

Curriculum Correlation

Investigating Science 9 to Ontario Curriculum: Science, Grade 9, De-streamed (SNC1W)

Strand A: STEM Skills, Careers, and Connections

Expectation	Degree of Fit	Chapter/Section References	Assessment Opportunities
A1. STEM Investigation Skills: apply scientif	fic processes and an enginee	ring design process in tl	heir investigations to develop a conceptual
understanding of the science they are learn	ing, and apply coding skills to	o model scientific conce	epts and relationships
A1.1 apply a scientific research process	High	Sections 2.1, 2.2,	A1 Decision-Making Analysis, p. 66
and associated skills to conduct		3.1, 3.2	A17 Design a Lab p. 82
investigations, making connections		Section 9.1	A20 Decision-Making Analysis, p. 102
between their research and the scientific		Section 12.2	A24 Quick Lab, p. 115
concepts they are learning			Unit A Task, p. 122
			C22 Quick Lab, p. 349
			Unit C Task, p. 381
			D30 Quick Lab, p. 496
			Unit D Task, p. 505
A1.2 apply a scientific experimentation	High	Sections 2.2, 3.1,	A17 Design a Lab, p. 82
process and associated skills to conduct		Sections 4.1, 4.2,	A19 Quick Lab, p. 93
investigations, making connections		5.1, 5.2, 5.3, 6.1,	B2 Quick Lab, p. 137
between their observations and findings		6.2,	B3 Inquiry Activity, p. 144
and the scientific concepts they are		Sections 7.1, 7.2,	B4 Quick Lab, p.146
learning		7.3, 8.1, 8.2, 8.3,	B5 Quick Lab, p. 149
		9.1, 9.2	B7 Inquiry Activity, p. 156
		Sections 10.1, 10.2,	B8 Inquiry Activity, p. 158
		10.3, 11.1, 11.2,	B9 Design a Lab, p. 160
		11.3	B10 Quick Lab, p. 169
			B12 Quick Lab, p. 179
			B13 Quick Lab, p. 186
			B19 Inquiry Activity, p. 202
			B21 Quick Lab, p. 215

Page 1 of 15 Updated Jan 2023



B23 Quick Lab, p. 216 B25 Quick Lab, p. 227 Unit B Task, p. 245 C2 Quick Lab, p. 259 C4 Quick Lab, p. 266 C7 Quick Lab, p. 276 C8 Quick Lab, p. 279 C10 Quick Lab, p. 287	
Unit B Task, p. 245 C2 Quick Lab, p. 259 C4 Quick Lab, p. 266 C7 Quick Lab, p. 276 C8 Quick Lab, p. 279 C10 Quick Lab, p. 287	
C2 Quick Lab, p. 259 C4 Quick Lab, p. 266 C7 Quick Lab, p. 276 C8 Quick Lab, p. 279 C10 Quick Lab, p. 287	
C4 Quick Lab, p. 266 C7 Quick Lab, p. 276 C8 Quick Lab, p. 279 C10 Quick Lab, p. 287	
C7 Quick Lab, p. 276 C8 Quick Lab, p. 279 C10 Quick Lab, p. 287	
C8 Quick Lab, p. 279 C10 Quick Lab, p. 287	
C10 Quick Lab, p. 287	
C11 Quick Lab, p. 295	
C12 Inquiry Activity, p. 302	
C13 Design a Lab, p. 303	
C14 Quick Lab, p. 304	
C15 Quick Lab, p. 307	
C16 Inquiry Activity, p. 319	
C18 Quick Lab, p. 323	
C20 Quick Lab, p. 330	
C24 Quick Lab, p. 350	
C27 Quick Lab, p. 362	
D2 Quick Lab, p. 395	
D3 Inquiry Activity, p. 402	
D4 Quick Lab, p. 405	
D5 Quick Lab, p. 412	
D6 Inquiry Activity, p. 413	
D7 Inquiry Activity, p. 414	
D10, Quick Lab, p. 424	
D11 Quick Lab, p. 425	
D12 Quick Lab, p. 433	
D13 Quick Lab, p. 444	
D14 Quick Lab, p. 445	
D15 Design a Lab, p. 446	
D16 Quick Lab, p. 449	
D19 Quick Lab, p. 455	
C20 Quick Lab, p. 456	

