# PLTW Gateway Standards Connection Science of Technology



#### **Connections to Standards in PLTW Gateway**

PLTW curriculum is designed to empower students to thrive in an evolving world. As a part of the design process when developing and updating our curriculum, we focus on connections to a variety of standards. PLTW Science of Technology connects to standards in the following:

#### **Table of Contents**

Common Core College and Career Readiness Anchor Standards	Page	2
Common Core State Standards for English Language Arts 6–8 Literacy Standards for History/Social Studies, Science, and Technical Subjects	Page	6
Common Core State Standards for English Language Arts 6th Grade	Page	10
Common Core State Standards for English Language Arts 7th Grade	Page	17
Common Core State Standards for English Language Arts 8th Grade	Page	22
International Society for Technology in Education	Page	27
Standards for Technological and Engineering Literacy	Page	29
K12 Computer Science Framework	Page	32
Next Generation Science Standards	Page	33

#### Reading Key Ideas and Details CCSS.ELA-LITERACY.CCRA.R.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. ✓ A.3 ✓ A.4 ✓ A.5 **✓** B.1 **☑** B.2 □ B.3 □ A.1 ✓ A.2 □ 2.2 **✓** 1.1 **✓** 1.2 **✓** 1.3 □ 2.1 □ 2.2a □ 2.3a nd 2.3b $\square$ 3.1 □ 3.2 □ 3.3 **✓** 3.4 $\square$ 3.5 □ 3.6 3.7 CCSS.ELA-LITERACY.CCRA.R.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas. □ A.1 □ A.2 □ A.3 **✓** B.1 □ A.4 □ A.5 **✓** B.2 □ B.3 □ 1.1 □ 1.2 □ 1.3 □ 2.1 □ 2.2 □ 2.2a □ 2.3a nd 2.3b □ 3.1 □ 3.2 $\square$ 3.3 $\square$ 3.4 □ 3.5 □ 3.6 3.7 CCSS.ELA-LITERACY.CCRA.R.10 Read and comprehend complex literary and informational texts independently and proficiently. **☑** B.1 □ A.1 ✓ A.2 ✓ A.3 ✓ A.4 ✓ A.5 **✓** B.2 **✓** B.3 **✓** 1.1 **✓** 1.2 **✓** 1.3 **✓** 2.1 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 3.1 **✓** 3.2 **✓** 3.3 **✓** 3.4 **✓** 3.5 **✓** 3.6 **✓** 3.7 Writing **Text Types and Purposes** CCSS.ELA-LITERACY.CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content. **✓** A.3 □ A.1 ✓ A.2 ✓ A.4 ✓ A.5 **☑** B.1 **✓** B.2 **☑** B.3 **✓** 2.1 **✓** 1.2 **✓** 2.2 **✓** 1.1 **✓** 1.3 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 3.1 **✓** 3.2 **✓** 3.3 **✓** 3.4 **✓** 3.5 **✓** 3.6 **✓** 3.7 CCSS.ELA-LITERACY.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. □ A.1 ✓ A.2 **✓** A.3 **☑** B.1 ✓ A.4 ✓ A.5 **✓** B.2 **✓** B.3

**✓** 1.1

**✓** 3.1

**✓** 1.2

**✓** 3.2

**✓** 1.3

**✓** 3.3

**✓** 2.1

**✓** 3.4

**✓** 2.2

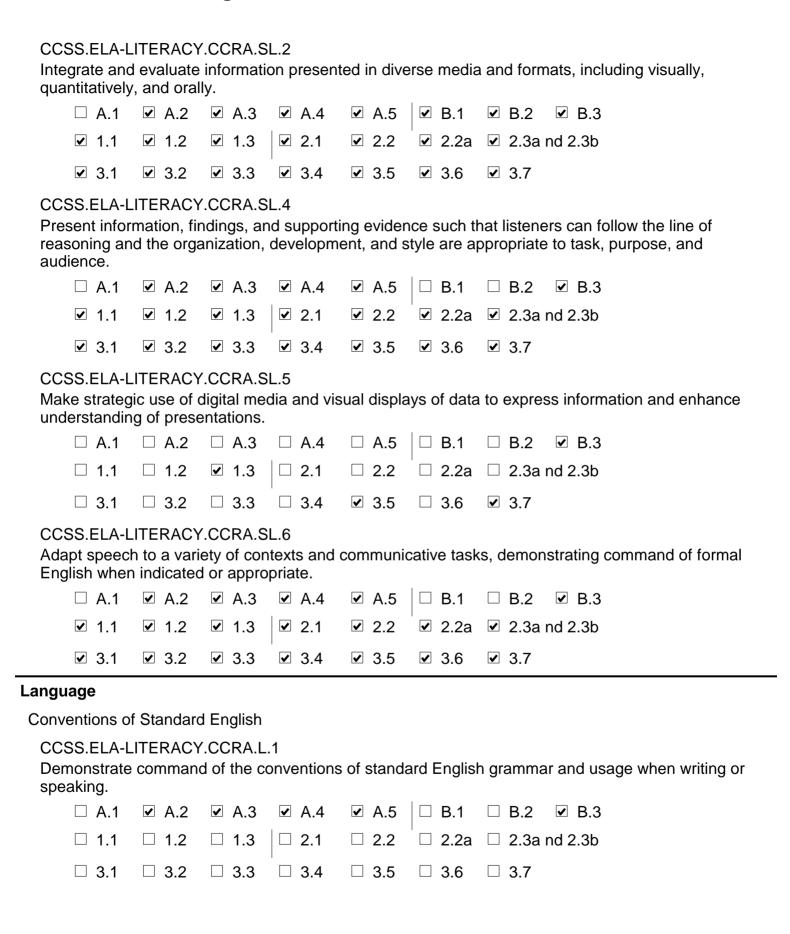
**✓** 3.5

**✓** 3.6

✓ 2.2a ✓ 2.3a nd 2.3b

**✓** 3.7

•	_		_	by planni	ng, revisir	ng, editing, rewriting, or trying a new	
approach. □ A.1	<b>✓</b> A.2	<b>✓</b> A.3	<b>✓</b> A.4	<b>∠</b> A.5	□ B.1	□ B.2 <b>☑</b> B.3	
			I.				
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	⊔ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
CCSS.ELA-l Conduct sho demonstratir	rt as well	as more si	ustained re the subjec	•	•	ased on focused questions, on.	
□ A.1	✓ A.2	✓ A.3	✓ A.4	<b>✓</b> A.5	□ B.1	□ B.2 □ B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
accuracy of 6  A.1  1.1  3.1  CCSS.ELA-L	ant informeach source A.2	ation from ce, and into A.3  1.3  3.3  CCCRA.W	multiple pegrate the A.4 2.1 3.4	e informati  ☑ A.5  ☐ 2.2  ☐ 3.5	on while a	rces, assess the credibility and avoiding plagiarism.   B.2 B.3  2.3a nd 2.3b  3.7  analysis, reflection, and research.  B.2 B.3  2.3a nd 2.3b  3.7	
Speaking and	Listening	l					
Comprehension	n and Co	llaboration					
	and partici	pate effec	tively in a			ions and collaborations with diverse learly and persuasively.	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3	
<b>✓</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	✓ 2.2a	✓ 2.3a nd 2.3b	
<b>☑</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	<b>✓</b> 3.4	<b>✓</b> 3.5	<b>✓</b> 3.6	<b>☑</b> 3.7	



#### CCSS.ELA-LITERACY.CCRA.L.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. ✓ A.3 ☐ A.1 ✓ A.2 ✓ A.4 ✓ A.5 □ B.1 □ B.2 **✓** B.3 □ 1.1 □ 1.2 □ 1.3 $\square$ 2.1 $\square$ 2.2 □ 2.2a □ 2.3a nd 2.3b □ 3.1 $\square$ 3.2 □ 3.4 □ 3.5 $\square$ 3.7 $\square$ 3.3 □ 3.6 CCSS.FLA-LITERACY.CCRA.L.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate. $\square$ A.1 $\square$ A.2 □ A.3 □ A.4 □ A.5 ✓ B.1 **✓** B.2 □ B 3 **✓** 1.1 **✓** 1.2 **✓** 1.3 **✓** 2.1 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 3.1 **✓** 3.2 **✓** 3.3 **✓** 3.4 **✓** 3.5 **✓** 3.6 **✓** 3.7 CCSS.ELA-LITERACY.CCRA.L.5 Demonstrate understanding of word relationships and nuances in word meanings. □ A.5 □ A.3 □ A.4 **☑** B.1 □ A.1 □ A.2 **✓** B.2 □ B.3 **✓** 1.1 **✓** 1.2 **✓** 1.3 **✓** 2.1 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 3.2 **✓** 3.1 **✓** 3.3 **✓** 3.4 **✓** 3.5 **☑** 3.6 **☑** 3.7 CCSS.ELA-LITERACY.CCRA.L.6

Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

□ A.1	✓ A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>☑</b> B.2 <b>☑</b> B.3
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	✓ 2.2a	✓ 2.3a nd 2.3b
				<b>✓</b> 3.5		

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Science of Technology Standards Connection Page 5 of 42

Reading Scien	ce/Techr	nical							
Key Ideas and	Details								
CCSS.ELA-L	.ITERAC`	Y.RST.6-8	3.1						
Cite specific	textual ev	vidence to	support a	nalysis of	science a	nd techni	ical texts.		
□ A.1	□ A.2	✓ A.3	□ A.4	<b>✓</b> A.5	□ B.1	□ B.2	□ B.3		
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			
CCSS.ELA-L	.ITERAC`	Y.RST.6-8	3.2						
Determine th from prior kn				s of a text	; provide a	an accura	ate summai	ry of the text distin	ct
□ A.1	✓ A.2	✓ A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>☑</b> B.2	□ B.3		
<b>☑</b> 1.1	✓ 1.2	□ 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	✓ 2.2a	<b>✓</b> 2.3a	nd 2.3b		
□ 3.1	□ 3.2	<b>✓</b> 3.3	✓ 3.4	□ 3.5	□ 3.6	□ 3.7			
CCSS.ELA-L Follow precis performing to	ely a mul	tistep pro	_	en carryin	ig out expe	eriments,	taking me	asurements, or	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3		
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	□ 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	<b>✓</b> 2.3a	nd 2.3b		
□ 3.1	□ 3.2	<b>✓</b> 3.3	<b>☑</b> 3.4	<b>✓</b> 3.5	□ 3.6	□ 3.7			
Craft and Struc	cture								
CCSS.ELA-L	_				- 4b		: <b>::</b> :::::::::::::::::::::::::::::::::		
are used in a				•		•		and phrases as the Ind topics.	Эу
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3		
<b>☑</b> 1.1	<b>☑</b> 1.2	<b>☑</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	✓ 2.2a	<b>✓</b> 2.3a	nd 2.3b		
<b>☑</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	☑ 3.4	<b>✓</b> 3.5	<b>✓</b> 3.6	<b>✓</b> 3.7			
Integration of A	Knowledg	e and Ide	as						
CCSS.ELA-L Distinguish a	_		_	ent based	on resear	ch findin	as. and spe	eculation in a text.	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	<b>☑</b> B.1	□ B.2	□ B.3		
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a		nd 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			

Range of Reading and Level of Text Complexity

CCSS.ELA-LITERACY.RST.6-8.10

By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently.

<b>✓</b> A.1	<b>✓</b> A.2	<b>✓</b> A.3	✓ A.4	✓ A.5	<b>☑</b> B.1	<b>☑</b> B.2 <b>☑</b> B.3
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	✓ 2.3a nd 2.3b
□ 3.1	□ 3.2	<b>✓</b> 3.3	✓ 3.4	<b>✓</b> 3.5	<b>✓</b> 3.6	□ 3.7

#### Writing in Hisotry/social Studies, Science, and Technical Subjects

Text Types and Purposes

CCSS.ELA-LITERACY.WHST.6-8.2

Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3
□ 1.1	□ 1.2	<b>☑</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a nd 2.3b
			•	□ 35		

CCSS.ELA-LITERACY.WHST.6-8.2.a

Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.

□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	$\ \square$ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7

CCSS.ELA-LITERACY.WHST.6-8.2.b

Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.

□ A.1	✓ A.2	<b>✓</b> A.3	✓ A.4	✓ A.5	<b>☑</b> B.1	□ B.2 □ B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	

CCSS.ELA-LITERACY.WHST.6-8.2.d

Use precise language and domain-specific vocabulary to inform about or explain the topic.

□ A.1	✓ A.2	✓ A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>☑</b> B.2 <b>☑</b> B.3
<b>☑</b> 1.1	✓ 1.2	<b>☑</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	✓ 2.2a	✓ 2.3a nd 2.3b
<b>.</b> 2 1	<b>4</b> 3 2	<b>√</b> 33	· • 3 1	<b>J</b> 35	<b>J</b> 36	<b>J</b> 37

Production and Distribution of Writing	
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#### CCSS.ELA-LITERACY.WHST.6-8.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

□ A.1	✓ A.2	<b>✓</b> A.3	✓ A.4	✓ A.5	<b>☑</b> B.1	<b>☑</b> B.2 <b>☑</b> E	3.3
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	✓ 2.3a nd 2.3	3b
<b>✓</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	✓ 3.4	<b>✓</b> 3.5	<b>✓</b> 3.6	<b>✓</b> 3.7	

#### CCSS.ELA-LITERACY.WHST.6-8.5

With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.

□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a nd 2.3b
			·	□ 3.5		

#### Research to Build and Present Knowledge

#### CCSS.ELA-LITERACY.WHST.6-8.7

Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

□ A.1	✓ A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	□ B.1	□ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	$\ \square$ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7

#### CCSS.ELA-LITERACY.WHST.6-8.8

Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

□ A.1	<b>✓</b> A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	□ B.1	□ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7

#### CCSS.ELA-LITERACY.WHST.6-8.9

Draw evidence from informational texts to support analysis, reflection, and research.

□ A.1	✓ A.2	✓ A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>☑</b> B.2 □ B.3
<b>v</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	✓ 2.3a nd 2.3b
□ 3.1	□ 3.2	<b>☑</b> 3.3	<b>✓</b> 3.4	□ 3.5	<b>✓</b> 3.6	□ 3.7

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#### **Reading Literature** Key Ideas and Details CCSS.ELA-LITERACY.RL.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. □ A.1 ✓ A.5 □ B.1 ✓ A.2 ✓ A.3 ✓ A.4 □ B.2 □ B.3 □ 2.1 □ 2.2 □ 1.1 □ 1.2 □ 1.3 □ 2.2a □ 2.3a nd 2.3b $\square$ 3.1 □ 3.2 □ 3.3 □ 3.4 □ 3.5 □ 3.6 □ 3.7 **Reading Informational** Key Ideas and Details CCSS.ELA-LITERACY.RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. □ A.1 ✓ A.3 ✓ A.2 ✓ A.4 ✓ A.5 □ B.1 ☐ B.2 □ B.3 □ 1.1 □ 1.2 □ 1.3 □ 2.1 □ 2.2 □ 2.2a □ 2.3a nd 2.3b □ 3.1 $\square$ 3.2 $\square$ 3.5 $\square$ 3.3 $\square$ 3.4 $\square$ 3.6 $\square$ 3.7 CCSS.ELA-LITERACY.RI.6.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. □ A.1 □ A.2 □ A.3 □ A.4 □ A.5 **✓** B.1 **✓** B.2 □ B.3 **✓** 1.1 **✓** 1.2 **✓** 1.3 **✓** 2.1 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b □ 3.1 $\square$ 3.2 **✓** 3.3 **✓** 3.4 ✓ 3.5 □ 3.6 □ 3.7 Craft and Structure CCSS.ELA-LITERACY.RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings. □ A.1 ✓ A.2 ✓ A.3 ✓ A.4 ✓ A.5 **☑** B.1 **✓** B.2 □ B.3 **✓** 1.1 **✓** 1.2 **✓** 1.3 **✓** 2.1 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 3.3 **✓** 3.1 **✓** 3.2 **✓** 3.4 **✓** 3.5 **✓** 3.6 **✓** 3.7

