

Curriculum Correlation

Investigating Science and Technology 8 to Ontario Curriculum: Science and Technology, Grade 8 (2022)

Strand A: STEM Skills and Connections

Throughout Grade 8, in connection with the learning in the Life Systems, Matter and Energy, Structures and Mechanisms, and Earth and Space Systems strands, students will:

Expectation	Degree of Fit	Chapter/Section References	Section/Page References
A1. STEM Investigation and Communication Skills: use a scientific research process, a scientific experimentation process, and an engineering design process to conduct investigations, following appropriate health and safety procedures			
A1.1 use a scientific research process and associated skills to conduct investigations	High	Section 3.3 Sections 6.0, 6.2 Sections 9.1, 9.2 Sections 10.3, 11.3, 12.2	Unit A 3.3 A47 Decision-Making Analysis, p. 77 Unit B 6.0 B35 Quick Lab, p. 157 6.2 Decision-Making Analysis, p. 171 Unit C 9.1 C32 Decision-Making Analysis, p. 248 9.2 C37 Decision-Making Analysis, p. 257 Unit D 10.3 D17 Inquiry Activity, p. 301 11.3 D33 Decision-Making Analysis, p. 331 12.2 D43 Decision-Making Analysis, p. 250 Unit Task, p. 361
A1.2 use a scientific experimentation process and associated skills to conduct investigations	High	Sections 1.3, 2.2, 2.3, 3.0, 3.2 Chapter 4 Sections 5.1, 5.2 Sections 7.0, 7.2 Chapter 8 Sections 9.0, 9.2	Unit A 1.3 A16 Inquiry Activity, p. 22 1.3 A17 Inquiry Activity, p. 29 2.3 A32 Quick Lab, p. 53 3.0 Amoeba Race, p. 61 2.2 A28 Design a Lab, p. 48 3.2 A42 Inquiry Activity, p. 70 Unit B

		<p>Sections 10.0, 10.1, 10.2, 11.2, 11.3</p>	<p>4.0 B3 Quick Lab, p. 97 4.1 B7 Quick Lab, p. 103 4.1 B8 Inquiry Activity, p. 104 4.2 B 13 Quick Lab, p. 111 4.3 Quick Lab, p. 120 4.3 B20 Design a Lab, p. 121 5.1 B27 Inquiry Activity, p. 141 5.2 B32 Inquiry Activity, p. 149 Unit C 7.0 C3 Quick Lab, p. 191 7.2 C10 Quick Lab, p. 200 7.2 C11 Inquiry Activity, p. 201 8.0 Quick Lab—Teacher Demonstration, p. 209 8.1 C17 Design a Lab, p. 214, 8.2 C21 Inquiry Activity, p. 222 8.3 C25 Inquiry Activity, p. 230 9.0 C28 Quick Lab, p. 239 9.2 Inquiry Activity, p. 258 Unit C Task, p. 265 Unit D 10.0 D3 Quick Lab, p. 279 10.1 D8 Inquiry Activity, p. 288 10.2 D14 Inquiry Activity, p. 296 11.2 D27 Inquiry Activity, p. 322 11.3 D32 Quick Lab, p. 330 12.3 D46 Inquiry Activity, p. 355</p>
<p>A1.3 use an engineering design process and associated skills to design, build, and test devices, models, structures, and/or systems</p>	<p>High</p>	<p>Sections 1.2, 3.1 Section 5.1 Sections 8.2, 9.1 Section 11.1</p>	<p>Unit A 1.2 A10 Quick Lab, p. 21 3.1 Problem-Solving Activity, p. 65 Unit B Exploring: B1 Quick Lab, p. 92</p>