Page 2 of 15 Updated Jan 2023



A1.3 apply an engineering design process and associated skills to design, build, and test devices, models, structures, and/or systems A1.4 apply coding skills to investigate and	*Includes only a few activities that involve designing/building	Section 8.1 Section 11.2	D21 Quick Lab, p. 459 D24 Inquiry Activity, p. 466 C17 Problem-Solving Activity, p. 320 D17 Quick Lab, p. 453
to model scientific concepts and relationships			
A1.5 apply their knowledge and understanding of safe practices and procedures, including the Workplace Hazardous Materials Information System (WHMIS), while planning and carrying out hands-on investigations	High	Sections 2.1, 2.2 Sections 4.1, 4.2, 5.1, 5.2 Sections 7.3, 8.1, 8.2 Sections 10.3, 11.1, 11.2, 11.3	A11 Quick Lab, p. 53 A14 Quick Lab, p. 69 B2 Quick Lab, p. 137 B3 Inquiry Activity, p. 144 B4 Quick Lab, p.146 B5 Quick Lab, p. 149 B7 Inquiry Activity, p. 156 B8 Inquiry Activity, p. 158 B10 Quick Lab, p. 169 B12 Quick Lab, p. 179 B13 Quick Lab, p. 186 Unit B Task, p. 244 C8 Quick Lab, p. 279 C13 Design a Lab, p. 303 C16 Inquiry Activity, p. 319 D10 Quick Lab, p. 424 D11 Quick Lab, p. 425 D12 Quick Lab, p. 433 D13 Quick Lab, p. 444 D15 Design a Lab, p. 446 D16 Quick Lab, p. 449

Page 3 of 15 Updated Jan 2023



			D17 Quick Lab, p. 453
			D18 Quick Lab, p. 454
			D18 Skill Builder Activity, p. 454
			D19 Inquiry Activity, p. 455
			D20 Inquiry Activity, p. 456
			D22 Inquiry Activity, p. 465
			D24 Inquiry Activity, p. 46
A2. Applications, Careers, and Connections	: analyse how scientific conc	epts and processes can	be applied in practical ways to address real-
world issues and in various careers, and des			
A2.1 design an experiment or a prototype	Moderate/High	Section 2.1	A17 Design a Lab, p. 82
to explore a problem relevant to a STEM-		Section 4.2	B9 Design a Lab, p. 160
related occupation, such as a skilled trade,	*D13 is relevant to a	Section 8.1	C13 Design a Lab, p. 303
using findings from research	skilled trade—electrician	Section 11.1	D13 Design a Lab, p. 444
A2.2 describe how scientific innovations	Moderate	Unit B	Investigating Careers in Science, p. 162
	Woderate	Section 9.2	
and emerging technologies, including	*Does not mention	Unit C	C26 Quick Lab, p. 361
artificial intelligence systems, impact			Investigating Careers in Science, p. 333
society and careers	Artificial intelligence. C26 discusses scientific	Unit D	Investigating Careers in Science, p. 469
	innovations		
A2.3 analyse how the development and	High	Section 2.1,	A12 Decision-Making Analysis, p. 64
application of science is economically,	nigii	Section 4.2,	B6 STSE, p. 155
• •		•	_ · ·
culturally, and socially contextualized, by		Sections 5.3, 6.3	B16 STSE, p. 200
investigating real-world issues		Sections 8.3, 9.3	B18 Case Study Decision-Making Analysis, p.
		Sections 10.3, 11.3,	201
		12.1	B28 STSE, p. 236
			B29 Case Study Decision-Making Analysis, p.
			237
			C19 STSE, p. 329
			C29 STSE, p. 370
			D9 STSE, p. 423
			D22 STSE, p. 464

