSLS 2023	Science NJSLS 2020				
Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.	Close Reading of Text: Read closely to determine what the text says explicitly and make logical inferences.		A-CED.3	CR Anchor Std					
Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation.	Writing Research: Conduct short as well as more sustained research projects to demonstrate understanding of the subject under investigation.		S-IC.2	WR Anchor Std					

Core Subject: Science   Math & ELA									
Science Standard	Math Connection	ELA Connection	Science NJSLS 2020	Math NJSLS 2023	ELA NJSLS 2023				
Patterns in rates of change and other numerical relationships can provide information about natural and human-designed systems.	Recognize and represent proportional relationships between quantities.	Close Reading of Text: Read closely to determine what the text says explicitly and make logical inferences.	MS-PS1-1, MS-LS1-1	7.RP.A.2	CR Anchor Std				
Graphs, charts, and images can be used to identify patterns in data.	Describe qualitatively the functional relationship between two quantities by analyzing a graph.	Diverse Media and Formats: Synthesize content presented in diverse media and formats, including visually and quantitatively, as well as in words.	MS-ESS1-4	8.F.B.5	MF Anchor Std				

Core Subject: Science   Math & ELA							
Science Standard	Math Connection	ELA Connection	Science NJSLS 2020	Math NJSLS 2023	ELA NJSLS 2023		
Developing and Using Models: Models can be used to simulate systems and interactions—including energy, matter, and information flows—within and between systems at different scales.	Write a function that describes a relationship between two quantities.		SEP.2	F-BF.1			
Planning and Carrying out Investigations: Scientists and engineers plan and carry out investigations in the field or laboratory, working collaboratively as well as individually.	Make sense of problems and persevere in solving them.	Participate Effectively: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners.	SEP.3	MP.1	PE Anchor Std		
Analyzing and Interpreting Data: Relationships can be classified as causal or correlational; correlation does not necessarily imply causation.	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.		SEP.4	S-ID.6			
Analyzing and Interpreting Data: Empirical evidence is needed to identify patterns.	Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.	Diverse Media and Formats: Synthesize content presented in diverse media and formats, including visually and quantitatively, as well as in words.	SEP.4	7.SP.B.3	MF Anchor Std		
Using Mathematical Computation and Thinking: Mathematical representations are needed to identify some patterns.	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	Close Reading of Text: Read closely to determine what the text says explicitly and make logical inferences.	SEP.5	A-CED.2	CR Anchor Std		

	Core Subject: Science   Math & ELA								
Science Standard	Math Connection	ELA Connection	Science NJSLS 2020	Math NJSLS 2023	ELA NJSLS 2023				
Constructing Explanations and Designing Solutions: Construct and revise an explanation based on valid and reliable evidence obtained from a variety of sources.	Construct viable arguments and critique the reasoning of others.	Argumentative Writing: write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	SEP.6	MP.3	AW Anchor Std				

Core Subject: Social Studies   English & VPA					
Social Studies Standard	ELA Connection	VPA Connection	SS NJSLS 2020	ELA NJSLS 2023	VPA NJSLS 2020
Historical sources and evidence provide an understanding of different points of view about historical events.	Close Reading of Text: Read closely to determine what the text says explicitly and make logical inferences.	Interpret and analyze artistic work for meaning.	6.1.12.D.5.d	CR Anchor Std	1.1.12.Re7a
Evidence from multiple relevant historical sources and interpretations can be used to develop a reasoned argument about the past.	Analysis of an Argument: Evaluate the argument and specific claims in a text, assessing the validity of the reasoning and the relevance and sufficiency of the evidence.	Develop and refine artistic work for presentation.	6.1.12.D.2.b	AA Anchor Std	1.3.12.Cr2a
Analysis of historical text including, but not limited to, people, events, and themes in history through fiction and non-fiction text.	Diverse Media and Formats: Synthesize content presented in diverse media and formats, including visually and quantitatively, as well as in words.	Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding.	6.1.12.D.3.a	MF Anchor Std	1.4.12.Cn11a
Historical events and developments are shaped by social, political, cultural, technological, and economic factors.	Informative and Explanatory Writing: Write informative/explanatory texts to examine and convey complex ideas and information	Anchor artistic work in historical and cultural context.	6.1.12.C.16.a	IW Anchor Std	1.4.12.Cr3a

Core Subject: Social Studies   English & VPA						
Social Studies Standard	ELA Connection	VPA Connection	SS NJSLS 2020	ELA NJSLS 2023	VPA NJSLS 2020	
	clearly and accurately.					
Understanding the historical context of social movements and political changes.	Participate Effectively: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	Evaluate works of art in the context of history and culture.	6.1.12.A.14.a	PE Anchor Std	1.1.12.Cn10a	

Core Subject: Social Studies   Math & Science					
Social Studies Standard	Math Connection	Science Connection	SS NJSLS 2020	Math NJSLS 2023	Science NJSLS 2020
Historical events and developments are shaped by social, political, cultural, technological, and economic factors.	Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.	Planning and Carrying out Investigations: Planning and carrying out investigations to understand historical developments.	6.1.12.C.16.a	7.SP.B.3	SEP.3
Historical sources and evidence provide an understanding of different points of view about historical events.	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.	Analyzing and Interpreting Data: Analyzing and interpreting data to provide evidence for phenomena.	6.1.12.D.5.d	7.EE.B.4	SEP.4

Core Subject: Social Studies   Math & Science						
Social Studies Standard	Math Connection	Science Connection	SS NJSLS 2020	Math NJSLS 2023	Science NJSLS 2020	
Understanding the historical context of social movements and political changes.	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	Using Mathematical Computation and Thinking: Using mathematical and computational thinking to analyze historical data and trends.	6.1.12.A.14.a	A-CED.2	SEP.5	
Evidence from multiple relevant historical sources and interpretations can be used to develop a reasoned argument about the past.	Recognize and represent proportional relationships between quantities.	Constructing Explanations and Designing Solutions: Constructing explanations and designing solutions based on evidence.	6.1.12.D.2.b	7.RP.A.2	SEP.6	
Analysis of historical text including, but not limited to, people, events, and themes in history through fiction and non-fiction text.	Describe qualitatively the functional relationship between two quantities by analyzing a graph.	Engaging in Argument from Evidence: Engaging in argument from evidence and evaluating the credibility of sources.	6.1.12.D.3.a	8.F.B.5	SEP.7	