Integration of I	Knowledg	e and Idea	as			
CCSS.ELA-L Integrate info in words to d	ormation p	resented				e.g., visually, quantitatively) as well as ue.
□ A.1	✓ A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>☑</b> B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
Writing						
Text Types an	d Purpose	es				
CCSS.ELA-L	LITERACY	7.W.6.1.c				
Use words, p	ohrases, a	nd clause	s to clarify	the relation	onships ar	mong claim(s) and reasons.
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	<b>☑</b> B.1	<b>☑</b> B.2 □ B.3
<b>✓</b> 1.1	<b>✓</b> 1.2	<b>☑</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	✓ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	<b>✓</b> 3.5	□ 3.6	<b>☑</b> 3.7
CCSS.ELA-L Write informathrough the s	ative/expla	anatory te				nvey ideas, concepts, and information ontent.
□ A.1	✓ A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	☑ B.2 □ B.3
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	✓ 2.3a nd 2.3b
<b>☑</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	<b>☑</b> 3.4	<b>☑</b> 3.5	<b>≥</b> 3.6	<b>☑</b> 3.7
CCSS.ELA-L Develop the and example	topic with		acts, defin	iitions, cor	ncrete deta	ails, quotations, or other information
□ A.1	✓ A.2	✓ A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	☑ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
CCSS.ELA-L Use precise			ain-specific	c vocabula	ary to infor	m about or explain the topic.
□ A.1	✓ A.2	✓ A.3	✓ A.4	✓ A.5	<b>☑</b> B.1	☑ B.2 ☑ B.3
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>☑</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	✓ 2.3a nd 2.3b
<b>☑</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	✓ 3.4	<b>✓</b> 3.5	<b>✓</b> 3.6	<b>☑</b> 3.7

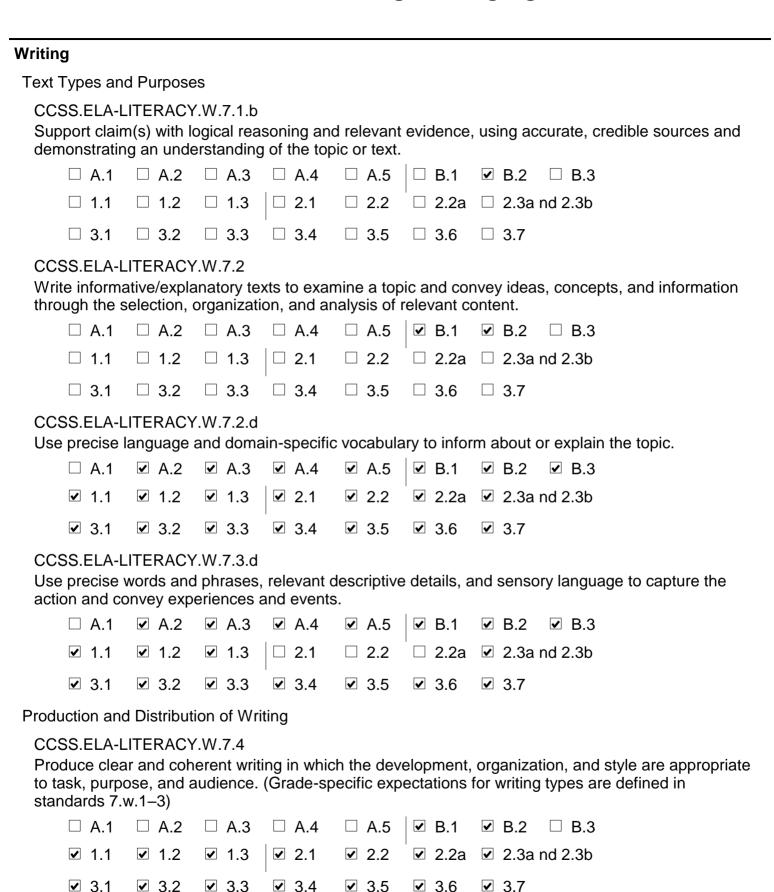
Use precis		•	, relevant	descriptive	details, a	nd senso	ory language to convey
□ A.	1 <b>☑</b> A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>✓</b> B.2	<b>☑</b> B.3
<b>☑</b> 1.	1 🗹 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	<b>✓</b> 2.3a	nd 2.3b
□ 3.	1 🗆 3.2	□ 3.3	□ 3.4	<b>✓</b> 3.5	□ 3.6	<b>✓</b> 3.7	
Production a	and Distrib	ution of Wr	iting				
Produce c	rpose, and	herent wri	_			_	tion, and style are appropriate types are defined in
□ A.	1 <b>☑</b> A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>☑</b> B.2	<b>☑</b> B.3
<b>☑</b> 1.	1 🗷 1.2	<b>✓</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	<b>✓</b> 2.3a	nd 2.3b
<b>✓</b> 3.	1	<b>✓</b> 3.3	<b>✓</b> 3.4	<b>✓</b> 3.5	<b>✓</b> 3.6	<b>✓</b> 3.7	
With some	•		•			•	trengthen writing as needed
□ A.	1 □ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3
□ <b>1.</b> ′	1 🗆 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
□ 3.	1 🗆 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
Research to	Build and	Present Kı	nowledge				
Conduct s	A-LITERAC hort resear en appropr	ch projects	s to answe	r a questio	n, drawinç	g on seve	eral sources and refocusing the
□ A.	1 <b>☑</b> A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	□ B.1	□ B.2	□ B.3
□ 1.·	1 🗆 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
□ 3.·	1 🗆 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
Gather rel source; ar	d quote or	mation fron	e the data	and concl	usions of		ess the credibility of each nile avoiding plagiarism and
□ A.	1 <b>☑</b> A.2	✓ A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>☑</b> B.2	□ B.3
□ 1.	1 🗆 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
□ 3.	1 🗆 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	

CCSS.ELA-L	_		:		
		•		analysis, reflection, and research.	
□ A.1	✓ A.2	✓ A.3 ✓ A.	4 <b>☑</b> A.5  □ B.1	□ B.2 □ B.3	
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>☑</b> 1.3 <b>☑</b> 2.	1 <b>☑</b> 2.2 <b>☑</b> 2.2a	✓ 2.3a nd 2.3b	
□ 3.1	□ 3.2	☑ 3.3 ☑ 3.4	4 🗆 3.5 🗆 3.6	□ 3.7	
peaking and	Listening				
Comprehensio	n and Col	llaboration			
	ctively in a partners o	range of collabo		ne-on-one, in groups, and teacher- ilding on others' ideas and express	
□ A.1	□ A.2	□ A.3 □ A.	4 □ A.5 □ B.1	□ B.2 <b>☑</b> B.3	
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>☑</b> 1.3 <b>☑</b> 2.	1 🗹 2.2 🔽 2.2a	✓ 2.3a nd 2.3b	
<b>☑</b> 3.1	<b>✓</b> 3.2	<b>☑</b> 3.3 <b>☑</b> 3.4	4 ☑ 3.5 ☑ 3.6	<b>☑</b> 3.7	
	cussions p	repared, having	<u>-</u>	ed material; explicitly draw on that e to probe and reflect on ideas und	
□ A.1	□ A.2	□ A.3 □ A.	4 □ A.5 □ B.1	□ B.2 <b>☑</b> B.3	
□ 1.1	□ 1.2	<b>☑</b> 1.3 □ 2.	1 □ 2.2 □ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3 □ 3.4	4	<b>☑</b> 3.7	
CCSS.ELA-L Follow rules needed.	_		et specific goals and d	leadlines, and define individual rol	es as
□ A.1	□ A.2	□ A.3 □ A.	4 □ A.5 □ B.1	□ B.2 <b>☑</b> B.3	
□ 1.1	□ 1.2	<b>☑</b> 1.3 □ 2.	1 □ 2.2 □ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3 □ 3.4	4	<b>☑</b> 3.7	
	spond to s			detail by making comments that	
□ A.1	✓ A.2	✓ A.3 ✓ A.	4 <b>☑</b> A.5  □ B.1	□ B.2 <b>☑</b> B.3	
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>☑</b> 1.3 <b>☑</b> 2.	1 🗹 2.2 🗹 2.2a	✓ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3 □ 3.4	4	<b>☑</b> 3.7	

