

# F.3 Science - Grade 3

PUBLISHER/PROVIDER MATERIAL INFORMATION (TO BE COMPLETED BY PUBLISHER/PROVIDER)								
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Title of Student Edition:	Amplify Science Grade 3 Student Book (6 Pack) Bundle	Student Edition ISBN:	9781644828267					
Title of Teacher Edition:	Amplify Science Grade 3 Digital Experience Teacher License, 6 year	Teacher Edition ISBN:	9798885700269					
Title of SE Workbook:	Amplify Science Grade 3 Student Investigation Notebook Bundle	SE Workbook ISBN:	9781643330624					

PUBLISHER/PROVIDER CITATION VIDEO: Reviewer must view video before starting the review of this set of materials.								
Citation Video Link:	An	Amplify Science K-5 Form F Citation Video						
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#### Section 1: Standards Review: Science

#### Abbreviations for the Form F Standards Review Tab:

- PE: Performance Expectation
- DCI: Disciplinary Core Idea
- SEP: Science and Engineering Practices
- CCC: Crosscutting Concepts
- CONN: Connections
- NM: NM STEM Ready Standard
- CCSS: Common Core State Standards for ELA/Literacy in Science and Common Core State Standards for Math in Science as identified in the NGSS

#### PUBLISHER/PROVIDER INSTRUCTIONS:

- Publisher/Provider citations for this section will refer to the Feacher Edition (teacher-facing core material). The cited Teacher Edition should correspond with the title and ISBN entered on the Form F cover page, whether in print, online, or both. The review set submitted to the summer review institute should also correspond with what is cited on the Form F. If the review set is an online platform only, then that is what should be cited on the Form F and submitted for review by the review teams. If the review set is in print only, then that is what should be cited on the Form F and submitted for review by the review teams.
- For this section, the publisher/provider will enter one citation per DCI, SEP, CCC, CONN, and NM standard in Column D. Each citation should direct the reviewer to a specific location in the materials that best meets the standard. The citations should be concise and should allow the reviewer to easily determine that all components of the standard have been met. Each citation should cover no more than 3 pages within the materials. Any cells grayed out do not require a citation.
  - o Column D: Enter one citation in Column D from the Teacher Edition (teacher-facing core material). Each citation should direct the reviewer to a specific location in the materials that best meets the standard.
  - The cited material for each DCI, SEP, CCC, and CONN must directly relate to the PE under which they fall.
- The material will be scored for alignment with each DCI, SEP, CCC, CONN, and NM standard within each PÉ as "Meets expectations", "Partially meets expectations", or "Does not meet expectations" based on the citations provided. A score for the PE will be derived from the related DCIs, SEPS, CCCs, CONNs, and NM Standards within the PE.

o NOTE: You may not use a citation more than once across ALL sections of the rubric.

Criteria #	Standard Identifier	F.3 Grade 3 Science Standards Review:	Publisher/Provider Citation from Teacher Edition	Score	If Scored D: Reviewer's Evidence for Publisher Citation	Reviewer Citation from Student Edition/Workbook	Score	Required: Reviewer's Evidence	Comments, other citations, notes	
Motion	on and Stability: Forces and Interactions									
1	PE	3-PS2-1. Students who demonstrate understanding can: Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.								
2	DCI	PS2.A: Forces and Motion • Each force acts on one particular object and has both strength and a direction. An object at rest typically has multiple forces acting on it, but they add to give zero net force on the object. Forces that do not sum to zero can cause changes in the object's speed or direction of motion. (Boundary: Qualitative and conceptual, but not quantitative addition of forces are used at this level.) (3-PS2-1)								
3	DCI	PS2.B: Types of Interactions  Objects in contact exert forces on each other. (3-PS2-1)	Balancing Forces Chapter 1, Lesson 1.4 Activity 1 (slides 2–13)							
4	SEP	Planning and Carrying Out Investigations Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.  Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. (3-PS2-1)	Balancing Forces Chapter 5, Lesson 5.1 Activity 3 (slides 27–38)							
5	CONN	Scientific Investigations Use a Variety of Methods  • Science investigations use a variety of methods, tools, and techniques. (3-PS2-1)	Balancing Forces Chapter 2, Lesson 2.4 Activity 2							
6	ccc	Cause and Effect Cause and effect relationships are routinely identified. (3-PS2-1)	Balancing Forces Chapter 3, Lesson 3.3 Activity 1 (slides 2–9), including Teacher Support Note, "Background. Crosscutting Concepts: What is Meant by Cause and Effect?" linked to on slide 2							
7	PE	3-PS2-2. Students who demonstrate understanding can: Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.								

