

# Lesson Plan Overviews

Lesson	TE pages	ST pages	AM pages	Objectives and Christian Worldview	Process Skills
1	2-3	1-2	1	<ul style="list-style-type: none"> <li>Define <i>worldview</i></li> <li>List characteristics of a Christian worldview</li> <li>Apply a Christian worldview to science</li> </ul>	
<b>Chapter 1: Living Things</b>					
2	4-7	3-5	3	<ul style="list-style-type: none"> <li>Recognize the interrelationship of science concepts</li> <li>Explain that a wildlife manager uses wisdom</li> <li>Apply the concept of wisdom to each student's responsibilities</li> </ul> <p><i>God as source of all wisdom</i> <i>God's use of creation for His glory</i></p>	
3	8-11	6-9	4	<ul style="list-style-type: none"> <li>Identify the parts of an ecosystem</li> <li>Identify the basic needs of living things</li> <li>Recognize that basic needs are met through resources</li> <li>Name an example of competition</li> </ul> <p><i>People as God's special creation</i> <i>God's variety in creation</i> <i>God's provision for His creation</i></p>	
4	12-13		5-6	<p><b>Answers in Genesis</b></p> <ul style="list-style-type: none"> <li>Explain why it is necessary to look at the world with a biblical perspective</li> <li>Explain from the Bible the sources of food for both people and animals before the Fall</li> <li>Analyze different kinds of teeth through the lens of Scripture</li> </ul>	
5-6	14-17	10-13	7-8	<ul style="list-style-type: none"> <li>List ways that God provides food for plants and animals</li> <li>Describe how plants get food</li> <li>Identify characteristics animals use to get food</li> <li>Identify types of shelters animals use</li> <li>Describe how working together benefits some animals</li> </ul>	
7	18-19		9-10	<p><b>Science Skill: A Science Experiment</b></p> <ul style="list-style-type: none"> <li>Use a scientific method</li> </ul>	
8-9	20-21	14-15	11-12	<p><b>Activity: Copying Nature</b></p> <ul style="list-style-type: none"> <li>Model different kinds of bird beaks</li> <li>Relate the results to actual birds</li> <li>Communicate information to other students</li> </ul> <p><i>God's provision for His creation</i> <i>Imitation of creation by people</i></p>	Communicating Using models Inferring Classifying
10-11	22-25	16-19	13-16	<ul style="list-style-type: none"> <li>Describe adaptations from a Christian worldview</li> <li>Identify camouflage, mimicry, migration, and hibernation as ways animals survive</li> <li>Name some examples of camouflage, mimicry, migration, and hibernation</li> </ul> <p><i>Consequences of sin on God's perfect creation</i> <i>The Flood's effect on the earth</i></p>	
12	26-27	20-21	17-18	<p><b>Activity: Hiding and Finding</b></p> <ul style="list-style-type: none"> <li>Observe how camouflage works</li> <li>Record and interpret data</li> </ul>	Recording and interpreting data Using numbers Inferring Communicating
13-14	28	22		<p><b>Exploration: Striving to Survive</b></p> <ul style="list-style-type: none"> <li>Research an endangered plant or animal</li> <li>Write about an endangered plant or animal</li> </ul>	