			<p>5.1 B28 Problem-Solving Activity, p. 142</p> <p>Unit C</p> <p>8.2 C22 Problem-Solving Activity, p. 224</p> <p>9.1 C33 Problem-Solving Activity, p. 249</p> <p>Unit C Task, p. 265</p> <p>Unit D</p> <p>11.1 D23 Problem-Solving Activity, p. 315</p>
A1.4 follow established health and safety procedures during science and technology investigations, including wearing appropriate protective equipment and clothing and safely using tools, instruments, and materials	High	Throughout	<p>Unit A</p> <p>1.1 A6 Quick Lab, p. 15</p> <p>1.2 A11 Quick Lab, p. 21</p> <p>1.2 A12 Quick Lab, p. 21</p> <p>1.3 A16 Inquiry Activity, p. 22</p> <p>1.3 A17 Inquiry Activity, p. 29</p> <p>2.1 A23 Inquiry Activity, p. 41</p> <p>2.2 A27 Inquiry Activity, p. 47</p> <p>2.2 A28 Design a Lab, p. 48</p> <p>2.3 A32 Quick Lab, p. 53</p> <p>3.2 A42 Inquiry Activity, p. 70</p> <p>Unit B</p> <p>All Quick Labs and Inquiry Activities</p> <p>Unit C</p> <p>Quick Labs, Inquiry Activities, Design a Labs, and Problem-Solving Activities, and Unit C Task</p> <p>Unit D</p> <p>All Quick Labs and Inquiry Activities</p> <p>Unit Test: 6</p>
A1.5 communicate their findings, using science and technology vocabulary and formats that are appropriate for specific audiences and purposes	High	Throughout	<p>Throughout the unit</p> <p>Examples:</p> <p>Unit A</p> <p>A47 Decision-Making Analysis, p. 77</p> <p>Check and Reflect, p. 66: 8</p>

		<p>Unit A Task, p. 83</p> <p>Unit B</p> <p>4.1 B7 Quick Lab, p. 103</p> <p>4.1 B8 Inquiry Activity, p. 104</p> <p>4.3 B19 Quick Lab, p. 120</p> <p>4.3 B20 Design a Lab, p. 121</p> <p>5.1 B27 Inquiry Lab, p. 141</p> <p>5.1 B28 Problem-Solving Activity, p. 142</p> <p>5.2 B32 Inquiry Activity, p. 149</p> <p>5.1 Check and Reflect, p. 143: 4, 7</p> <p>Unit B Review, p. 178: 3, 24, 32</p> <p>Unit C</p> <p>C10 Quick Lab, p. 200</p> <p>C14 Quick Lab, p. 209</p> <p>C17 Design a Lab, p. 214</p> <p>C21 Inquiry Activity, p. 222</p> <p>C22 Problem-Solving Activity, p. 224</p> <p>C25 Inquiry Activity, p. 230</p> <p>C28 Quick Lab, p. 239</p> <p>C32 Decision-Making Analysis, p. 248</p> <p>C33 Problem-Solving Activity, p. 249</p> <p>C38 Inquiry Activity, p. 258</p> <p>Unit C Task, p. 265</p> <p>Unit D</p> <p>11.1 Check and Reflect, p. 316: 6</p> <p>Chapter 11.0 Review, p. 334: 9</p> <p>Unit Review, p. 362: 21, 24</p> <p>Chapter 11.0 Quiz: 22</p> <p>Unit Test: 21</p>
<p>A2. Coding and Emerging Technologies: use coding in investigations and to model concepts, and assess the impact of coding and of emerging technologies on everyday life and in STEM-related fields</p>		