8	DCI	PS2.A: Forces and Motion  • The patterns of an object's motion in various situations can be observed and measured; when that past motion exhibits a regular pattern, future motion can be predicted from it. (Boundary: Technical terms, such as magnitude, velocity, momentum, and vector quantity, are not introduced at this level, but the concept that some quantities need both size and direction to be described is developed.) (3-PS2-2)	Balancing Forces Chapter 5, Lesson 5.3 Activity 2 (slides 18–29)
9	SEP	Planning and Carrying Out Investigations Planning and carrying out investigations to answer questions or test solutions to problems in 3–5 builds on K–2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.  Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution. (3-PS2-2)	Environments and Survival Chapter 3, Lesson 4.3 Activity 2 (slides 15–26)
10	CONN	Science Knowledge is Based on Empirical Evidence  • Science findings are based on recognizing patterns. (3-PS2-2)	Inheritance and Traits Chapter 1, Lesson 1.2 Activity 3 Teacher Support Note, "Instructional. Suggestion. Pedagogical Goals: Understanding the Nature of Science" linked to on slide 29
11	ссс	Patterns Patterns of change can be used to make predictions. (3-PS2-2)	Weather and Climate Chapter 3, Lesson 3.5 Activity 3 (slides 40-41)
12	PE	3-PS2-3. Students who demonstrate understanding can: Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.	
13	DCI	PS2.B: Types of Interactions • Electric and magnetic forces between a pair of objects do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other. (3-PS2-3)	Balancing Forces Chapter 2, Lesson 2.1 Activity 2 (slides 12–19)
14	SEP	Asking Questions and Defining Problems Asking questions and defining problems in grades 3–5 builds on grades K–2 experiences and progresses to specifying qualitative relationships.  Ask questions that can be investigated based on patterns such as cause and effect relationships. (3-PS2-3)	Balancing Forces Chapter 2, Lesson 2.4 Activity 3 (slides 12–20)
15	ccc	Cause and Effect     Cause and effect relationships are routinely identified, tested, and used to explain change. (3-PS2-3)	Balancing Forces Chapter 1, Lesson 1.4 Activity 4 (slides 26–31), including "Assessment Guide" (linked to in Digital Resources)
16	PE	3-PS2-4. Students who demonstrate understanding can: Define a simple design problem that can be solved by applying scientific ideas about magnets.	
17	DCI	PS2.B: Types of Interactions • Electric and magnetic forces between a pair of objects do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other. (3-PS2-4)	Balancing Forces Chapter 5, Lesson 5.3 Activity 1 (slides 2–17), including Teacher Support Note, "Instructional Suggestion: Going Further: Exploring Electric Forces" linked to on slide 2

18	SEP	Asking questions and defining problems in grades 3–5 builds on	Balancing Forces Chapter 5, Lesson 5.5 Activity 3	
19	CONN		Environments and Survival Chapter 4, Lesson 4.1 Activity 2 (slides 5–12)	
From Mo	olecules to Organisr	ns: Structures and Processes		
20	PE	3-LS1-1. Students who demonstrate understanding can: Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.		
21	DCI		Inheritance and Traits Chapter 1, Lesson 1.1 Activity 4 (slides 21–39)	
22	SEP	building and revising simple models and using models to represent events and design solutions.  • Develop models to describe phenomena. (3-LS1-1)	Inheritance and Traits Chapter 2, Lesson 2.2 Activity 1 (slides 2–8)	
23	CONN		Inheritance and Traits Chapter 2, Lesson 2.2 Activity 1 (slides 2–8)	
24	ccc	Patterns Patterns of change can be used to make predictions. (3-LS1-1)	Inheritance and Traits Chapter 1, Lesson 1.3 Activity 2 (slides 20–32)	
Ecosyste	ems: Interactions, E	nergy, and Dynamics		
25	PE	3-LS2-1. Students who demonstrate understanding can: Construct an argument that some animals form groups that help members survive.		
		Being part of a group helps animals obtain food, defend	Inheritance and Traits Chapter 1, Lesson 1.1 Activity 1 (slides 2-7),	
26	DCI	functions and vary dramatically in size. (Note: Moved from K–2) (3-LS2-1)	including Teacher Support Notes, "Instructional Suggestion: Going Further: Social Interactions and Group Behaviors in Animals" and "Additional Assessment Opportunities: Student Understanding of Animal Social Interactions and Group Behavior" linked to on slide 2	
26	DCI	functions and vary dramatically in size. (Note: Moved from K–2) (3-LS2-1)  Engaging in Argument from Evidence Engaging in argument from evidence in 3–5 builds on K–2	including Teacher Support Notes, "Instructional Suggestion: Going Further: Social Interactions and Group Behaviors in Animals" and "Additional Assessment Opportunities: Student Understanding of Animal Social Interactions and Group Behavior" linked to	
		Engaging in Argument from Evidence Engaging in argument from Evidence Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed worlds.  • Construct an argument with evidence, data, and/or a model. (3-LS2-1)  Cause and Effect  • Cause and effect relationships are routinely identified and used	including Teacher Support Notes, "Instructional Suggestion: Going Further: Social Interactions and Group Behaviors in Animals" and "Additional Assessment Opportunities: Student Understanding of Animal Social Interactions and Group Behavior" linked to on slide 2  Weather and Climate Chapter 1, Lesson 1.6 Activity 3 (slides 25–38)	
27	SEP	Engaging in Argument from Evidence Engaging in argument from Evidence Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed worlds.  • Construct an argument with evidence, data, and/or a model. (3-LS2-1)  Cause and Effect • Cause and effect relationships are routinely identified and used to explain change. (3-LS2-1)	including Teacher Support Notes, "Instructional Suggestion: Going Further: Social Interactions and Group Behaviors in Animals" and "Additional Assessment Opportunities: Student Understanding of Animal Social Interactions and Group Behavior" linked to on slide 2  Weather and Climate Chapter 1, Lesson 1.6 Activity 3 (slides 25–38)  Balancing Forces Chapter 5, Lesson 5.5	