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				<ul style="list-style-type: none"> <li>Give an oral presentation with a visual <i>People as stewards of God's creation</i></li> </ul>	
15	29–31	23–25	19	<ul style="list-style-type: none"> <li>Recognize that each living thing has an effect on its environment</li> <li>Infer that increased development often results in decreased habitats for plants and animals</li> <li>Identify pollution as anything that makes the water, air, or land dirty <i>People as stewards of the earth's resources</i> <i>God's creation for mankind's enjoyment</i> <i>God's provision for His creation</i></li> </ul>	
16	32	26	20	<p><b>Chapter Review</b></p> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 1</li> <li>Apply knowledge to everyday situations <i>People as stewards of God's creation</i></li> </ul>	
17	32			<p><b>Chapter 1 Test</b></p> <ul style="list-style-type: none"> <li>Demonstrate knowledge of concepts taught in Chapter 1</li> </ul>	
<b>Chapter 2: Insects and Spiders</b>					
18	33	27	21	<ul style="list-style-type: none"> <li>List ways that a beekeeper uses wisdom</li> <li>Explain how beekeeping fits into a Christian worldview of science</li> <li>Defend the claim that keeping bees is an activity that pleases God</li> </ul>	
19	34–35	28–29	22	<ul style="list-style-type: none"> <li>Recognize that arthropods are one kind of invertebrate</li> <li>Explain why an insect is an arthropod</li> <li>Identify insects as the largest group of arthropods</li> <li>Identify parts of an insect</li> </ul>	
20–21	36–37	30–31	23–24	<p><b>Exploration: Insect Collection</b></p> <ul style="list-style-type: none"> <li>Identify insects</li> <li>Record observations about insects</li> <li>Organize collected insects in a display</li> </ul>	
22–23	38–41	32–35	25–26	<ul style="list-style-type: none"> <li>List ways that God gives each insect what it needs to survive in its ecosystem</li> <li>Identify ways insects protect themselves</li> <li>Name insects that have chewing mouthparts</li> <li>Name insects that have sucking mouthparts</li> </ul>	
24–25	42–43	36–37	27–28	<p><b>Activity: Amazing Discovery</b></p> <ul style="list-style-type: none"> <li>Make a model of an imaginary insect</li> <li>Apply information about insects and environments</li> <li>Use and define terms in context <i>God's variety in creation</i> <i>People as God's image-bearers</i></li> </ul>	Defining operationally Making and using models Communicating
26–27	44–45	38–39	29–31	<ul style="list-style-type: none"> <li>Name two insects that go through incomplete metamorphosis</li> <li>Describe the stages of incomplete metamorphosis</li> <li>Name two insects that go through complete metamorphosis</li> <li>Describe the stages of complete metamorphosis</li> </ul>	
28	46–49	40–43	32	<ul style="list-style-type: none"> <li>Recognize that some insects live and work together in groups</li> <li>Describe some ways honeybees work together</li> <li>Compare different types of ants</li> <li>Name some jobs that members of an insect colony have <i>God's perfect design</i></li> </ul>	
29–30	50–51	44–45	33–34	<p><b>Activity: What's for Lunch?</b></p> <ul style="list-style-type: none"> <li>Observe and compare the ants' responses to different foods <i>Christians' use of science to show God's love to others</i></li> </ul>	Observing Classifying Communicating

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31	52–53		35–38	<b>Study Skill: PQ3R</b> • Use the PQ3R method to read informational text	
32–33	54–57	46–49	39	• Compare the bodies of insects and spiders • Describe some ways spiders get their food • Identify two poisonous spiders <i>God's design of the smallest creatures</i>	
34	58	50	40	<b>Chapter Review</b> • Recall concepts and terms from Chapter 2 • Apply knowledge to everyday situations <i>People as stewards of God's creation</i>	
35	58			<b>Chapter 2 Test</b> • Demonstrate knowledge of concepts taught in Chapter 2	
<b>Chapter 3: Plants</b>					
36	59	51	41	• Describe the goals of a landscape architect • Explain how a landscape architect reaches these goals • Justify the work of a landscape architect from Genesis 1:28	
37–38	60–63	52–55	42	• Identify and describe parts of a flower • Explain when pollination occurs • Name three ways plants can be pollinated <i>God's creation for the enjoyment of people</i> <i>God's provision for His creation</i> <i>People as stewards of God's creation</i>	
39	64–66	56–58	43–44	• Recognize that a fruit is the part of a plant that contains seeds • Name four ways seeds can be dispersed • Identify the parts of a seed <i>Seeds as an illustration of God's design</i>	
40–41	67	59		<b>Exploration: Find that Seed!</b> • Observe seeds in fruits • Record information about seeds	
42	68–70	60–62	45–49	• Identify some conditions a seed needs to germinate • Describe the life cycle of a plant • Name some ways plants reproduce without seeds <i>God's Word as the only true source of guidance</i> <i>Human life as an illustration of the Bible's pattern of sowing and reaping</i>	
43	71–72		50	<b>Science Skill: Measuring Mass and Volume</b> • Measure mass to the nearest gram • Measure volume using milliliters	
44	73–74	63–64	51–52	<b>Activity: Destination Germination</b> • Experiment to test a hypothesis • Infer conditions needed for green beans to germinate <i>People's responsibility to glorify God</i>	Hypothesizing Observing Inferring Identifying and controlling variables Collecting and recording data
45–46	75–77	65–67	53–54	• Describe some ways botanists classify plants • Identify a fern as a plant that reproduces by spores • Differentiate between the locations of seeds in flowering plants and in conifers <i>God's perfect design</i>	
47–48	78–79	68–69	55–56	<b>Activity: Classifying Leaves</b> • Classify leaves by chosen criteria	Classifying Observing