A2.1 write and execute code in investigations and when modelling concepts, with a focus on planning and designing programs	Absent		
A2.2 identify and describe impacts of coding and of emerging technologies, such as artificial intelligence systems, on everyday life, including skilled trades	Absent		
A3. Applications, Connections, and Contributions: demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences			
A3.1 describe practical applications of science and technology concepts in various occupations, including skilled trades, and how these applications address real-world problems	Moderate *Skilled trades are not mentioned.	Science and Technology in Your World feature	Unit A S&T in Your World, p. 55 Unit B S&T in Your World, p. 151 Unit C S&T in Your World, p. 233 Unit D S&T in Your World, p. 333
A3.2 investigate how science and technology can be used with other subject areas to address real-world problems	High	Section 3.3 Section 9.2 Sections 11.1, 11.3	Unit A 3.3 A46 Decision-Making Analysis, p. 76 3.3 A48 Decision Making Analysis, p. 77 Unit B S&T in Your World, p. 123 Unit C 9.2 C38 Inquiry Activity, p. 258 Unit D 11.3 D33 Inquiry Activity, p. 331 11.1 D23 Inquiry Activity, p. 315
A3.3 analyse contributions to science and technology from various communities	Absent		

Strand B: Life Systems—Cells

<i>By the end of Grade 8, students will:</i>			
Expectation	Degree of Fit		Section/Page References
B1. Relating Science and Technology to Our Changing World: assess developments in cell biology and their impact on individuals, society, and the environment			
B1.1 assess how various technologies have enhanced our understanding of cells and cellular processes (1.1)	High	Sections 1.1, 1.2, 3.3	1.1 A7 Thinking about ST&S, p. 16 3.3 Check and Reflect, p. 78: 7–9 S&T in Your World, p. 31 Chapter 1.0 Quiz: 24 Chapter 2.0 Quiz: 24 Chapter 3.0 Review, p. 80: 13 Chapter 3.0 Quiz: 22 Unit A Review, p. 87: 36 Unit A Test: 23
B1.2 analyse beneficial and harmful effects of developments in cell biology and associated emerging technologies on human health and the environment, while taking different perspectives into consideration (1.2)	High	Section 3.3	3.3 Check and Reflect, p. 78: 4–6, 8, 9 Chapter 1.0 Review, p. 33: 8 Chapter 2.0 Quiz: 24 Chapter 3.0 Review, p. 80–81: 8, 10, 11, 13, 14 Chapter 3.0 Quiz: 24 Unit A Review, p. 86–87: 31, 33, 40 Unit A Test: 30 A46 Decision-Making Analysis, p. 76 A47 Decision-Making Analysis, p. 77
B2. Exploring and Understanding Concepts: demonstrate an understanding of the basic structure and function of plant and animal cells and cell processes			
B2.1 demonstrate an understanding of cells, using cell theory (3.1)	High	Sections 1.0, 1.1, 2.3	1.1, 2.3 Check and Reflect, p. 16: 1; p. 54: 5 Chapter 1.0 Quiz: 7, 22 Chapter 2.0 Quiz: 23 Unit A Review, p. 84–87: 4, 5, 38, 39 Unit A Test: 1
B2.2 identify organelles and other cell components, including the nucleus, cell	High	Section 1.2	1.2 Check and Reflect, p. 23: 1, 2, 5, 6 Chapter 1.0 Review, p. 32: 2, 5