Page 4 of 15 Updated Jan 2023



			D26 Case Study Decision-Making Analysis, p.
			486
			D27 Decision-Making Analysis, p. 488
A2.4 apply scientific literacy skills when	High	Sections 1.3, 2.2,	A1 STSE, p. 5
investigating social and environmental		3.2,	A8 STSE, p. 8
issues that have personal, local, and/or		Sections 4.2, 5.3,	A15 STSE, p. 81
global impacts		6.2	A22 STSE, p. 114
		Sections 8.3, 9.3,	B6 STSE, p. 155
		12.2	B16 STSE, p. 200
			B28 STSE, p. 236
			C1 STSE, p. 254
			C19 STSE, p. 329
			C29 STSE, p. 370
			D9 STSE, p. 423
			D22 STSE, p. 464
A2.5 analyse contributions to science by	Moderate	Section 2.2	Investigating Careers in Science, p. 86
people from various communities,		Section 4.2	Investigating Careers in Science, p. 162
including communities in Canada		Section 9.2	C26 STSE Quick Lab, p. 361

Strand B: Biology—Sustainable Ecosystems and Climate Change

Expectation	Degree of Fit	Chapter/Section	Assessment Opportunities
		References	
B1. Relating Science to Our Changing World	d: assess impacts of climate c	hange on ecosystem	sustainability and on various communities, and
describe ways to mitigate these impacts			
B1.1 assess impacts of climate change on	Moderate/Low	Section 2.1	Chapter 2 Review, p. 88: 2
the sustainability of local and global		Section 3.2	3.2 Check and Reflect, p. 116: 6, 10–12
ecosystems, describe local or global	*Focuses overall on		
initiatives for combatting climate change,	sustainability and briefly		
and identify solutions to address some of	mentions climate change		
the impacts			

Page 5 of 15 Updated Jan 2023



	as one of many threats to		
	ecosystems		
B1.2 assess impacts of climate change on	Absent		
communities in Canada, including First			
Nations, Métis, and Inuit communities			
B1.3 investigate and explain how	Absent		
sustainable practices used by various			
communities, including First Nations,			
Métis, and Inuit communities, reflect an			
understanding of the importance of the			
dynamic equilibrium of ecosystems			
B2. Investigating and Understanding Concep	ots: demonstrate an underst	anding of the dynamic	and interconnected nature of ecosystems,
including how matter cycles and energy flow	s through ecosystems		
B2.1 investigate interactions between the	High	Section 1.1	1.1 Check and Reflect, p. 21: 14
biosphere, hydrosphere, lithosphere, and		Section 1.2	1.2 Check and Reflect, p. 35: 4–6,
atmosphere, and explain why these			, ,
interactions are important for ecosystem			Chapter 1 Review, p. 48: 4, 17, 18
sustainability			Unit A Review, p. 124: 1, 4, 5,7, 19, 42
B2.2 explain how naturally occurring	Moderate/High	Section 1.2	1.2 Check and Reflect, p. 35: 4–7, 11–13,15
phenomena, including the cycling of matter	Woderate/Filgii	Section 1.3	1.2 Check and Reflect, p. 33. 4 7, 11 13,13
and the flow of energy, contribute to the	*Does not define	Section 1.5	1.3 Check and Reflect, p. 46: 2, 4, 5–8
dynamic equilibrium within and between	"dynamic equilibrium"		Chapter 1 Review, p. 48: 3, 18
1 -	only defines		Unit A Review, p. 124: 3, 20–22, 35
ecosystems	1 .		, , , ,
D2 2 commons and contined the mississis	"equilibrium"	Continu 1 2	1.2 Charle and Deflect in 25, 2, 10, 12, 14
B2.3 compare and contrast the processes	Moderate/High	Section 1.2	1.3 Check and Reflect, p. 35: 3, 10, 12, 14
of cellular respiration and photosynthesis,	*D		Chapter 1 Review, p. 48: 17, 18
and explain how their complementary	*Does not mention		Unit A Review, p. 124
relationship contributes to the dynamic	dynamic equilibrium		Office (Review), p. 124
equilibrium of ecosystems			
B2.4 investigate factors and processes,	Moderate	Section 2.1	2.1 Check and Reflect, p. 67: 2, 7, 9, 10
including biodiversity, air and water quality,		Section 2.2	2.2 Check and Reflect, p. 85: 1–8, 10–15
soil health, and succession, and explain			