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				<ul style="list-style-type: none"> <li>Communicate classification criteria to others</li> </ul>	Communicating
49	80	70	57	<b>Chapter Review</b> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 3</li> <li>Apply knowledge to everyday situations</li> </ul> <i>Interrelationship of parts of creation</i>	
50	80			<b>Chapter 3 Test</b> <ul style="list-style-type: none"> <li>Demonstrate knowledge of concepts taught in Chapter 3</li> </ul>	
<b>Chapter 4: Forces and Machines</b>					
51	82–85	71–73	59	<ul style="list-style-type: none"> <li>Recognize the interrelationship of science concepts</li> <li>Explain how movers use machines to make work easier and safer</li> </ul> <i>Christians' use of science to show God's love to others</i>	
52–53	86–89	74–77	60	<ul style="list-style-type: none"> <li>Identify gravity and friction as forces</li> <li>Name examples of how friction is helpful</li> <li>Describe relationships between forces and movement</li> <li>Describe how the amount of work done is related to the amount of force and distance</li> </ul>	
54–55	90–91		61–62	<b>Exploration: Make a Machine</b> <ul style="list-style-type: none"> <li>Design a plan to solve a problem</li> <li>Apply knowledge of simple machines</li> <li>Summarize the function of the diagram in writing</li> <li>Produce a diagram</li> </ul> <i>Christians' use of science to show God's love to others</i>	
56–57	92–95	78–81	63–64	<ul style="list-style-type: none"> <li>Explain how simple machines make work easier</li> <li>Differentiate between the effort and the load</li> <li>Describe kinds of levers</li> <li>Name examples of different levers</li> </ul>	
58	96–97	82–83	65–66	<b>Activity: How Much Effort?</b> <ul style="list-style-type: none"> <li>Experiment to determine how the position of the fulcrum affects the amount of effort</li> <li>Predict how many pennies are needed to balance a lever when the fulcrum is in given positions</li> </ul> <i>Christians' use of science to show God's love to others</i>	Predicting Experimenting Identifying variables Inferring
59	98–101	84–87	67	<ul style="list-style-type: none"> <li>Use a wheel and axle to show how distance and force are related</li> <li>Recognize that gears are a special kind of wheel and axle</li> <li>Identify where the load and effort are when a fixed pulley is used</li> <li>Explain how adding movable pulleys to a block and tackle decreases the effort needed</li> <li>Name some examples of wheel and axles and pulleys</li> </ul> <i>People created in God's image</i>	
60	102–3	88–89	68–70	<ul style="list-style-type: none"> <li>Identify inclined planes, screws, and wedges as simple machines</li> <li>Name examples of inclined planes, screws, and wedges</li> </ul> <i>People as stewards of God's creation</i> <i>Imitation of creation by people</i> <i>People to serve God with work</i>	
61	104–5		71–72	<b>Answers in Genesis</b> <ul style="list-style-type: none"> <li>Conclude from the Bible record that ancient people were intelligent</li> <li>Infer the possible roles of simple machines in the construction of Noah's ark</li> <li>Describe the ark as a picture of Jesus Christ and salvation</li> </ul>	
62	106–7	90–91	73	<b>Activity: Vroom, Vroom!</b> <ul style="list-style-type: none"> <li>Infer the relationship between force and work</li> </ul>	Identifying and controlling variables