membrane, cell wall, chloroplasts, vacuole, mitochondria, and cytoplasm, and explain their basic functions (3.2)			Chapter 1.0 Quiz: 10, 11, 12 Unit A Review, p. 84–85: 6, 7, 20, 22 Unit A Test: 11–16, 22
B2.3 compare the structure and function of plant and animal cells (3.3)	High	Section 1.2	1.2 Check and Reflect, p. 23: 1, 2, 5, 6 Chapter 1.0 Review, p. 32: 5 Chapter 1.0 Quiz: 23 Unit A Review, p. 84: 3, 7 Unit A Test: 26
B2.4 explain the processes of diffusion and osmosis within a cell (3.4)	High	Section 1.3	1.3, 2.2 Check and Reflect, p. 30: 1, 3, 4; p. 49: 3 Chapter 1.0 Review, p. 32–33: 3, 6, 7, 9 Chapter 1.0 Quiz: 13, 14, 20, 21 Chapter 2.0 Review: 2, 3 Chapter 2.0 Quiz: 24 Unit A Review, p. 84–87: 8, 13, 29, 34, 35, 37 Unit A Test: 5, 24, 25 1.3 A16 Inquiry Activity, p. 28 1.3 A17 Inquiry Activity, p. 29
B2.5 describe various unicellular and multicellular organisms, and compare ways in which these two types of organisms meet their basic needs (3.5)	High	Chapter 2	2.1, 2.2 Check and Reflect, p. 42: 1–5; p. 49: 1–4, 6 Chapter 2.0 Review, p. 56: 5, 7 Chapter 2.0 Quiz: 1, 2, 7, 8, 10, 12, 22 Unit A Review, p. 85: 14, 16–18, 22 Unit A Test: 8, 21 A23 Inquiry Activity, p. 41
B2.6 describe the organization of cells into tissues, organs, and systems (3.6)	High	Sections 3.1, 3.2	3.1, 3.2 Check and Reflect, p. 66: 1–8; p. 71: 1, 2, 4–7 Chapter 3.0 Review, p. 80: 4, 6 Chapter 3.0 Quiz: 1, 2, 4, 6–21 Unit A Review, p. 86–87: 25–28, 38 Unit A Test: 3, 9, 10

Strand C: Matter and Energy—Fluids

<i>By the end of Grade 8, students will:</i>			
Expectation	Degree of Fit		Section/Page References
C1. Relating Science and Technology to Our Changing World: analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment			
C1.1 assess the environmental, social, and economic impacts of various innovations and technologies that are based on the properties of fluids (1.1)	High	Section 9.2	9.2 Check and Reflect, p. 260: 4–6 9.2 C37 Decision-Making Analysis, p. 257 Chapter 9.0 Review, p. 262: 6, 9–11, 13 Chapter 9.0 Quiz: 23 Unit C Review, p. 266: 16, 21, 25, 27, 33, 39 Unit C Test: 30
C1.2 assess the environmental and social impacts of fluid spills, including impacts on First Nations, Métis, and Inuit communities, and including the cost and technical challenges related to cleanup and remediation efforts (1.2, <i>new focus</i>)	Moderate *Does not include examples of spills on Indigenous land or other Indigenous-related info	Section 9.2	9.2 Check and Reflect, p. 260: 4–6 Chapter 9.0 Review: 9–11, 13 Chapter 9.0 Quiz: 13, 23 Unit C Review: 14–16, 21, 25, 27 Unit C Test: 29 9.2 C37 Decision-Making Analysis, p. 257
C2. Exploring and Understanding Concepts: demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids			
C2.1 demonstrate an understanding of the factors that affect viscosity, and compare the viscosity of various fluids, including volumetric flow rate (3.1, <i>flow rate new</i>)	High	Sections 8.1	8.1 Check and Reflect, p. 215: 1, 4–7 Chapter 8.0 Review, p. 234: 1, 2 Chapter 8.0 Quiz: 5, 7, 8 Unit C Review, p. 266: 6, 40 Unit C Test: 3, 19
C2.2 demonstrate an understanding of the relationship between mass, volume, and density (3.2)	High	Section 7.2, 8.2	8.2 Check and Reflect, p. 226: 4, 5, 7, 8 Chapter 8.0 Review, p. 234: 3, 4, 11, 14 Chapter 8.0 Quiz: 11, 12 Unit C Review, p. 266: 35, 36, 41 Unit C Test: 24, 25