	key ideas	expressed	and dem	onstrate u	nderstand	ing of mult	iple perspec	ctives through	
reflection a		Ū			l — <b>-</b> .				
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	<b>☑</b> B.1		<b>☑</b> B.3		
□ 1.1	□ 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a n	d 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			
CCSS.ELA									
Interpret inf explain hov							lly, quantitat	ively, orally) and	
□ A.1	✓ A.2	✓ A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>✓</b> B.2	□ B.3		
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	✓ 2.3a n	d 2.3b		
<b>✓</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	<b>✓</b> 3.4	<b>✓</b> 3.5	<b>✓</b> 3.6	<b>✓</b> 3.7			
Presentation	of Knowled	dge and Id	eas						
	ims and fin	dings, seq			•	• .	•	ons, facts, and olume, and clea	r
□ A.1	✓ A.2	✓ A.3	✓ A.4	✓ A.5	□ B.1	□ B.2	<b>☑</b> B.3		
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			
CCSS.ELA Include mu presentatio	Itimedia co	mponents		phics, ima	ges, music	c, sound) a	ınd visual dis	splays in	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3		
□ 1.1	□ 1.2	<b>☑</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	<b>✓</b> 3.7			
CCSS.ELA Adapt spee indicated o	ch to a var	iety of con	texts and	tasks, der	nonstratin	g comman	d of formal E	English when	
□ A.1	✓ A.2	<b>✓</b> A.3	✓ A.4	✓ A.5	□ B.1	□ B.2	<b>☑</b> B.3		
□ 1.1	□ 1.2	<b>☑</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	<b>✓</b> 3.5	□ 3.6	<b>✓</b> 3.7			

anguage						
Conventions of	Standard	l English				
CCSS.ELA-LI Demonstrate speaking.			nventions	of standa	ard English	h grammar and usage when writing or
□ A.1	✓ A.2	✓ A.3	✓ A.4	<b>✓</b> A.5	□ B.1	□ B.2 <b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
CCSS.ELA-LI Demonstrate spelling when	command		nventions	of standa	ard English	h capitalization, punctuation, and
□ A.1	✓ A.2	✓ A.3	✓ A.4	✓ A.5	□ B.1	□ B.2 <b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
Knowledge of L	.anguage					
CCSS.ELA-LI Use knowledg			its conven	ntions whe	en writing,	speaking, reading, or listening.
□ A.1	✓ A.2	✓ A.3	✓ A.4	✓ A.5	□ B.1	□ B.2 <b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
Vocabulary Acc	quisition a	nd Use				
CCSS.ELA-LI Determine or grade 6 readin	clarify the	meaning				aning words and phrases based on f strategies.
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	<b>☑</b> B.1	☑ B.2 □ B.3
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>☑</b> 1.3	<b>☑</b> 2.1	<b>☑</b> 2.2	<b>✓</b> 2.2a	✓ 2.3a nd 2.3b
<b>☑</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	<b>☑</b> 3.4	<b>✓</b> 3.5	<b>✓</b> 3.6	<b>☑</b> 3.7
•	ıse accura er vocabı	ately grad ulary know		_		nic and domain-specific words and or phrase important to
□ A.1	✓ A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>☑</b> B.2 <b>☑</b> B.3
<b>✓</b> 1.1	✓ 1.2	<b>☑</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	✓ 2.2a	✓ 2.3a nd 2.3b
<b>☑</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	<b>☑</b> 3.4	<b>✓</b> 3.5	<b>✓</b> 3.6	<b>☑</b> 3.7

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	guidance a revising, e	and support from pediting, continuiting, con		elop and strengthen writing as neede ach, focusing on how well purpose a	
□ A.1	□ A.2	□ A.3 □ A.4	□ A.5 □ B.1	□ B.2 □ B.3	
□ 1.1	□ 1.2	<b>☑</b> 1.3 □ 2.1	□ 2.2 □ 2.2a	□ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3 □ 3.4	<b>☑</b> 3.5 □ 3.6	<b>☑</b> 3.7	
Research to B	Build and P	Present Knowledg	е		
assess the c	ant inform credibility a	nation from multiple and accuracy of ea	ach source; and quote	rces, using search terms effectively; e or paraphrase the data and a standard format for citation.	
□ A.1	<b>✓</b> A.2	✓ A.3 ✓ A.4	✓ A.5 ✓ B.1	<b>☑</b> B.2 □ B.3	
□ 1.1	□ 1.2	□ 1.3 □ 2.1	□ 2.2 □ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3 □ 3.4	□ 3.5 □ 3.6	□ 3.7	
Speaking and	Listening	J			
Comprehension	on and Col	llaboration			
Comprehension CCSS.ELA-l					
CCSS.ELA-l Engage effe	LITERACY ctively in a partners o	/.SL.7.1 a range of collabo		e-on-one, in groups, and teacher-led ilding on others' ideas and expressin	
CCSS.ELA-l Engage effe with diverse	LITERACY ctively in a partners o	/.SL.7.1 a range of collabo	texts, and issues, bui		
CCSS.ELA-l Engage effe with diverse their own cle	LITERACY ctively in a partners o early.	7.SL.7.1 a range of collabor on grade 7 topics,	texts, and issues, bui ✓ A.5 ✓ B.1	ilding on others' ideas and expressin  ☑ B.2 ☑ B.3	
CCSS.ELA-l Engage effe with diverse their own cle	LITERACY ctively in a partners of early.  ✓ A.2	7.SL.7.1 a range of collaboron grade 7 topics,  ✓ A.3 ✓ A.4	texts, and issues, bui ✓ A.5  ✓ B.1 ✓ 2.2  ✓ 2.2a	ilding on others' ideas and expressin  ☑ B.2 ☑ B.3	
CCSS.ELA-I Engage effe with diverse their own cle  A.1  I 1.1  I 3.1  CCSS.ELA-I Come to disthat prepara under discus	ctively in a partners of early.  A.2 A.2 A.2 A.2 A.2 ITERACY cussions partners of early.	A.SL.7.1  A range of collaboration grade 7 topics,  ✓ A.3 ✓ A.4  ✓ 1.3 ✓ 2.1  ✓ 3.3 ✓ 3.4  A.SL.7.1.a  Drepared, having retring to evidence	texts, and issues, but  A.5 B.1  2.2 2.2a  3.5 3.6  The ead or researched many and the topic, text, or	ilding on others' ideas and expressin  B.2 B.3  2.3a nd 2.3b  3.7  aterial under study; explicitly draw or issue to probe and reflect on ideas	g
CCSS.ELA-I Engage effe with diverse their own cle  A.1  In a 3.1  CCSS.ELA-I Come to distinct preparation under discussion.	LITERACY ctively in a partners of early.   A.2  A.2  3.2  LITERACY cussions position by reference.	A.SL.7.1  A range of collaboration grade 7 topics,  ✓ A.3 ✓ A.4  ✓ 1.3 ✓ 2.1  ✓ 3.3 ✓ 3.4  ✓ SL.7.1.a  Drepared, having rerring to evidence	texts, and issues, but  A.5 B.1  2.2 2.2a  3.5 3.6  The ead or researched materials and the topic, text, or  A.5 B.1	ilding on others' ideas and expressin  ■ B.2 ■ B.3  ■ 2.3a nd 2.3b  ■ 3.7  aterial under study; explicitly draw or issue to probe and reflect on ideas  □ B.2 ■ B.3	g
CCSS.ELA-I Engage effe with diverse their own cle  A.1  I 1.1  I 3.1  CCSS.ELA-I Come to disthat prepara under discus	ctively in a partners of early.  A.2 A.2 A.2 A.2 A.2 ITERACY cussions partners of early.	A.SL.7.1  A range of collaboration grade 7 topics,  ✓ A.3 ✓ A.4  ✓ 1.3 ✓ 2.1  ✓ 3.3 ✓ 3.4  A.SL.7.1.a  Drepared, having retring to evidence	texts, and issues, but  A.5 B.1  2.2 2.2a  3.5 3.6  The ead or researched materials and the topic, text, or  A.5 B.1	ilding on others' ideas and expressin  ■ B.2 ■ B.3  ■ 2.3a nd 2.3b  ■ 3.7  aterial under study; explicitly draw or issue to probe and reflect on ideas  □ B.2 ■ B.3	g