29		3-LS3-1. Students who demonstrate understanding can: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.	
30	DCI	LS3.A: Inheritance of Traits     Many characteristics of organisms are inherited from their parents. (3-LS3-1)	Inheritance and Traits Chapter 2, Lesson 2.6 Activity 1 (slides 2-9)
31	DCI	LS3.B: Variation of Traits  • Different organisms vary in how they look and function because they have different inherited information. (3-LS3-1)	Inheritance and Traits Chapter 2, Lesson 2.3 Activity 2 (slides 12–27)
32	SEP	Analyzing and Interpreting Data  Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.  Analyze and interpret data to make sense of phenomena using logical reasoning. (3-LS3-1)	Inheritance and Traits Chapter 2, Lesson 2.5 Activity 4 (slides 38-45)
33	ccc	Patterns - Similarities and differences in patterns can be used to sort and classify natural phenomena. (3-LS3-1)	Inheritance and Traits Chapter 1, Lesson 1.5 Activity 1 (slides 10–27)
34	PE	3-LS3-2. Students who demonstrate understanding can: Use evidence to support the explanation that traits can be influenced by the environment.	
35	DCI	LS3.A: Inheritance of Traits  Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment. (3- LS3-2)	Inheritance and Traits Chapter 3, Lesson 3.2 Activity 3 (slides 22–37)
36	DCI	LS3.B: Variation of Traits  • The environment also affects the traits that an organism develops. (3-LS3-2)	Inheritance and Traits Chapter 3, Lesson 3.5 Activity 1 (slides 6–15)
37	SEP	Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.  - Use evidence (e.g., observations, patterns) to support an explanation. (3-LS3-2)	Inheritance and Traits Chapter 2, Lesson 2.6 Activity 3 (slides 27–34) including "Assessment Guide" (found in lesson Digital Resources)
38	ccc	Cause and Effect Cause and effect relationships are routinely identified and used	
Piologia	nal Evolution: Unity s	to explain change. (3-LS3-2)	Activity 1 (slides 2–11)
Biologic	cal Evolution: Unity a	3-LS4-1. Students who demonstrate understanding can:	
39	PE	Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.	
40	DCI	LS4.A: Evidence of Common Ancestry and Diversity  Some kinds of plants and animals that once lived on Earth are no longer found anywhere. (Note: Moved from K–2) (3-LS4-1)	Environments and Survival Chapter 2, Lesson 2.3 Activity 1 (slides 6–16)
41	DCI	LS4.A: Evidence of Common Ancestry and Diversity • Fossils provide evidence about the types of organisms that lived long ago and also about the nature of their environments. (3-LS4-1)	Environments and Survival Chapter 2, Lesson 2.2 Activity 3 (slides 31–34), including Teacher Support Note, "Assessment. Assessment. Opportunities: Assessing Student Understanding of Fossils and Extinction" linked to on slide 25

		Analyzing and Interpreting Data	Weather and Climate			
			Chapter 3, Lesson 3.2			
40	SEP	to introducing quantitative approaches to collecting data and	Activity 2 (slides 16–23)			
42	SEP	conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.				
		Analyze and interpret data to make sense of phenomena using				
		logical reasoning. (3-LS4-1)				
		Scale, Proportion, and Quantity	Environments and Survival			
43	ccc		Chapter 3, Lesson 3.3			
		periods. (3-LS4-1)	Activity 1 (slides 2-15)			
		Scientific Knowledge Assumes an Order and Consistency in	Weather and Climate			
		Natural Systems	Chapter 1, Lesson 1.4			
		Science assumes consistent patterns in natural systems. (3-	Activity 2 (slides 11–19),			
44	CONN	LS4-1)	including Teacher Support Note, "Rationale,			
	CONN		Pedagogical Goals:			
			Understanding the Nature			
			of Science" linked to on			
			slide 11			
		3-LS4-2. Students who demonstrate understanding can:				
45	PE	Use evidence to construct an explanation for how the variations in characteristics among individuals of the same				
43		species may provide advantages in surviving, finding mates,				
		and reproducing.				
		LS4.B: Natural Selection	Environments and Survival			
46	DCI	Sometimes the differences in characteristics between	Chapter 1, Lesson 1.4			
"	-5.	individuals of the same species provide advantages in surviving,	Activity 3 (slides 20-27)			
	-	finding mates, and reproducing. (3-LS4-2)	1.1. "			
		Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in 3–5 builds	Inheritance and Traits Chapter 2. Lesson 2.6			
		on K–2 experiences and progresses to the use of evidence in	Activity 3 (slides 25–34)			
47	SEP	constructing explanations that specify variables that describe and	Additity o ( <u>shado 20 04</u> )			
47	SEP	predict phenomena and in designing multiple solutions to design				
		problems.				
		Use evidence (e.g., observations, patterns) to construct an explanation. (3-LS4-2)				
		Cause and Effect	Inheritance and Traits			
48	ccc	Cause and effect relationships are routinely identified and used				
"		to explain change. (3-LS4-2)	Activity 3 (slides 24-29)			
		3-LS4-3. Students who demonstrate understanding can:		·		
49	PE	Construct an argument with evidence that in a particular				
"	. –	habitat some organisms can survive well, some survive less				
-		well, and some cannot survive at all.	Francisco et a sed Ouri			
		LS4.C: Adaptation • For any particular environment, some kinds of organisms	Environments and Survival Chapter 1, Lesson 1.2			
50	DCI	survive well, some survive less well, and some cannot survive at	Activity 3 (slides 32–44)			
		all. (3-LS4-3)				
		Engaging in Argument from Evidence	Weather and Climate			
		Engaging in argument from evidence in 3–5 builds on K–2	Chapter 2, Lesson 2.5			
51	SEP	experiences and progresses to critiquing the scientific	Activity 3 (slides 21–34),			
		explanations or solutions proposed by peers by citing relevant evidence about the natural and designed worlds.	including <u>"Assessment</u> Guide" (found in lesson			
		Construct an argument with evidence. (3-LS4-3)	Digital Resources)			
	1	Cause and Effect	Balancing Forces			
			Chapter 3, Lesson 3.4			
		to explain change. (3-LS4-3)	"Assessment Guide:			
52	ccc		Reviewing Students'			
			Chapter 3 Explanations About Why the Train			
			Falls" (found in lesson			
			Digital Resources)			
		3-LS4-4. Students who demonstrate understanding can:				
53	PE	Make a claim about the merit of a solution to a problem				
33	'-	caused when the environment changes and the types of				
		plants and animals that live there may change.				