			8.2 C21 Inquiry Activity, p. 223
C2.3 explain the difference between solids, liquids, and gases in terms of their density, using the particle theory of matter (3.3)	High	Sections 7.2, 8.1, 8.2	7.2, 8.1, 8.3 Check and Reflect, p. 202: 2, p. 215: 2, 3, 6, p. 226: 1, 2 Chapter 7.0 Review, p. 204: 11, 12 Chapter 7.0 Quiz: 14 Chapter 8.0 Review, p. 234: 5 Chapter 8.0 Quiz: 22 Unit C Review, p. 266: 4 Unit C Test: 5, 22
C2.4 explain the difference between liquids and gases in terms of their compressibility and how their compressibility affects their technological applications (3.4)	High	Sections 8.3, 9.1	8.3, 9.1 Check and Reflect, p. 232: 3; p. 250: 2, 3, 9 Chapter 8.0 Review, p. 234: 7, 8 Chapter 9.0 Review, p. 262: 2, 6 Chapter 9.0 Quiz: 22 Unit C Review, p. 266: 8, 37, 40 Unit C Test: 22 8.3 C25 Inquiry Activity, p. 231
C2.5 determine the buoyancy of an object, given its density, in a variety of fluids (3.5)	Moderate *Does not include information on determining buoyancy. Provides one question in the Student Book	Section 8.2	Chapter 8.0 Review: 11 Chapter 8.0 Quiz: 10 Unit C Review: 10, 23, 28 Unit C Test: 25
C2.6 explain in qualitative terms the relationship between pressure, volume, and temperature when a liquid or a gas is compressed or heated (3.6)	High	Section 8.3	7.2, 8.3 Check and Reflect, p. 202: 6; p. 232: 6 Chapter 7.0 Review, p. 204: 4, 8 Chapter 7.0 Quiz: 13 Chapter 8.0 Quiz: 9 Unit C Review p. 266: 17, 18

			Unit C Test: 26, 28
C2.7 describe how forces are transferred in all directions in fluids, including using Pascal’s law to quantify the transfer of forces in fluids (3.7)	High	Section 9.1	9.1 Check and Reflect, p. 250: 1, 4, 7, 10 Chapter 9.0 Review, p. 262: 1 Chapter 9.0 Quiz: 6 Unit C Review, p. 266: 1 Unit C Test: 9, 10
C2.8 describe factors that affect the flow of fluids	High	Section 8.1	8.1 Check and Reflect, p. 215: 1–4, 6 Chapter 8.0 Review, p. 234: 1, 2
C2.9 describe the differences between pneumatic and hydraulic systems	High	Section 9.1	9.1 Check and Reflect, p. 250: 2 9.0 Chapter Review, p. 262: 2, 4–6 Unit C Review, p. 266: 12,
C2.10 compare how fluids are used and how their flow is regulated in living organisms and in mechanical devices or systems (3.8)	Moderate	Sections 7.1, 9.1	Chapter 9.0 Review, p. 262: 15 Chapter 9.0 Quiz: 9 Unit C Review, p. 266: 41 Unit C Test: 23

Strand D: Structures and Mechanisms—Systems in Action

<i>By the end of Grade 8, students will:</i>			
Expectation	Degree of Fit		Section/Page References
D1. Relating Science and Technology to Our Changing World: assess the social and environmental impacts of various systems, and evaluate improvements to the systems or alternative ways of meeting the same needs			
D1.1 assess the social, economic, and environmental impacts of automating systems (1.1)	High	Section 6.2	6.2 Check and Reflect, p. 172: 3, 6–10 6.2 B43 Decision-Making Analysis, p. 171 Chapter 6.0 Review, p. 175: 10 Chapter 6.0 Quiz: 12, 24
D1.2 assess the impact on individuals, society, and the environment of alternative ways of meeting needs that are currently met by existing systems, taking different points of view into consideration (1.2)	High	Section 6.2	6.2 Check and Reflect, p. 172: 8, 9 Chapter 6.0 Review, p. 175: 10 Chapter 6.0 Quiz: 22, 24 Unit B Review, p. 180: 34, 39