Foll	ow i	rules f	or c	RACY ollegia	al dis	scuss	ions,	, track	pro	gress	tow	ard sp	ecit	fic go	als aı	nd de	adlin	es, ar	nd def	fine
indi				s need						. –		5.4		<b>D</b> 0		<b>-</b> -				
		A.1		A.2		A.3		A.4		A.5		B.1		B.2	✓	B.3				
		1.1		1.2	✓	1.3		2.1		2.2		2.2a		2.3a	nd 2.	3b				
		3.1		3.2		3.3		3.4	<b>✓</b>	3.5		3.6	✓	3.7						
Pos	se qu	uestio	ns tl	RACY hat elid l ideas	cit e	labora										comm	nents	with r	eleva	ınt
		A.1		A.2		A.3		A.4		A.5		B.1		B.2	✓	B.3				
		1.1		1.2	<b>✓</b>	1.3		2.1		2.2		2.2a		2.3a	nd 2.	3b				
		3.1		3.2		3.3		3.4	<b>✓</b>	3.5		3.6	✓	3.7						
				RACY w infor			xpres	ssed b	y ot	hers a	and,	when	wa	rrante	ed, m	odify	their	own v	/iews	
		A.1		A.2		A.3		A.4		A.5		B.1		B.2	<b>✓</b>	B.3				
		1.1		1.2	<b>✓</b>	1.3	•	2.1		2.2		2.2a		2.3a	nd 2.	3b				
	<b>✓</b>	3.1		3.2	✓	3.3	✓	3.4	<b>✓</b>	3.5		3.6	✓	3.7						
Ana	alyze	e the n	nain	RACY ideas ally) ar	and	d sup	•	_		•								` •	, visu	ally,
		A.1		A.2		A.3		A.4		A.5	<b>✓</b>	B.1	<b>✓</b>	B.2		B.3				
		1.1		1.2		1.3		2.1		2.2		2.2a		2.3a	nd 2.	3b				
		3.1		3.2		3.3		3.4		3.5		3.6		3.7						
Prese	enta	tion of	f Kn	owled	ge a	and Id	eas													
				RACY															_	
				lia com nt poin		nents	and	visual	l dis <sub>l</sub>	plays i	in pi	resent	atio	ns to	clarif	y clai	ms a	nd fin	dings	and
		A.1		A.2		A.3		A.4		A.5		B.1		B.2	<b>✓</b>	B.3				
		1.1		1.2	<b>✓</b>	1.3		2.1		2.2		2.2a		2.3a	nd 2.	3b				
		3.1		3.2		3.3		3.4	<b>✓</b>	3.5		3.6	<b>✓</b>	3.7						

CCSS.ELA-L Adapt speed indicated or	h to a var	iety of contexts	s and tasks, d	lemonstratin	g commai	nd of formal English when
□ A.1	□ A.2	□ A.3 □	A.4 🗆 A.5	5 □ B.1	□ B.2	<b>☑</b> B.3
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>▼</b> 1.3	2.1 🗹 2.2	2	✓ 2.3a ı	nd 2.3b
<b>☑</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	3.4 🗷 3.5	3.6	<b>☑</b> 3.7	
Language						
Conventions of	f Standar	d English				
CCSS.ELA-l Demonstrate speaking.			entions of star	ndard Englisl	n gramma	r and usage when writing or
□ A.1	□ A.2	□ A.3 □	A.4 \( \sim \) A.5	5 □ B.1	□ B.2	<b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3 □	2.1 🗆 2.2	2 □ 2.2a	☐ 2.3a ı	nd 2.3b
□ 3.1	□ 3.2	□ 3.3 □	3.4 □ 3.5	3.6	□ 3.7	
CCSS.ELA-l Demonstrate spelling whe	comman		ntions of star	ndard Englisl	n capitaliz	ation, punctuation, and
□ A.1	□ A.2	□ A.3 □	A.4 \( \sim \) A.5	5 □ B.1	□ B.2	<b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3 □	2.1 🗆 2.2	2  □ 2.2a	☐ 2.3a ı	nd 2.3b
□ 3.1	□ 3.2	□ 3.3 □	3.4 □ 3.5	3.6 □ 3.6	□ 3.7	
CCSS.ELA-L Spell correct		Y.L.7.2.b				
□ A.1	□ A.2	□ A.3 □	A.4 🗆 A.5	5 □ B.1	□ B.2	<b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3 □	2.1 🗆 2.2	2 □ 2.2a	☐ 2.3a ı	nd 2.3b
□ 3.1	□ 3.2	□ 3.3 □	3.4 □ 3.5	3.6	□ 3.7	
Knowledge of	Language	)				
CCSS.ELA-L Use knowled			conventions w	hen writing,	speaking	, reading, or listening.
□ A.1	□ A.2	□ A.3 □	A.4 🗆 A.5	5 □ B.1	□ B.2	<b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3 □	2.1 🗆 2.2	2  □ 2.2a	☐ 2.3a ı	nd 2.3b
□ 31	□ 32	□ 3.3 □	3.4 🗆 3.5	5 □ 3.6	□ 3.7	

#### CCSS.ELA-LITERACY.L.7.3.a Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy. □ A.1 A.2 □ A.3 □ A.4 □ A.5 □ B.1 □ B.2 **☑** B.3 □ 1.1 1.2 **✓** 1.3 $\square$ 2.1 $\square$ 2.2 □ 2.2a □ 2.3a nd 2.3b □ 3.1 $\square$ 3.2 □ 3.4 **✓** 3.5 □ 3.6 **✓** 3.7 □ 3.3 Vocabulary Acquisition and Use CCSS.ELA-LITERACY.L.7.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies. □ A.1 □ A.2 □ A.3 □ A.4 □ A.5 **✓** B.1 **✓** B.2 □ B.3 **✓** 1.1 **✓** 1.2 **✓** 1.3 **✓** 2.1 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 3.1 **✓** 3.2 **✓** 3.4 **✓** 3.5 **✓** 3.6 **✓** 3.7 **✓** 3.3 CCSS.ELA-LITERACY.L.7.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. □ A.1 ✓ A.2 ✓ A.3 ✓ A.4 ✓ A.5 ✓ B.1 **✓** B.2 **✓** B.3 **✓** 1.1 **✓** 1.2 **✓** 1.3 **✓** 2.1 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b

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**✓** 3.5

**✓** 3.6

**✓** 3.7

**✓** 3.1

**✓** 3.2

**✓** 3.3

**✓** 3.4

#### Writing Text Types and Purposes CCSS.ELA-LITERACY.W.8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. □ A.3 □ A.5 □ A.1 □ A.2 □ A.4 **☑** B.1 **✓** B.2 □ B.3 □ 2.2 □ 1.1 □ 1.2 □ 1.3 □ 2.1 □ 2.2a □ 2.3a nd 2.3b $\square$ 3.1 □ 3.2 □ 3.3 □ 3.4 □ 3.5 □ 3.6 □ 3.7 CCSS.ELA-LITERACY.W.8.2.b Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. □ A.1 □ A.2 □ A.5 **✓** B.1 □ A.3 □ A.4 **✓** B.2 □ B.3 □ 1.1 □ 1.2 □ 1.3 □ 2.2 □ 2.2a □ 2.3a nd 2.3b □ 2.1 □ 3.1 □ 3.2 $\square$ 3.3 □ 3.4 □ 3.5 □ 3.6 3.7 CCSS.ELA-LITERACY.W.8.2.d Use precise language and domain-specific vocabulary to inform about or explain the topic. **☑** B.1 □ A.1 ✓ A.2 ✓ A.3 ✓ A.4 ✓ A.5 **✓** B.2 □ B.3 **✓** 1.1 **✓** 1.2 **✓** 1.3 **✓** 2.1 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 3.4 **✓** 3.1 **✓** 3.2 **✓** 3.3 **✓** 3.5 **✓** 3.6 **✓** 3.7 CCSS.ELA-LITERACY.W.8.3.d Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. □ B.1 A.2 □ A.3 ☐ B.2 **✓** B.3 □ A.1 □ A.4 □ A.5 □ 2.1 □ 2.2 **✓** 1.1 **✓** 1.2 **✓** 1.3 □ 2.2a 2.3a nd 2.3b □ 3.4 □ 3.1 □ 3.2 $\square$ 3.3 **✓** 3.5 □ 3.6 **✓** 3.7 Production and Distribution of Writing CCSS.ELA-LITERACY.W.8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3.) □ A.1 □ A.2 □ A.3 □ A.4 □ A.5 **✓** B.1 **✓** B.2 ✓ B.3 **✓** 1.2 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 1.1 **✓** 1.3 **✓** 2.1 **✓** 2.2 **✓** 3.1 **✓** 3.2 **✓** 3.3 **✓** 3.4 **✓** 3.5 **✓** 3.6 **✓** 3.7