54	DCI	LS2.C: Ecosystem Dynamics, Functioning, and Resilience  • When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. (secondary to 3-LS4-4)	Environments and Survival Chapter 3, Lesson 3.2 Activity 3 (slides 25–31)
55	DCI	LS4.D: Biodiversity and Humans Populations live in a variety of habitats, and change in those habitats affects the organisms living there. (3-LS4-4)	Environments and Survival Chapter 3, Lesson 3.1 Activity 3 (slides 30–39)
56	SEP	Engaging in Argument from Evidence Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed worlds.  • Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem. (3-LS4-4)	Environments and Survival Chapter 4, Lesson 4.5 Activity 1 (slides 9–17)
57	ccc	Systems and System Models     A system can be described in terms of its components and their interactions. (3-LS4-4)	Environments and Survival Chapter 1, Lesson 1.2 Activity 3 Teacher Support Notes, "Background. Crosscutting Concept: What is Meant by. Systems and System Models?" and "Background. Crosscutting Concept: Systems and System Models Across This Unit" linked to on slide 32
58	CONN	Interdependence of Science, Engineering, and Technology  • Knowledge of relevant scientific concepts and research findings is important in engineering. (3-LS4-4)	Environments and Survival Chapter 4, Lesson 4.4 Activity 1 (slides 2–7)
Farth's	Systems	3 3 4 7 4 3 4 3 7 4 3 7	
59	PE	3-ESS2-1. Students who demonstrate understanding can: Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.	
60	DCI	Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next. (3-ESS2-1)	Weather and Climate Chapter 3, Lesson 3.2 Activity 3 (slides 24–32)
61	SEP	Analyzing and Interpreting Data Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.  Represent data in tables and various graphical displays (bar graphs and pictographs) to reveal patterns that indicate relationships. (3-ESS2-1)	Weather and Climate Chapter 2, Lesson 2.1 Activity 2 (slides 14–22)
62	ccc	Patterns Patterns of change can be used to make predictions. (3-ESS2-1)	Weather and Climate Chapter 3, Lesson 3.3 Activity 2 (slides 13–22)
63	PE	3-ESS2-2. Students who demonstrate understanding can: Obtain and combine information to describe climates in different regions of the world.	
64	DCI	ESS2.D: Weather and Climate     Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years. (3-ESS2-2)	Weather and Climate Chapter 3, Lesson 3.3 Activity 1 (slides 2–12)

65	SEP	Obtaining, Evaluating, and Communicating Information Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.  Obtain and combine information from books and other reliable media to explain phenomena. (3-ESS2-2)	Weather and Climate Chapter 3, Lesson 3.5 Activity 1 (slides 5–16)
66	ccc	Patterns Patterns of change can be used to make predictions. (3-ESS2-2)	Weather and Climate Chapter 3, Lesson 3.3 Activity 3 (slide 38)
Earth an	nd Human Activity		
67	PE	3-ESS3-1. Students who demonstrate understanding can: Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.	
68	DCI	ESS3.B: Natural Hazards  • A variety of natural hazards result from natural processes.  Humans cannot eliminate natural hazards but can take steps to reduce their impacts. (3-ESS3-1)	Weather and Climate Chapter 4, Lesson 4.2 Activity 2 (slides 10–21)
69	SEP	Engaging in Argument from Evidence Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).  • Make a claim about the merit of a solution to a problem by citing relevant evidence about how it meets the criteria and constraints of the problem. (3-ESS3-1)	Environments and Survival Chapter 4, Lesson 4.2 Activity 2 (slides 16–21)
70	ccc	Cause and Effect     Cause and effect relationships are routinely identified, tested, and used to explain change. (3-ESS3-1)	Balancing Forces Chapter 3, Lesson 3.4 Activity 1 Teacher Support Notes, "Background. Crosscutting Concepts: What is Meant by Cause and Effect?" and "Background. Crosscutting Concepts: Cause and Effect Across the Unit" linked to on slide 2
71	CONN	Influence of Engineering, Technology, and Science on Society and the Natural World  Engineers improve existing technologies or develop new ones to increase their benefits (e.g., better artificial limbs), decrease known risks (e.g., seatbelts in cars), and meet societal demands (e.g., cell phones). (3-ESS3-1)	Environments and Survival Chapter 2, Lesson 2.7 Activity 1 (slides 2–16)
72	CONN	Science is a Human Endeavor  • Science affects everyday life. (3-ESS3-1)	Environments and Survival Chapter 4, Lesson 4.1 Activity 2 Teacher Support Note, "Rationale, Pedagogical Goals: Understanding the Nature of Science" linked to on slide 5
Enginee	ring Design:		
73	PE	3-5-ETS1-1. Students who demonstrate understanding can: Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	
74	DCI	ETS1.A: Defining and Delimiting Engineering Problems  Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account. (3-5-ETS1-1)	Environments and Survival Chapter 4, Lesson 4.5 Activity 2 (slides 18–28)