Page 6 of 15 Updated Jan 2023



how they contribute to ecosystem sustainability	*Does not address succession		Chapter 2 Review, p. 88: 4, 6, 7, 8, 11, 13, 14, 15, 17, 21 Unit A Review, p. 124: 5, 12, 16
B2.5 explain the effects of various human activities on the dynamic equilibrium of ecosystems	Moderate/High *Does not address dynamic equilibrium	Sections 2.2	2.2 Check and Reflect, p. 85: 4, 11, 12, 14, 15 Chapter 2 Review, p. 88: 5, 7– 9, 11 Unit A Review, p. 88: 2, 4, 5, 7, 8–13, 15–17
B2.6 identify and use various indicators of climate change to describe the impacts of climate change on local and global ecosystems, and analyse how human activities contribute to climate change	*Chapter 2 focuses on sustainability rather than climate change	Section 2.1	Chapter 2 Review, p. 88: 4
B2.7 explain how sustainable practices related to the cycling of matter and the flow of energy can be applied in agricultural innovations	*Does not directly mention cycling of matter and flow of energy	Section 3.2	3.2 Check and Reflect, p. 116: 3, 5–7, 13 Unit A Review p. 124: 12, 14, 16, 32, 44

Strand C: Chemistry—The Nature of Matter

By the end of this course, students will:			
Expectation	Degree of Fit	Chapter/Section	Assessment Opportunities
		References	
C1. Relating Science to Our Changing World	assess social, environmenta	II, and economic impa	cts of the use of elements, compounds, and
associated technologies			
C1.1 assess social, environmental, and	Moderate/High	Section 6.3	B27 Quick Lab, p. 231
economic impacts of processes associated			B28 STSE, p. 236
with the life cycle of consumer products,	*Most content is not		B29 Case Study Decision-Making Analysis, p.
considering the elements and compounds	directly related to life		237
used to make them, and suggest ways to			

Page 7 of 15 Updated Jan 2023



enhance positive impacts and/or minimize negative impacts	cycles of consumer products		6.3 Check and Reflect, p. 238: 2, 3, 5–8, 10– 17
C1.2 analyse impacts of using emerging chemical technologies in various fields, including in the skilled trades, and assess factors that influence the development of these technologies	*Skilled trade is mentioned but doesn't use emerging technology. Great Canadians in Science discusses emerging technologies but not in relation to skilled trades	Section 4.2	Investigating Careers in Science, p. 162
C2. Investigating and Understanding Concept physical and chemical properties of common			of matter, including the structure of the atom, of elements in the periodic table
C2.1 investigate properties, changes, and interactions of matter that are important for the dynamic equilibrium of ecosystems and their sustainability	*Does not mention dynamic equilibrium, ecosystems, or sustainability. Focus is on physical and chemical properties of matter.	Section 4.1 Section 4.2	4.1 Check and Reflect, p. 147: 1–12 4.2 Check and Reflect, p. 161: 1–11 Chapter 4 Review, p. 164: 1–19 Unit B Review, p. 246: 1–7, 24–29, 31
C2.2 research the role of experimental evidence in the development of various atomic models, and compare and contrast different models of the atom	* Text includes content on development. The Quick Lab covers the "research" but doesn't emphasize "the role of experimental evidence"	Section 5.1	B11 Quick Lab, p. 176 5.1 Check and Reflect, p. 177: 3 Unit B Review, p. 246: 8, 9, 10