CCSS.ELA-	LITERACY	′.W.8.5						
	revising, e	editing, re	writing, or				trengthen writing a ing on how well pu	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7		
	ogy, includ	ling the In					nd present the rela	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7		
Research to B	Build and P	resent Kr	nowledge					
assess the c conclusions	rant inform credibility a of others v	ation from and accura while avoi	acy of eac	h source; arism and	and quote following	or parapla a standar	g search terms eff hrase the data and d format for citatio	d
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	<b>☑</b> B.1	<b>✓</b> B.2	□ B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7		
CCSS.ELA-l Draw eviden	_		nformation	al texts to	support a	nalysis, re	eflection, and rese	arch.
□ A.1	✓ A.2	✓ A.3	✓ A.4	✓ A.5	<b>☑</b> B.1	<b>✓</b> B.2	<b>☑</b> B.3	
<b>☑</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	<b>✓</b> 2.3a	nd 2.3b	
□ 3.1	□ 3.2	<b>✓</b> 3.3	<b>✓</b> 3.4	□ 3.5	□ 3.6	□ 3.7		

#### **Speaking and Listening** Comprehension and Collaboration CCSS.ELA-LITERACY.SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. □ A.1 ✓ A.2 ✓ A.3 ✓ A.4 ✓ A.5 **☑** B.1 **☑** B.2 **☑** B.3 **✓** 1.1 **✓** 1.2 **✓** 1.3 **✓** 2.1 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 3.1 **✓** 3.2 **✓** 3.3 **✓** 3.4 **✓** 3.5 **✓** 3.6 **✓** 3.7 CCSS.ELA-LITERACY.SL.8.1.a Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. □ A.1 A.2 □ A.3 □ A.4 □ A.5 □ B.1 □ B.2 **✓** B.3 □ 1.2 □ 2.1 □ 2.2 □ 2.2a □ 1.1 **✓** 1.3 ☐ 2.3a nd 2.3b $\square$ 3.1 $\square$ 3.2 □ 3.3 □ 3.4 **✓** 3.5 □ 3.6 **✓** 3.7 CCSS.ELA-LITERACY.SL.8.1.b Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. □ A.1 □ A.2 □ A.3 □ A.4 □ A.5 □ B.1 □ B.2 **✓** B.3 □ 1.1 □ 1.2 **✓** 1.3 $\square$ 2.1 $\square$ 2.2 □ 2.2a □ 2.3a nd 2.3b □ 3.1 □ 3.2 $\square$ 3.3 □ 3.4 **✓** 3.5 □ 3.6 **✓** 3.7 CCSS.ELA-LITERACY.SL.8.1.c Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. □ A.3 □ A.1 □ A.2 □ A.4 □ A.5 □ B.1 □ B.2 ✓ B.3 $\square$ 2.1 □ 2.2 $\square$ 1.1 1.2 □ 1.3 □ 2.2a □ 2.3a nd 2.3b □ 3.1 □ 3.2 □ 3.3 □ 3.4 □ 3.5 □ 3.6 □ 3.7 CCSS.ELA-LITERACY.SL.8.1.d Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. □ A.1 ✓ A.2 ✓ A.3 ✓ A.4 ✓ A.5 **☑** B.1 **✓** B.2 **☑** B.3 **✓** 1.1 **✓** 1.2 **✓** 2.2 ✓ 2.2a ✓ 2.3a nd 2.3b **✓** 1.3 **✓** 2.1 **✓** 3.1 □ 3.2 **✓** 3.3 **✓** 3.4 **✓** 3.5 □ 3.6 **✓** 3.7

Presentation	of Knowled	dge and Id	deas						
CCSS.ELA-LITERACY.SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.									
□ A.	1 □ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3			
□ 1.′	□ 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b			
□ 3.′	□ 3.2	□ 3.3	□ 3.4	<b>☑</b> 3.5	□ 3.6	<b>✓</b> 3.7			
Adapt spe	A-LITERACY ech to a var or appropriat	iety of cor	ntexts and	tasks, der	monstratin	g command of form	nal English when		
□ A.	1 □ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3			
□ 1.′	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b			
□ 3.′	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			
_anguage									
Conventions	of Standar	d English							
	A-LITERAC\ ate comman	_	onvention	s of standa	ard Englisl	n grammar and usa	ge when writing or		
□ A.	1 □ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3			
□ 1.′	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b			
□ 3.′	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			
Demonstra	A-LITERACY ate comman nen writing.		onvention	s of standa	ard Englisl	n capitalization, pur	nctuation, and		
□ A.	1 □ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3			
□ <b>1</b> .′	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b			
□ 3.′	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			
CCSS.ELA	A-LITERACY ectly.	Y.L.8.2.c							
□ A.	1 □ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3			
□ <b>1</b> .′	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b			
□ 3.′	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			

Knowledge o	f Language	)					
CCSS.ELA Use knowle			its conve	entions who	en writing,	speaking, reading	ı, or listening.
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
Vocabulary A	cquisition a	and Use					
CCSS.ELA	_		rticular w	ords to bet	ter unders	stand each of the v	vords.
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	<b>☑</b> B.1	<b>☑</b> B.2 □ B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
	d use accurather vocab	ately grad				nic and domain-sp ord or phrase impo	
□ A.1	✓ A.2	<b>✓</b> A.3	✓ A.4	<b>✓</b> A.5	<b>☑</b> B.1	<b>☑</b> B.2 □ B.3	
<b>☑</b> 1.1	<b>✓</b> 1.2	✓ 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	✓ 2.3a nd 2.3b	
<b>☑</b> 3.1	<b>✓</b> 3.2	<b>✓</b> 3.3	<b>☑</b> 3.4	<b>☑</b> 3.5	<b>≥</b> 3.6	<b>☑</b> 3.7	

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(	nowledge Constructor											
	•	3a Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.										
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3				
	□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b				
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7					
1	novative Des	signer										
	4a Students kno innovative ar					for genera	ating idea	as, testing theories, creating				
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3				
	□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b				
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7					
	4c Students dev	velop, test	and refin	ie prototyp	es as part	of a cyclic	cal design	ı process.				
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	☑ B.3				
	□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b				
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7					
,	omputational	Thinker										
	5c Students bre models to un							, and develop descriptive				
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3				
	□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b				
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7					

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□ 3.1

□ 3.2

□ 3.3

□ 3.4

#### **Creative Communicator** 6с Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations. □ A.1 □ A.2 □ A.3 □ A.4 □ A.5 □ B.1 □ B.2 **✓** B.3 □ 1.1 □ 1.2 □ 2.1 □ 2.2 □ 1.3 □ 2.2a □ 2.3a nd 2.3b □ 3.1 □ 3.2 □ 3.3 □ 3.4 □ 3.5 □ 3.6 □ 3.7 **Global Collaborator** 7c Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal. □ A.2 □ A.3 □ B.1 □ A.1 □ A.4 □ A.5 □ B.2 **☑** B.3 □ 1.1 □ 1.2 □ 1.3 □ 2.1 □ 2.2 □ 2.2a □ 2.3a nd 2.3b

□ 3.5

 $\square$  3.6  $\square$  3.7

# **Standards for Technological and Engineering Literacy**

Core Concepts	s of Tech	nology an	d Engine	eering		
STEL-2R						
Compare ho	w differen	t technolog	gies invol	lve differer	nt sets of p	rocesses.
□ A.1	□ A.2	□ A.3	✓ A.4	□ A.5	□ B.1	□ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
STEL-2S						
Defend decis	sions relat	ted to a de	sign prob	olem.		
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
Integration of	Knowled	ge, Techno	ologies,	and Pract	ices	
0751 05						
STEL-3E Analyze how systems.	different	technologi	cal syste	ms often iı	nteract witl	h economic, environmental, and social
□ A.1	□ A.2	□ A.3	✓ A.4	□ A.5	□ B.1	□ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
STEL-3F						
Apply a prod	luct, syste	m or proce	ess devel	oped for o	ne setting	to another setting.
□ A.1	□ A.2	□ A.3	✓ A.4	□ A.5	□ B.1	□ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
STEL-3G Explain how products and			rom othe	r content a	ıreas affec	ets the development of technological
□ A.1	□ A.2	□ A.3	✓ A.4	□ A.5	□ B.1	□ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7