D2. Exploring and Understanding Concepts: demonstrate an understanding of different types of systems and the factors that contribute to their safe and efficient operation			
D2.1 identify various types of systems (3.1)	High	Sections 4.0, 6.0, 6.1	6.1 Check and Reflect, p. 163: 1 Chapter 6.0 Review, p. 174: 4, 7 Chapter 6.0 Quiz: 1, 3, 6, 16 Unit B Review, p. 178: 2, 35 Unit B Test: 1
D2.2 describe the purpose, inputs, and outputs of various systems, including systems related to food processing (3.2, <i>but food systems is new</i>)	Moderate *Does not include information on food systems	Section 4.3	4.3 Check and Reflect, p. 122: 1, 3, 4, Chapter 4.0 Review, p. 124: 11, 17 Unit B Review, p. 178: 11 Unit B Test: 25, 26
D2.3 identify the various processes and components of a system that allow it to perform its function efficiently and safely (3.3)	High	Section 5.1, 5.2	5.1 Check and Reflect, p. 143: 1, 2, 4, 7 Chapter 5.0 Review, p. 153: 11 6.1 Check and Reflect, p. 163: 2, 3, 9 Chapter 6.0 Review, p. 174: 1, 3, 7 Chapter 6.0 Quiz: 7, 8, 10 Unit B Review, p. 179: 26 Unit B Test: 16, 27
D2.4 use the scientific terms <i>displacement, force, work, energy, and efficiency</i> to describe everyday experiences (3.4, <i>but focus is a bit different</i>)	Moderate *Does not include information on “displacement”	Sections 4.1, 4.2, 5.2	4.1 Check and Reflect, p. 105: 1–6 4.2 Check and Reflect, p. 112: 1–5 Chapter 4.0 Review, p. 124: 1, 3, 4, 9 Chapter 4.0 Quiz: 2, 4, 7, 9, 12, 17–20 5.2 Check and Reflect, p. 150: 1, 3, 4 Chapter 5.0 Quiz: 4 Unit B Review, p. 178: 1, 3, 6 Unit B Test: 2, 4, 5, 12, 15
D2.5 demonstrate an understanding of the relationships between work, force, and displacement in simple systems (3.5)	Moderate *Does not mention “displacement” (a vector quantity), only	Section 4.2	4.2 Check and Reflect, p. 112: 6–9 Chapter 4.0 Review, p. 125: 14, 25(a), 29, 32(b), 32(c) Chapter 4.0 Quiz: 13, 22

	uses “distance” a scalar quantity)		
D2.6 explain the relationship between input and output forces and determine the mechanical advantage of various mechanical systems, including simple machines (3.6; <i>input and output is new</i>)	High	Sections 4.3, 5.1	4.3 Check and Reflect, p. 122: 2–4, 6–8 Chapter 4.0 Review, p. 125: 15 Unit B Review, p. 179: 30, 32(a) Unit B Test: 14, 21, 24
D2.7 identify ways in which energy can dissipate from mechanical systems, and describe technological innovations that make these systems more efficient (3.7)	High	Sections 4.3, 5.2	4.3 Check and Reflect, p. 122: 5 Chapter 4.0 Review, p. 124: 6, 10 Chapter 4.0 Quiz: 12 5.2 Check and Reflect, p. 150: 2, 4 Unit B Review, p. 178: 13, 14, 23, 24 Unit B Test: 17, 19
D2.8 explain how providing information and support to consumers helps to ensure that the systems they use run safely and efficiently	Low	Section 6.1	6.1 B38 Quick Lab, p. 161
D2.9 describe technological innovations involving mechanical systems that have increased productivity in various industries (3.8)	High	Section 6.2	6.2 Check and Reflect, p. 172: 2 Chapter 6.0 Review, p. 174: 4 Chapter 6.0 Quiz: 3, 11 Unit B Review, p. 178: 17 Unit B Test: 28, 30
D2.10 identify social factors that influence the evolution of a system (3.9)	High	Section 6.1	6.1 Check and Reflect, p. 163: 4, 8, 9 Chapter 6.0 Review, p. 174: 8 Chapter 6.0 Quiz: 9, 12, 24 Unit B Review, p. 180: 36

Strand E: Earth and Space Systems—Water Systems

<i>By the end of Grade 8, students will:</i>			
Expectation	Degree of Fit		Section/Page References