Page 8 of 15 Updated Jan 2023



C2.3 identify the location, relative mass, and charge of subatomic particles within an atom, using the Bohr-Rutherford model	High	Section 5.1	5.1 Check and Reflect, p. 177: 2, 4, 6, 8, 11 Chapter 5 Review, p. 206: 2, 3 Unit B Review, p. 248: 42, 53, 61
C2.4 explain the relationship between the position of an element in the periodic table and the structure of its atoms, using models	High	Section 5.3	B15 Quick Lab, p. 189 B17 Quick Lab, p. 200 5.3 Check and Reflect, p. 204: 10 Chapter 5 Review p. 206: 8, 9 Unit B Review, p. 246: 12, 13, 16, 17
C2.5 investigate the physical and chemical properties of elements, and use their findings to relate these properties to the organization of the periodic table, classify elements, and identify patterns in the periodic table	High	Section 5.2 Section 5.3	5.2 Check and Reflect, p. 187: 1, 2, 6–9 5.3 Check and Reflect, p. 204: 1–5, 7, 8, 10(d), 11–13 Chapter 5 Review, p. 206: 11, 12, 14, 16–18 Unit B Review, p. 246: 14, 15, 18, 35, 43, 44, 59
C2.6 investigate and describe physical and chemical properties of elements and compounds, including those that make up common household products	*Does not include information on common household products	Section 4.2 Section 6.1	4.2 Check and Reflect, p. 161: 1–11 Chapter 4 Review, p. 164: 4, 5, 7, 9, 10, 12 1 3, 17 6.1 Check and Reflect, p. 217: 8, 12 Chapter 6 Review, p. 240: 11(b) Unit B Review, p. 246: 4, 7, 24, 25, 26, 27, 28, 29, 32, 40 Unit B Review, p. 246: 3, 4, 7, 14, 15, 24–29, 31, 41, 45, 47, 51, 62, 65
C2.7 describe the relationship between the structure of simple compounds and their chemical formulas	High	Section 6.1 Section 6.2	6.1 Check and Reflect, p. 217: 2–7, 9, 10 6.2 Check and Reflect, p. 229: 1, 3–6, 8, 9 Chapter 6 Review, p. 240: 2, 4 –11 Unit B Review, p. 246: 21, 22, 33, 37–40, 55, 57, 58

Strand D: Physics—Principles and Applications of Electricity

|--|

Page 9 of 15 Updated Jan 2023



Expectation	Degree of Fit	Chapter/Section References	Assessment Opportunities	
D1. Relating Science to Our Changing World: assess social, environmental, and economic impacts of electrical energy production and				
consumption, and describe ways to achieve s		Section 12.1	D2C Decision Making Analysis in 49C	
D1.1 assess social, environmental, and	High	Section 12.1	D26 Decision-Making Analysis, p. 486	
economic benefits and challenges resulting from the production of electrical energy			D27 Decision-Making Analysis, p. 488 12.1 Check and Reflect, p. 489: 11	
from various sources			Chapter 12 Review, p. 500: 1, 2, 9	
Holli various sources			Unit D Task, p. 504	
			Unit D Review, p. 506: 63–65	
D1.2 evaluate how electrical energy	High	Section 12.1	D26 Decision-Making Analysis, p. 486	
production and consumption impact	Tilgii	Section 12.1	D27 Decision-Making Analysis, p. 488	
various communities locally or globally, and			12.1 Check and Reflect, p. 489: 11	
describe ways to achieve sustainable			Chapter 12 Review, p. 500: 3	
practices			Unit D Task, p. 504	
D1.3 develop a plan of action to address a	Moderate	Section 12.2	12.2 Check and Reflect, p. 498: 16	
local or global electrical energy production	Moderate		Chapter 12 Review, p. 500: 16–19	
or consumption issue, including strategies			Unit D Task, p. 504	
for energy conservation			Unit D Review, p. 506: 66, 67	
D1.4 analyse social, environmental, and	Moderate	Section 12.2	D29 STSE, p. 496	
economic impacts of emerging			D31 Quick Lab, p. 497	
technologies related to electrical energy	*Mentions		12.2 Check and Reflect, p. 498: 16	
production, consumption, storage, and	fluorescent		Unit D Task, p. 504	
conservation	light bulbs in D31,		Unit D Review, p. 506: 63	
	but does not include			
	new or "emerging			
	technology"			
D2. Investigating and Understanding Concepts: demonstrate an understanding of the nature of electric charges, including properties of static				
and current electricity				
D2.1 conduct investigations to explain the	High	Sections 10.1, 10.2	D2 Quick Lab, p. 395	
behaviour of electric charges in static and			D3 Inquiry Activity, p. 402	
current electricity, and to relate the			10.1 Check and Reflect, p. 403: 1– 6, 10, 11	
			D4 Quick Lab, p. 405	