75	SEP	Asking Questions and Defining Problems Asking questions and defining problems in 3–5 builds on grades K–2 experiences and progresses to specifying qualitative relationships. • Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost. (3-5-ETS1-1)	Environements and Survival Chapter 2, Lesson 2.7 Activity 3 (slides 31–42)
76	ccc	Influence of Science, Engineering, and Technology on Society and the Natural World  People's needs and wants change over time, as do their demands for new and improved technologies. (3-5-ETS1-1)	Environments and Survival Chapter 1, Lesson 1.1 Activity 1Teacher Support Note, "Instructional Suggestion, Nature of Science: Connecting to Engineering, Technology, and Applications of Science" linked to on slide 2
77	PE	3-5-ETS1-2. Students who demonstrate understanding can: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	
78	DCI	ETS1.B: Developing Possible Solutions Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. (3-5-ETS1-2)	Environments and Survival Chapter 4, Lesson 4.2 Activity 1 (slides 3–15)
79	DCI	ETS1.B: Developing Possible Solutions  • At whatever stage, communicating with peers about proposed solutions is an important part of the design process, and share ideas can lead to improved designs. (3-5-ETS1-2)	Environments and Survival Chapter 3, Lesson 4.4 Activity 4 (slides 35–43)
80	SEP	Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in 3–5 builds on K–2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.  Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design problem. (3-5-ETS1-2)	Environments and Survival Chapter 4, Lesson 4.2 Activity 3 (slides 23–28)
81	ccc	Influence of Science, Engineering, and Technology on Society and the Natural World  Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands. (3-5-ETS1-2)	Environments and Survival Chapter 1, Lesson 1.1 Activity 1 (slides 2–13)
82	PE	3-5-ETS1-3. Students who demonstrate understanding can: Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	
83	DCI	ETS1.B: Developing Possible Solutions  Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved. (3-5-ETS1-3)	Weather and Climate Chapter 4, Lesson 4.3 Activity 3 (slides 20–27)
84	DCI	ETS1.C: Optimizing the Design Solution     Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. (3-5-ETS1-3)	Environments and Survival Chapter 4, Lesson 4.3 Activity 3 Teacher Support Note, "Rationale, Engineering Note: Increasing Student Independence with the Design Cycle" linked to on slide 27