E1. Relating Science and Technology to Our Changing World: assess the impact of human activities and technologies on the sustainability of water resources			
E1.1 assess the social and environmental impact of the scarcity of fresh water, and propose a plan of action to help address fresh water sustainability issues (1.1, new focus)	Moderate *Does not address water scarcity	Sections 11.3, 12.1	12.1 Check and Reflect, p. 344: 2 12.1 D39 Inquiry Activity, p. 344 Chapter 12.0 Review, p. 358: 1, 2, 5, 6 Unit Task, p. 361 Unit Review, p. 362: 18, 19 Chapter 12.0 Quiz: 1, 4, 5, 6–10, 17–21, 23 Unit Test: 2–4, 7, 20, 24
E1.2 demonstrate an understanding of First Nations, Métis, and Inuit knowledges and values about water, connections to water, and ways of managing water resources sustainably	Absent		
E1.3 assess the impact of scientific discoveries and technological innovations on local and global water systems (1.3)	High	Section 12.3	12.3 Check and Reflect, p. 356: 2, 4–6 Chapter 12.0 Review, p. 358: 4, 7, 8 Unit Review, p. 362: 13, 18 Chapter 12.0 Quiz: 3, 13–15, 24 Unit Test: 27, 29
E2. Exploring and Understanding Concepts: demonstrate an understanding of the characteristics of Earth’s water systems and of factors that affect these systems			
E2.1 identify the states of water on Earth’s surface, their distribution, relative amounts, and circulation, and the conditions under which they exist (3.1)	High	Section 10.1	10.1 Check and Reflect, p. 289: 1, 2, 4 Chapter 10.0 Review, p. 304: 1–4 Unit Review, p. 362: 1, 3 Chapter 10.0 Quiz: 2–5, 12, 14, 16, 17, 19 Unit Test: 9, 15
E2.2 demonstrate an understanding of a watershed, and explain its importance to water management and planning (3.2)	High	Section 10.1	10.1 Check and Reflect, p. 289: 3, 5–7 Chapter 10.0 Review, p. 304: 5, 6 Unit Review, p. 362: 20 Chapter 10.0 Quiz: 13, 18, 21, 24 Unit Test: 1

E2.3 explain how human activity and natural phenomena cause changes in the water table (3.3)	High	Section 11.1	11.1 Check and Reflect, p. 316: 1–5 Chapter 11.0 Review, p. 334: 5, 7 Unit Review, p. 362: 6, 7 Chapter 11.0 Quiz: 7–9, 13, 20 Unit Test: 13, 22, 23
E2.4 identify factors, including climate change, that have contributed to the melting of glaciers and polar ice-caps, and describe the effects of this phenomenon on local and global water systems (3.4)	Moderate *Does not mention climate change	Section 10.3	10.3 Check and Reflect, p. 302: 1–5 Chapter 10.0 Review, p. 304: 7 Unit Review, p. 362: 1, 5 Chapter 10.0 Quiz: 1, 15, 23
E2.5 explain changes in atmospheric conditions caused by the presence of bodies of water (3.5)	High	Section 10.2	10.2 Check and Reflect, p. 297: 1–4 Unit Review, p. 362: 5, 14, 22 Chapter 10.0 Quiz: 9–11, 20, 22 Unit Test: 10
E2.6 describe various indicators of water quality, and explain the impact of human activity on those indicators	Moderate	Sections 10.2, 11.2	10.2 Check and Reflect, p. 297: 1–4 Unit Review, p. 362: 5, 14, 22 Chapter 10.0 Quiz: 9–11, 20, 22 Unit Test: 10
E2.7 explain how municipalities process water and manage water usage	High	Sections 11.2, 11.3, 12.1	11.2, 11.3 Check and Reflect, p. 323: 2–5; p. 332: 1–5 Chapter 11.0 Quiz: 6, 22, 14, 15, 24 Unit Test: 14, 18, 26