Page 10 of 15 Updated Jan 2023



observed behaviour to the properties of subatomic particles and atomic structure			D5 Quick Lab, p. 412 D6 Quick Lab, p. 413 D7 Quick Lab, p. 414 10.2 Check and Reflect, p. 415: 2–9 Chapter 10 Review, p. 428: 1–7, 10, 12–21 D12 Quick Lab, p. 433 Unit D Review, p. 506: 2–12, 45, 47
D2.2 determine the conductivity of various materials by investigating their ability to hold or transfer electric charges	High	Sections 10.1, 11.1	10.1 Check and Reflect, p. 403: 7, 8, 9 Chapter 10 Review, p. 428: 12 D15 Design a Lab: p. 446 11.1 Check and Reflect, p. 447: 8, 10 Chapter 11 Review, p. 470: 13, 14 Unit D Review, p. 506: 17, 18, 43
D2.3 identify the components of a direct current (DC) circuit and explain their functions, and identify electrical quantities, their symbols, and their corresponding International System of Units (SI) units	High	Sections 11.1, 11.2	11.1 Check and Reflect, p. 447: 1– 3, 7–12 11.2 Check and Reflect, p. 457: 2, 3 Chapter 11 Review, p. 470, 1, 2, 6, 7 Unit D Review, p. 506: 16, 19
D2.4 investigate the relationships between electric current, potential difference, and resistance in electrical circuits, and develop a mathematical model to represent the relationships	High	Sections 11.1, 11.3	D21 Quick Lab, p. 459 11.1 Check and Reflect, p. 447: 5, 8, 9, 13, 14 D23 Inquiry Activity, p. 465 11.3 Check and Reflect, p. 467: 1–7 Chapter 11 Review, p. 470: 16, 17 Unit D Review, p.506: 16, 17, 18, 24, 25. 49, 52
D2.5 apply a mathematical model to calculate electric current, potential difference, and resistance in real-world situations	High	Section 11.3	11.3 Check and Reflect, p. 467: 8–12 Chapter 11 Review, p. 470: 8, 9, 11 Unit D Review, p. 506: 21, 22, 57–59, 61
D2.6 construct series and parallel circuits to compare electric current, potential difference, and resistance in both types of circuits	High	Section 11.2	D19 Inquiry Activity, p. 455 D20 Inquiry Activity, p. 456 11.2 Check and Reflect, p. 457: 1–7 Chapter 11 Review, p. 470: 3, 4, 5, 12

Page 11 of 15 Updated Jan 2023



			Unit D Review, p. 506: 20, 23, 48, 50
D2.7 explain the difference between	Absent		
electricity and electrical energy			
D2.8 determine the efficiency of various	Moderate	Section 12.2	12.2 Check and Reflect, p. 498: 5–7
electrical devices that consume or produce			Chapter 12 Review, p. 500: 7
electrical energy, and identify the energy	*Does not include		Unit D Review, p. 506: 62
transformations in each device	information on		
	identifying the		
	energy		
	transformations.		
	Various energy		
	sources for		
	producing electricity		
	are mentioned in		
	12.1, but does not		
	include questions on		
	the energy		
	transformations		

Strand E: Earth and Space Science—Space Exploration

Expectation	Degree of Fit	Chapter/Section	Assessment Opportunities		
•		References			
E1. Relating Science to Our Changing World: evaluate social, environmental, and economic impacts of space exploration and of technological					
innovations derived from space exploration					
E1.1 evaluate social, environmental, and	High	Sections 9.2, 9.3	C31 STSE Decision-Making Activity, p. 372		
economic impacts of space observation and			9.3 Check and Reflect, p. 374: 1, 4, 6, 7, 9, 10		
exploration			Chapter 9 Review, p. 376: 13, 19		
			Unit C Task, p. 380		
			Unit C Review, p. 382: 55, 62, 63		