85	SEP	Planning and carrying out investigations to answer questions or							
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• NOT (HS-	CCSS for ELA/Literacy and Math in Grade 3 NGSS  • NOTE: The standards noted at the end of each CCSS (such as  (HS-ESS1-1), (HS-ESS1-2), (HS-ESS1-5)) are the occurrences of the  CCSS within the NGSS.										
_	Grade 3 CCSS ELA/Literacy										
86	CCSS ELA/ Literacy	RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. (3-PS2-1), (3-PS2-3), (3-LS2-1), (3-LS3-1), (3-LS3-2), (3-LS4-1), (3-LS4-2), (3-LS4-3), (3-LS4-4), (3-ESS2-2)	Balancing Forces Chapter 2, Lesson 2.3 Activity 3 (slides 16–22)								
87	CCSS ELA/ Literacy	RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea. (3-LS3-1), (3-LS3-2), (3-LS4-1), (3-LS4-2), (3-LS4-3), (3-LS4-4)	Inheritance and Traits Chapter 1, Lesson 1.2 Activity 3 (slides 29–39)								
88	CCSS ELA/ Literacy	RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. (3-PS2-3), (3-LS2-1), (3-LS3-1), (3-LS3-2), (3-LS4-1), (3-LS4-2), (3-LS4-3), (3-LS4-4)	Balancing Forces Chapter 1, Lesson 1.3 Activity 3 (slides 14–22)								
89	CCSS ELA/ Literacy	RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). (3-LS1-1)	Balancing Forces Chapter 3, Lesson 3.2 Activity 1 (slides 2–9)								
90	CCSS ELA/ Literacy	RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence). (3-PS2-3)	Inheritance and Traits Chapter 2, Lesson 2.3 Activity 3 (slides 28–34)								
91	CCSS ELA/ Literacy	RI.3.9 Compare and contrast the most important points and key details presented in two texts on the same topic. (3-ESS2-2)	Environments and Survival Chapter 3, Lesson 3.2 Activity 2 (slides 14–24)								
92	CCSS ELA/ Literacy	W.3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons. (3-LS2-1), (3-LS4-1), (3-LS4-3), 3-LS4-4), (3-ESS3-1)	Weather and Climate Chapter 3, Lesson 3.7 Activity 3 (slides 27–35)								
93	CCSS ELA/ Literacy	W.3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. (3-LS3-1), (3-LS3-2), (3-LS4-1), (3-LS4-2), (3-LS4-3), (3-LS4-4)	Inheritance and Traits Chapter 1, Lesson 1.7 Activity 3 (slides 20–33)								
94	CCSS ELA/ Literacy	W.3.7 Conduct short research projects that build knowledge about a topic. (3-PS2-1), (3-PS2-2), (3-ESS3-1)	Inheritance and Traits Chapter 2, Lesson 2.2 Activity 2 (slides 10–22)								
95	CCSS ELA/ Literacy	W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories. (3-PS2-1), (3-PS2-2), (3-LS4-1)	Environments and Survival Chapter 1, Lesson 1.3 Activity 2 (slides 16–20)								
96	CCSS ELA/ Literacy	SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail. (3-PS2-3)	Inheritance and Traits Chapter 1, Lesson 1.3 Activity 3 (slides 33–43)								
97	CCSS ELA/ Literacy	SL.3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace. (3-LS3-1), (3-LS3-2), (3-LS4-2), (3-LS4-3), (3-LS4-4)	Environments and Survival Chapter 2, Lesson 2.2 Activity 3 (slides 25–30)								

98	CCSS ELA/ Literacy	SL.3.5 Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.  (3-LS1-1)	Chapter 2, Lesson 2.4			
Grade 3	CCSS Math					
99	CCSS Math	MP.2 Reason abstractly and quantitatively. (3-PS2-1), (3-LS3-1), (3-LS3-2), (3-LS4-1), (3-LS4-2), (3-LS4-3), (3-LS4-4), (3-ESS2-1), (3-ESS2-2), (3-ESS3-1), (3-5-ETS1-1), (3-5-ETS1-2), (3-5-ETS1-3)	Environments and Survival Chapter 1, Lesson 1.1 Activity 2 (slides 19–29)			
100	CCSS Math	MP.4 Model with mathematics. (3-LS1-1), (3-LS2-1), (3-LS3-2), (3-LS4-1), (3-LS4-2), (3-LS4-3), (3-L	Environments and Survival Chapter 2, Lesson 2.4 Activity 2 (slides 9–21)			
101	CCSS Math	MP.5 Use appropriate tools strategically. (3-PS2-1), (3-LS4-1), (3-ESS2-1), (3-5-ETS1-1), (3-5-ETS1-2), (3-5-ETS1-3)	Weather and Climate Chapter 1, Lesson 1.2 Activity 2 (slides 15–25)			
102	CCSS Math	3.NBT Number and Operations in Base Ten (3-LS2-1), (3-LS1-1)	Weather and Climate Chapter 2, Lesson 2.2 Activity 1 (slides 2–12)			
103	CCSS Math	3.NF Number and Operations—Fractions (3-LS1-1)	Environments and Survival Chapter 1, Lesson 1.4 Activity 3 Teacher Support Note, "Instructional Suggestion, Going Further: Mathematical Thinking" linked to on slide 20			
104	CCSS Math	3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (I). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. (3-PS2-1), (3-ESS2-1)	Environments and Survival Chapter 2, Lesson 2.1 Activity 3 (slides 17–29)			
105	CCSS Math		Weather and Climate Chapter 2, Lesson 2.3 Activity 1 (slides 2–23)			
106	CCSS Math	<b>3.MD.B.4</b> Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. (3-LS3-1), (3-LS3-2), (3-LS4-1)	Weather and Climate Chapter 2, Lesson 2.1 Activity 3 (slides 23–40)			