# **Standards for Technological and Engineering Literacy**

Impacts of Tec	hnology					
STEL-4L						
Analyze how resources ar			se of techr	nologies c	onsumes i	renewable and non-renewable
□ A.1	□ A.2	□ A.3	✓ A.4	□ A.5	□ B.1	□ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
STEL-4N						
Analyze examos communicate	•	echnologi	es that ha	ve change	ed the way	people think, interact, and
□ A.1	□ A.2	□ A.3	✓ A.4	□ A.5	□ B.1	□ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	✓ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
Influence of So	ociety on	Technolo	gical Dev	/elopmen	t	
STEL-5F						
Analyze how	an invent	ion or inn	ovation wa	as influenc	ed by its h	nistorical context.
□ A.1	□ A.2	□ A.3	✓ A.4	□ A.5	□ B.1	□ B.2 □ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
Design in Tech	nology a	nd Engin	eering Ed	lucation		
STEL-7Q						
Apply the ted	chnology a	and engine	eering des	ign proces	SS.	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3
□ 1.1	□ 1.2	<b>☑</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7
STEL-7R						
Refine desig	n solution	s to addre	ss criteria	and cons	traints.	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b> B.3
□ 1.1	□ 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7

# **Standards for Technological and Engineering Literacy**

STEL-7S							
Create soluti	ons to pro	blems by	identifyin	g and app	lying huma	an factors in d	esign
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 □	B.3
□ 1.1	□ 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2	.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
STEL-7T							
Assess desig	gn quality	based up	on establi	shed princ	iples and	elements of de	esign.
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 □	B.3
□ 1.1	□ 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2	.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
STEL-7U							
Evaluate the	strengths	and wea	knesses c	of different	design so	lutions.	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 <b>☑</b>	B.3
□ 1.1	□ 1.2	<b>☑</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2	.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
STEL-7V							
Improve esse	ential skill	s necessa	ary to succ	cessfully d	esign.		
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 🗸	B.3
<b>✓</b> 1.1	<b>✓</b> 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2	.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	

#### **K12 Computer Science Framework**

**Collaborating Around Computing** 

#### P2.CAC.1 Cultivate working relationships with individuals possessing diverse perspectives, skills, and personalities. □ A.1 A.2 □ A.3 □ A.4 □ A.5 □ B.1 □ B.2 **☑** B.3 □ 1.1 □ 1.2 □ 1.3 □ 2.1 □ 2.2 □ 2.2a □ 2.3a nd 2.3b □ 3.1 □ 3.2 □ 3.3 □ 3.4 □ 3.5 □ 3.6 □ 3.7 P2.CAC.2 Create team norms, expectations, and equitable workloads to increase efficiency and effectiveness. □ A.1 □ A.2 □ A.3 □ A.4 □ A.5 □ B.1 □ B.2 **☑** B.3 □ 1.1 □ 1.2 □ 1.3 □ 2.1 □ 2.2 □ 2.2a □ 2.3a nd 2.3b □ 3.1 $\square$ 3.2 $\square$ 3.3 □ 3.4 $\square$ 3.5 □ 3.6 $\square$ 3.7 P2.CAC.3 Solicit and incorporate feedback from, and provide constructive feedback to, team members and other stakeholders. □ A.1 □ A.2 □ A.3 □ A.4 □ A.5 □ B.1 □ B.2 **✓** B.3 □ 2.2 □ 1.1 □ 1.2 □ 1.3 □ 2.1 □ 2.2a □ 2.3a nd 2.3b □ 3.1 □ 3.2 □ 3.3 □ 3.4 □ 3.5 □ 3.6 □ 3.7

Earth and Hun	nan Activ	ity							
NGSS.MS-E Apply scient environment	ific princip	les to des	ign a metl	nod for mo	onitoring a	nd minimiz	ing a huma	ın impact on	the
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3		
□ 1.1	□ 1.2	<b>☑</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			
Engineering D	esign								
	riteria and ing into ac	count rele	vant scier	ntific princ	iples and p			nsure a succ eople and th	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3		
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			
NGSS.MS-E Evaluate cor criteria and c	mpeting de	_		g a systen	natic proce	ess to dete	rmine how	well they me	et the
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3		
□ 1.1	□ 1.2	<b>☑</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			
	a from tes best chara							sign solutions better meet	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3		
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	<b>☑</b> 3.5	□ 3.6	<b>✓</b> 3.7			
NGSS.MS-E Develop a m process suc	nodel to ge				•	dification o	f a propose	ed object, too	ol, or
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3		
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b		
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7			

Matter and Its I	nteractio	ons					
to determine	interpret of if a cheme burning s	ical reaction	on has oc	curred. [C	larification	fore and after the substand Statement: Examples of r dium hydroxide, and mixing	eactions
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 □ B.3	
<b>☑</b> 1.1	<b>✓</b> 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
resources an	nake sens d impact emical pr	society. [Cocess to for	Clarification orm the sy	n Stateme ynthetic m	nt: Empha	etic materials come from na asis is on natural resources amples of new materials c	s that
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 □ B.3	
□ 1.1	<b>✓</b> 1.2	□ 1.3	☑ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
thermal energing the	design pr gy by che e transfer concentra	mical proc of energy tion of a s	esses. [C to the en ubstance.	larification vironment Examples	Statemer , and mod s of design	vice that either releases or nt: Emphasis is on the des lification of a device using ns could involve chemical r	ign, factors such
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 □ B.3	
<b>☑</b> 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
Motion and Sta	bility: Fo	rces and	Interaction	ons			
NGSS.MS-PS Plan an inves of the forces	stigation to					n object's motion depends	on the sum
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2 □ B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	☐ 2.3a nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	<b>☑</b> 3.4	<b>≥</b> 3.5	□ 3.6	☑ 3.7	

NGSS.MS-P Construct an are attractive	nd present	_					that gravitational interactions
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
□ 3.1	□ 3.2	□ 3.3	✓ 3.4	□ 3.5	□ 3.6	□ 3.7	
NGSS.MS-P Apply Newto objects.	_	Law to des	sign a solu	ıtion to a p	oroblem in	volving th	ne motion of two colliding
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	<b>✓</b> 3.7	
nergy							
NGSS.MS-P Develop a m different amo	odel to de						eracting at a distance changes,
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
□ 3.1	□ 3.2	□ 3.3	<b>☑</b> 3.4	<b>✓</b> 3.5	□ 3.6	<b>☑</b> 3.7	
cience and E	ngineerin	g Practic	es				
Asking Questi	ons and D	efining Pr	oblems				
NGSS.P1 Asking quest specifying re		• •				•	es and progresses to nd models.
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
NGSS.P1 • that arise for seek addition			tion of phe	enomena,	models, o	r unexpe	ected results, to clarify and/or
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
□ 3.1	□ 3.2	<b>✓</b> 3.3	<b>✓</b> 3.4	<b>✓</b> 3.5	□ 3.6	<b>✓</b> 3.7	

Developing ar	nd Using M	lodels						
NGSS.P2								
Modeling in to describe,			•				g, using, and revisir tems.	ng models
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3	
□ 1.1	□ 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a r	nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7		
NGSS.P2								
• Use and/o	r develop a	a model o	f simple sy	stems wit	h uncertai	n and less	s predictable factor	3.
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3	
□ 1.1	□ 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a r	nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7		
NGSS.P2								
<ul> <li>Develop ar</li> </ul>	nd/or use a	a model to	predict a	nd/or desc	ribe phen	omena.		
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3	
□ 1.1	□ 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a r	nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7		
Analyzing and	l Interpretii	ng Data						
NGSS.P4								
Analyzing ar	•	•			I			
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3	
<b>✓</b> 1.1	<b>✓</b> 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a r	nd 2.3b	
□ 3.1	□ 3.2	<b>✓</b> 3.3	<b>☑</b> 3.4	<b>☑</b> 3.5	□ 3.6	□ 3.7		
NGSS.P4								
<ul><li>Analyze ar</li></ul>	nd interpre	t data to p	rovide evi	dence for	phenome	na.		
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3	
<b>☑</b> 1.1	<b>☑</b> 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a r	nd 2.3b	
□ 3.1	□ 3.2	□ 3.3	☑ 3.4	<b>✓</b> 3.5	□ 3.6	□ 3.7		