Page 12 of 15 Updated Jan 2023



E1.2 evaluate how space observation and exploration technologies contribute to our understanding of climate change, natural disasters, and other phenomena E1.3 assess ways in which technological	Moderate Moderate/High	Section 9.2 Section 9.2	C25 Quick Lab, p. 353 (climate change is not mentioned by name but its effects are shown in photo) 9.2 Check and Reflect, p. 363: 8, 9, 10, 11 Chapter 9 Review, p. 376: 17 C25 Quick Lab, p. 353
innovations related to space observation and exploration are applied in various fields, including their contributions to sustainable practices on Earth	*Does not mention sustainable practices	Section 9.2	9.2 Check and Reflect, p. 363: 2, 5, 7–12 Chapter 9 Review, p. 376: 9, 15, Unit C Review, p. 382: 53, 54
E2. Investigating and Understanding Concep			
phenomena of the solar system and the univ			·
E2.1 describe the importance of the Sun and its characteristics, including its role in the solar system and in sustaining life on Earth	* Does not directly mention the importance of the sun in sustaining life on Earth, but this is covered indirectly in discussion of energy flow through ecosystems in Unit A Ch. 1.	Sections 7.1, 8.2, 8.3	Chapter 1 Review, p. 48: 17 (for the Sun's role in sustaining life) Unit A Review, p. 124: 4 7.1 Check and Reflect, p. 267: 2, 3 Chapter 7 Review, p. 290: 2(b) 8.2 Check and Reflect, p. 327: 1–5, 8.3 Check and Reflect, p. 331: 2, 3, 4, Chapter 8 Review, p. 334: 3, 4, 6, 7 Unit C Review, p. 382: 14, 15, 61
E2.2 explain how the Sun's energy causes natural phenomena on Earth, and how these phenomena contribute to renewable energy production	*Section 8.3 does not mention the Sun's unequal heating of Earth causing wind. Does not include references to how winds, tides, and the	Sections 8.3, 12.1	8.3 Check and Reflect, p. 331: 4, 5, 7, Chapter 8 Review, p. 334: 8, 13, 21 Unit C Review p. 382: 14, 16, 42, 43 12.1 Check and Reflect, p. 489: 4, 5, 6 Chapter 12 Review, p. 500: 2, 16(a) Unit D Review, p. 506: 28, 30, 33, 65

Page 13 of 15 Updated Jan 2023



	seasons contribute to energy production. Section 12.1, covers solar, wind, and tidal energy, but does not mention the Sun's role in them.		
E2.3 summarize observational evidence used to support theories about the origin and evolution of the universe and the solar system, considering diverse ways of knowing	*Limited content on diverse ways of knowing	Sections 7.3, 9.1	7.3 Check and Reflect, p. 288: 1, 2, 5–9 Chapter 7 Review, p. 290: p. 7, 10–12, 16 9.1 Check and Reflect, p. 351: 1–4 Chapter 9 Review, p. 376: 1–3, 14 Unit C Review, p. 382: 8, 22, 23, 48, 51, 59
E2.4 describe major components of the solar system and the universe and compare their characteristics	High	Sections 7.1, 7.2, 8.1, 8.2, 8.3	7.1 Check and Reflect, p. 267: 1, 6 7.2 Check and Reflect, p. 276: 1–12 Chapter 7 Review, p. 290: 2, 4–6, 13–15 8.1 Check and Reflect, p. 305: 1–13 8.2 Check and Reflect, p. 321: 7, 8 8.3 Check and Reflect, p. 331: 1, 2, Chapter 8 Review, p. 334: 1–9, 11, 12, 14, 15, 17–22 Unit C Review, p. 382: 5, 7, 9–13, 18–21, 25, 27, 36, 39, 40, 41, 44–47,
E2.5 quantify distances in the solar system and the universe by applying an understanding of relative distances and sizes and using appropriate units of measure	High	Section 7.1	7.1 Check and Reflect, p. 267: 4, 5, 12–14 Chapter 7 Review, p. 290: 3 Unit C Review, p. 382: 3, 4, 37, 38, 56
E2.6 conduct investigations to explain the causes of various astronomical phenomena that can be observed from Earth	*Questions do not involve investigating the phenomena	Section 8.3	C18 Quick Lab, p. 323 C20 Quick Lab, p. 330 8.3 Check and Reflect, p. 331: 3, 5, 6–11 Chapter 8 Review, p. 334: 12, 13 Unit C Review, p. 382: 19–21, 48, 50, 61

Page 14 of 15 Updated Jan 2023



Page 15 of 15 Updated Jan 2023