Section	2: Science Content Review							
Publis Edition with whose cite For this concis  The m	HER/PROVIDER INSTRUCTIONS: her/provider citations for this section will refer to the Teache, and/or Student Workbook should correspond with titles an hat is cited on the Form F. If the review set is an online plated on the Form F and submitted for review by the review teas section, the publisher/provider will enter one citation per ce and should allow the reviewer to easily determine that all Column C: Enter one citation in Column C from either the Each citation should direct the reviewer to a specific locatic atterial will be scored for alignment with each criterion as "NOTE: You may not use a citation more than once acre	nd ISBNs entered on the Form form only, then that is what si ms.  priterion (Column C). Each cit components of the criterion has teacher Edition (teacher-fain in the materials that best materials that best materials where the each of the criterion in the materials that best materials that best materials that best materials where the criterially leets expectations", "Partially	n F cover p nould be ci ation shou ave been i cing core eets the ci meets exp	ladge, whether in print, online, or bot ted on the Form F and submitted for a different the reviewer to a specific lemet. Each citation should cover no material) OR Student Edition/Studiterion.	h. The review set submitt or review by the review tea ocation in the materials th more than 3 pages within dent Workbook (studen	ted to the sum tems. If the reveat best meets the materials. t-facing core	nmer review institute should also view set is in print only, then that the criterion. The citations shou material).	correspond is what should
Criteria #	Grades K-12 Science Content Criteria	Publisher/Provider Citation	Score	If Scored D: Reviewer's Evidence for Publisher Citation	Reviewer Citation	Score	Required: Reviewer's Evidence	Comments, other citations, notes
Instruct	AREA 1: PHENOMENA-/PROBLEM-BASED AND THREE ional materials are centered around high quality phenomensional approach to make sense of the phenomena	mena and/or problems and						
1	Materials clearly integrate and describe the three- dimensional NM STEM Ready! Standards via appropriate grade-band, interdisciplinary progressions that center around the phenomena, utilizing aligned SEPs, CCCs, DCIs and the common core math and ELA standards' connections.	Weather and Climate Unit Overview (pg. 2–3 in Printable Teacher Guide)  Planning for the Unit, Standards at a Glance (pg. 27 in Printable Teacher Guide)						
2	Materials consistently support meaningful student sensemaking with the three dimensions, including discourse, that is appropriate to grade band progressions, instruction and assessment.	Inheritance and Traits Planning for the Unit, Unit Map (pg. 4–5 in Printable Unit Guide)						
3	Natural and designed phenomena and/or problems that are meaningful and apparent to students drive coherent lessons and activities in all three dimensions.	Balancing Forces Printable Resrouces, Coherence Flowchart						
Assessi	AREA 2: THREE-DIMENSIONAL ASSESSMENT ments provide tools, guidance and support for teachers tudent progress toward the learning goals of the 3 dime	to collect, interpret and actensional standards.	t on data					
4	Materials engage students in meaningful tasks as well as multiple assessment types and opportunities, across all dimensions, in order to make sense of phenomena and/or design solutions to problems.	Balancing Forces Teacher References, Assessment System, Entry-Level and Summative Assessments & Monitoring Progress (pg. 560–562 in Printable Teacher Guide)						
5	Materials include opportunities for students to obtain feedback from teachers and peers as well as opportunities for student self-reflection.	Environments and Survival Chapter 4, Lesson 4.2 Activity 1 Teacher Support Notes linked to on slide 2 Activity 3 Teacher Support Notes linked to on slide 22						
	AREA 3: TEACHER SUPPORTS s include opportunities for teachers to effectively plan	and utilize materials.						

wateriai	waterials include opportunities for teachers to effectively plan and utilize materials.							
	Materials provide a comprehensive list of supplies and	Weather and Climate						
	teacher guidance needed to support instructional	Chapter 1, Lesson 1.1						
6	activities in a safe manner.	Materials & Preparation						
		(pg. 4–6 in Printable						
		Lesson Guide)						

7	Materials provide teacher guidance for the use of embedded and meaningful technology to support and enhance student learning, when applicable.	Environments and Survival Teacher References, Apps in this Unit (pg. 613–616 in Printable Teacher Guide)				
8	Materials and assessments include teacher guidance for students at, approaching, or exceeding grade level expectations.	Environments and Survival Chapter 2, Lesson 2.6 Differentiation (pg. 6–8 in Printable Lesson Guide) Slide 32, Critical Juncture Assessment 2 in Teacher Note				
9	Materials provide teacher guidance for interpreting student evidence of learning, monitoring student progress and providing feedback to guide student learning and to modify instruction.	Balancing Forces Chapter 2, Lesson 2.5 Slide 10, On-the-Fly Assessment 8 in Teacher Note				
	AREA 4: STUDENT CENTERED INSTRUCTION s are designed for each student's regular and active pa	rticipation in science conten	t.			
10	Materials provide opportunities to engage students' curiosity and participation in a way that pulls from their prior knowledge and connects their learning to relevant phenomena and problems.	Inheritance and Traits Chapter 1, Lesson 1.1 "Eliciting and Leveraging Students' Prior Knowledge, Personal Experiences, and Cultural Backgrounds" (found in lesson Digital Resources)  Activity 2 (slides 14–16)				
11	The flow of lessons from one unit to the next is coherent, meaningful, direct, and apparent to students.	Inheritance and Traits Chapter 4, Lesson 4.1 Activity 1 (slides 2–7)				
	AREA 5: EQUITY s are designed for all learners.					
12	Materials provide extensions and/or opportunities for all students to engage in learning grade-level/band science and engineering in greater depth.	Weather and Climate Chapter 2, Lesson 2.2 Differentiation (pg. 5–7 in Printable Lesson Guide)				
13	Materials and assessments are designed in an accessible manner and include multiple ways for all students to build and reflect on science knowledge; multiple ways for all students to access content (Universal Design for Learning); and multiple opportunities for student self-reflection.	Amplify Science Program Guide, Access and equity, <u>Universal</u> <u>Design for Learning</u>				

## Section 2: All Content Review

### PUBLISHER/PROVIDER INSTRUCTIONS:

- The All Content tab will be completed solely by the reviewers. They will score each criterion and provide evidence for their score from the material based on their overall review of the material. You will not provide any citations for this tab.
  The material will be scored for alignment with each criterion as "Meets expectations", "Partially meets expectations", or "Does not meet expectations".