NGSS.P4								
<ul> <li>Analyze a</li> </ul>	nd interpre	t data to	determine	similarities	s and diffe	rences in f	indings.	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b	
□ 3.1	□ 3.2	□ 3.3	<b>☑</b> 3.4	<b>✓</b> 3.5	□ 3.6	□ 3.7		
NGSS.P4								
<ul> <li>Analyze data</li> <li>that best me</li> </ul>		-	•	tional rang	ge for a pro	oposed obj	iect, tool, process or syst	:em
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3	
□ 1.1	<b>✓</b> 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7		
Using Mather	natics and	Computa	tional Thir	nking				
NGSS.P5 Use mather solutions.	natical rep	resentatio	ons to desc	cribe and/o	or support	scientific c	conclusions and design	
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	<b>✓</b> 2.2	□ 2.2a	□ 2.3a n	d 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	<b>✓</b> 3.5	□ 3.6	□ 3.7		
Constructing	Explanatio	ns and De	esigning S	Solutions				
NGSS.P6								
<ul> <li>Construct that predict(</li> </ul>	•			•	or quantita	tive relatio	onships between variable	S
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7		
NGSS.P6								
<ul><li>Construct</li></ul>	an explan	ation usin	g models (	or represe	ntations.			
□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3	
□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a n	d 2.3b	
□ 3.1	□ 3.2	□ 3.3	□ 3.4	<b>✓</b> 3.5	□ 3.6	□ 3.7		

NGS	S.P6							
(inclu	uding the	students	own expe	eriments) a	and the as	ssumption	that the	e obtained from sources ories and laws that describe e to do so in the future.
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3
	□ 1.1	□ 1.2	□ 1.3	□ A.4 □ 2.1 □ 3.4	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7	
NGS	S.P6							
realv	vorld phe	nomena,	examples	s, or events	S.			and/or use an explanation for
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3
	□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
	□ 3.1	□ 3.2	□ 3.3	□ A.4 □ 2.1 ☑ 3.4	<b>✓</b> 3.5	□ 3.6	□ 3.7	
	S.P6							
	oly scien <sup>.</sup> Iusion.	tific reaso	ning to sh	ow why th	e data or	evidence	is adequa	ate for the explanation or
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3
	□ 1.1	□ 1.2	□ 1.3	□ A.4	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
	□ 3.1	□ 3.2	<b>✓</b> 3.3	<b>☑</b> 3.4	<b>☑</b> 3.5	□ 3.6	□ 3.7	
NGS	S.P6							
	oly scien <sup>.</sup> ess or sy		or princip	les to desi	gn, consti	ruct, and/o	or test a d	design of an object, tool,
	□ A.1	□ A.2	□ A.3	□ A.4 □ 2.1	□ A.5	□ B.1	□ B.2	□ B.3
	□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	<b>☑</b> 3.5	□ 3.6	<b>☑</b> 3.7	
NGS	S.P6							
			-	gaging in t a and cons	_	n cycle, to	construc	t and/or implement a solution
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3
	□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	<b>☑</b> 3.5	□ 3.6	<b>☑</b> 3.7	

NGS	S.P6											
<ul> <li>Optimize performance of a design by prioritizing criteria, making tradeoffs, testing, revising, and retesting.</li> </ul>												
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3				
	□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b				
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	<b>☑</b> 3.5	□ 3.6	<b>☑</b> 3.7					
NGS	S.P7											
• Eva	aluate co	mpeting	design sol	utions bas	ed on joir	ntly develo	ped and	agreed-upon design criteria.				
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3				
	□ 1.1	□ 1.2	□ 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b				
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	<b>☑</b> 3.5	□ 3.6	<b>✓</b> 3.7					
Obtaining, Evaluating, and Communicating Information												
NGSS.P8  Obtaining, evaluating, and communicating information in 6-8 builds on K-5 experiences and progresses to evaluating the merit and validity of ideas and methods.												
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	<b>☑</b> B.3				
	□ 1.1	<b>☑</b> 1.2	<b>✓</b> 1.3	□ 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b				
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7					
NGS	S.P8											
<ul> <li>Critically read scientific texts adapted for classroom use to determine the central ideas and/or obtain scientific and/or technical information to describe patterns in and/or evidence about the natural and designed world(s).</li> </ul>												
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3				
	□ 1.1	□ 1.2	□ 1.3	<b>☑</b> 2.1	<b>✓</b> 2.2	<b>✓</b> 2.2a	□ 2.3a	nd 2.3b				
	□ 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7					
NGS	S.P8											
• Gather, read, and synthesize information from multiple appropriate sources and assess the credibility, accuracy, and possible bias of each publication and methods used, and describe how they are supported or not supported by evidence.												
	□ A.1	□ A.2	□ A.3	□ A.4	□ A.5	□ B.1	□ B.2	□ B.3				
	□ 1.1	□ 1.2	□ 1.3	<b>☑</b> 2.1	□ 2.2	□ 2.2a	□ 2.3a	nd 2.3b				
	<b>✓</b> 3.1	□ 3.2	□ 3.3	□ 3.4	□ 3.5	□ 3.6	□ 3.7					

NGSS.F	28																	
• Communicate scientific and/or technical information (e.g. about a proposed object, tool, process, system) in writing and/or through oral presentations.																		
	A.1		A.2		A.3		A.4		A.5		B.1		B.2	□ B.3				
	1.1	<b>✓</b>	1.2	<b>✓</b>	1.3		2.1		2.2		2.2a		2.3a	nd 2.3b				
	3.1		3.2		3.3		3.4		3.5		3.6		3.7					
rosscutting Concepts																		
Scale, proportion, and quantity																		
3																		
In considering phenomena, it is critical to recognize what is relevant at different measures of size, time, and energy and to recognize how changes in scale, proportion, or quantity affect a system's structure or performance.																		
	A.1		A.2		A.3		A.4		A.5		B.1		B.2	□ B.3				
	1.1		1.2	<b>✓</b>	1.3		2.1		2.2		2.2a		2.3a	nd 2.3b				
	3.1		3.2		3.3		3.4		3.5		3.6		3.7					
4																		
Defining the system under study'specifying its boundaries and making explicit a model of that system provides tools for understanding and testing ideas that are applicable throughout science and engineering.												stem						
	A.1		A.2		A.3		A.4		A.5		B.1		B.2	□ B.3				
	1.1		1.2	<b>✓</b>	1.3		2.1		2.2		2.2a		2.3a	nd 2.3b				
	3.1		3.2		3.3		3.4		3.5		3.6		3.7					
6																		
The way				-	t or liv	/ing	thing is	sh	aped	and	its sul	bstr	uctur	e determ	ne m	any of	fits	
	A.1		A.2		A.3		A.4		A.5		B.1		B.2	□ B.3				
	1.1		1.2		1.3		2.1	•	2.2		2.2a	<b>✓</b>	2.3a	nd 2.3b				
	3.1		3.2		3.3		3.4		3.5		3.6		3.7					

#### **Nature of Science**

Scientific Investigations Use a Variety of Methods

• Science investigations use a variety of methods and tools to make measurements and observations.

□ A.1 □ A.2 □ A.3 □ A.4 □ A.5 □ B.1 □ B.2 □ B.3 ☑ 1.1 ☑ 1.2 ☑ 1.3 □ 2.1 □ 2.2 □ 2.2a □ 2.3a nd 2.3b

 $\square$  3.1  $\square$  3.2  $\square$  3.3  $\square$  3.4  $\square$  3.5  $\square$  3.6  $\square$  3.7

• Science investigations are guided by a set of values to ensure accuracy of measurements, observations, and objectivity of findings.

 $\square$  A.1  $\square$  A.2  $\square$  A.3  $\square$  A.4  $\square$  A.5  $\square$  B.1  $\square$  B.2  $\square$  B.3

□ 1.1 □ 1.2 □ 1.3 □ 2.1 □ 2.2 □ 2.2a ☑ 2.3a nd 2.3b

 $\square$  3.1  $\square$  3.2  $\square$  3.3  $\square$  3.4  $\square$  3.5  $\square$  3.6  $\square$  3.7

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