	Does not meet expectations.							
Criteria #	All Content Criteria Review	Score	Required: Reviewer's Evidence from Material	Comments, citations, notes				
Instructi	rocus AREA 1: Coherence Instructional materials are coherent and consistent with the New Mexico Content Standards Instructional materials are coherent and consistent with the New Mexico Content Standards Instructional materials are coherent and consistent with the New Mexico Content Standards							
1	Instructional materials address the full content contained in the standards for all students by grade level.							
2	Instructional materials support students to show mastery of each standard.							
3	Instructional materials require students to engage at a level of maturity appropriate to the grade level under review.							
4	Instructional materials are coherent, making meaningful connections for students by linking the standards within a lesson and unit.							
	AREA 2: WELL-DESIGNED LESSONS onal materials take into account effective lesson struct	ure and pa	cing.					
5	The Teacher Edition presents learning progressions to provide an overview of the scope and sequence of skills and concepts. The design of the assignments shows a purposeful sequencing of teaching and learning expectations.							
6	Within each lesson of the instructional materials, there are clear, measurable, standards-aligned content objectives.							
7	Within each lesson of the instructional materials, there are clear, measurable language objectives tied directly to the content objectives.							
8	Instructional materials provide focused resources to support students' acquisition of both general academic vocabulary and content-specific vocabulary.							
9	The visual design of the instructional materials (whether in print or digital) maintains a consistent layout that supports student engagement with the subject.							

10	Instructional materials incorporate features that aid students and teachers in making meaning of the text.			
11	Instructional materials provide students with ongoing review and practice for the purpose of retaining previously acquired knowledge.			
Instructi	AREA 3: RESOURCES FOR PLANNING onal materials provide teacher resources to support pleerstanding of the New Mexico Content Standards.	anning, lea	rning,	
12	Instructional materials provide a list of lessons in the Teacher Edition (in print or clearly distinguished/ accessible as a teacher's edition in digital materials), cross-referencing the standards addressed and providing an estimated instructional time for each lesson, chapter, and unit.			
13	Instructional materials support teachers with instructional strategies to help guide students' academic development.			
14	Instructional materials include a teacher edition/ teacher- facing material with useful annotations and suggestions on how to present the content in the student edition/student-facing material and in the supporting material.			
15	Instructional materials integrate opportunities for digital learning, including interactive digital components.			
Instructi	AREA 4: ASSESSMENT conal materials offer teachers a variety of assessment rect ongoing data about student progress related to the st		nd tools	
16	Instructional materials provide a variety of assessments that measure student progress in all strands of the standards for the content under review.  (Adopted New Mexico Content Standards for 2024: NM STEM Ready Science Standards)			
17	Instructional materials provide multiple formative and summative assessments, clearly defining which standards are being assessed through content and language objectives.			
18	Instructional materials provide scoring guides for assessments that are aligned with the standards they address, and that offer teachers guidance in interpreting student performance and suggestions for further instruction, differentiation, remediation and/or acceleration.			

				T
19	Instructional materials provide appropriate assessment alternatives for English Learners, Culturally and Linguistically Diverse students, advanced students, and special needs students.			
20	Instructional materials include opportunities to assess student understanding and knowledge of the standards using technology.			
	AREA 5: EXTENSIVE SUPPORT ional materials give all students extensive opportunities	and suppo	ort to explore key concepts.	
21	Instructional materials can be customized or adapted to meet the needs of different student populations.			
22	Instructional materials provide differentiated strategies and/or activities to meet the needs of students working below proficiency and those of advanced learners.			
23	Instructional materials provide appropriate linguistic support for English Learners and Culturally and Linguistically Diverse students, and accommodations and modifications for other special populations that will support their regular and active participation in learning content.			
24	Instructional materials provide strategies and resources for teachers to inform and engage parents, family members, and caregivers of all learners about the program and provide suggestions for how they can help support student progress and achievement.			
25	Instructional materials include opportunities for all students that encourage and support critical and creative thinking, inquiry, and complex problem-solving skills.			
	AREA 6: CULTURAL AND LINGUISTIC PERSPECTIVES ional materials represent a variety of cultural and linguistical and linguistica	stic perspe	ctives.	
26	Instructional materials inform culturally and linguistically responsive pedagogy by affirming students' backgrounds in the materials themselves and in the student discussions.			
27	Instructional materials provide a collection of images, stories, and information, representing a broad range of demographic groups, and do not make generalizations or reinforce stereotypes.			

28	Instructional materials provide context, illustrations, and activities for students to make interdisciplinary connections and/or connections to real-life experiences and diverse cultural and linguistic backgrounds.		
	AREA 7: INCLUSION OF CULTURALLY AND LINGUISTIC ional materials highlight diversity in culture and langua		
29	Instructional materials include tools and resources to relate the content area appropriately to diversity in culture and language.		
30	Instructional materials include tools and resources that demonstrate multiple perspectives in a specific concept.		
31	Instructional materials engage students in critical reflection about their own lives and societies, including cultures past and present in New Mexico.		
32	Instructional materials address multiple ethnic descriptions, interpretations, or perspectives of events and experiences.		