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				<ul style="list-style-type: none"> <li>Compare the results of changing variables</li> </ul>	Hypothesizing Experimenting Inferring
63	108	92	74	<b>Chapter Review</b> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 4</li> <li>Apply knowledge to everyday situations</li> </ul>	
64	108			<b>Chapter 4 Test</b> <ul style="list-style-type: none"> <li>Demonstrate knowledge of concepts taught in Chapter 4</li> </ul>	
<b>Chapter 5: Electricity and Magnetism</b>					
65	109	93	75	<ul style="list-style-type: none"> <li>Describe how a power-line worker works safely</li> <li>Defend the claim that we should be concerned about the safety of other people</li> <li>Create some rules concerning safety around electricity for your class</li> </ul> <i>Christians' use of science to show God's love to others</i>	
66-67	110-13	94-97	76	<ul style="list-style-type: none"> <li>Identify that all matter is made up of small particles</li> <li>Identify when an object is positively or negatively charged or neutral</li> <li>Describe static electricity</li> <li>Describe what happens when different charges are brought near each other</li> </ul> <i>People as stewards of God's creation</i>	
68-69	114-17	98-101	77-80	<ul style="list-style-type: none"> <li>Differentiate between current electricity and static electricity</li> <li>Contrast conductors, insulators, and resistors</li> <li>Differentiate between a series circuit and a parallel circuit</li> <li>Identify the two parts of a circuit</li> </ul> <i>Christians' use of science to show God's love to others</i> <i>People as stewards of God's creation</i>	
70	118-19	102-3	81	<b>Activity: Conductors Needed</b> <ul style="list-style-type: none"> <li>Predict whether items are conductors or insulators</li> <li>Form a generalization about the types of materials that are conductors</li> </ul>	Defining operationally Predicting Experimenting Recording data
71	120-22	104-6	82	<ul style="list-style-type: none"> <li>Form generalizations about the types of materials that are attracted to magnets</li> <li>Identify the place on a magnet where magnetism is the strongest</li> <li>Identify uses of magnets</li> </ul> <i>People as stewards of God's creation</i>	
72-74	123-25	107	83-84	<b>Study Skill: Keyword Search</b> <ul style="list-style-type: none"> <li>Understand that the words chosen to type into a search engine have a direct connection to the sources that are suggested by their results</li> <li>Practice converting questions to a set of keywords for use in developing queries</li> </ul> <b>Exploration: Magnetic Search</b> <ul style="list-style-type: none"> <li>Identify search terms and create queries for research</li> </ul>	
75	126-27	108-9	85-86	<b>Activity: How Strong Is Your Magnet?</b> <ul style="list-style-type: none"> <li>Test the strengths of the magnetic fields of magnets</li> <li>Test the fact that the magnetic fields are strongest at the poles of a magnet</li> </ul>	Recording data Experimenting Observing Inferring Defining operationally
76	128-31	110-13	87-89	<ul style="list-style-type: none"> <li>Explain why electromagnets are temporary magnets</li> <li>List some uses for electromagnets</li> <li>Describe two relationships between magnetism and electricity</li> <li>Describe how a generator works</li> </ul> <i>Interrelationship of the parts of creation testifies of God's design</i> <i>God-given curiosity of people</i>	

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				<i>Responsibility of people to glorify God</i>	
77	132	114	90	<b>Chapter Review</b> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 5</li> <li>Apply knowledge to everyday situations</li> </ul>	
78	132			<b>Chapter 5 Test</b> <ul style="list-style-type: none"> <li>Demonstrate knowledge of concepts taught in Chapter 5</li> </ul>	
<b>Chapter 6: Light</b>					
79	133	115	91	<ul style="list-style-type: none"> <li>Defend the importance of work for a Christian</li> <li>Describe ways that a photographer uses light</li> <li>Create images using more and less light</li> </ul> <i>People to serve God with work</i>	
80–81	134–37	116–19	92–93	<ul style="list-style-type: none"> <li>Recognize that light travels in a straight line</li> <li>Identify luminous objects</li> <li>Differentiate between transparent, translucent, and opaque objects</li> </ul> <i>God as Master of creation</i> <i>God's provision for His creation</i> <i>Jesus as the true light</i>	
82	138–39	120–21	94–96	<ul style="list-style-type: none"> <li>Identify the location of a light source based on the position of a shadow</li> <li>Explain how shadows can be used to tell time</li> </ul> <i>God as Master of creation</i>	
83	140–41			<b>Science Skill: Measuring Length</b> <ul style="list-style-type: none"> <li>Measure length to the nearest centimeter</li> </ul>	
84	142–43	122–23	97–98	<b>Activity: Shadows Big and Small</b> <ul style="list-style-type: none"> <li>Demonstrate that light travels in straight lines</li> <li>Summarize the relationship between a light source and shadows produced</li> </ul>	Inferring Measuring Experimenting Collecting and recording data
85–86	144–47	124–27		<ul style="list-style-type: none"> <li>List the colors of the visible spectrum</li> <li>Explain why an object appears to be a certain color</li> <li>Explain why a straight object in a glass of water may appear bent</li> </ul> <i>God's provision for His creation</i> <i>God keeps His promises</i>	
87	148–51	128–31	99–102	<ul style="list-style-type: none"> <li>Identify the parts of the eye and their functions</li> <li>Sequence how light travels through the eye</li> <li>Differentiate between farsighted vision and nearsighted vision</li> <li>Compare how light is refracted in different kinds of lenses</li> </ul> <i>Christians' use of science to show God's love to others</i>	
88–89	152	132		<b>Exploration: I Spy My Eye</b> <ul style="list-style-type: none"> <li>Make a model of an eye</li> <li>Demonstrate knowledge of the parts of an eye</li> </ul> <i>Wonder of God's creation</i>	
90	153	133	103	<b>Exploration: Seeing Things More Closely</b> <ul style="list-style-type: none"> <li>Observe an object through several magnifying glasses</li> <li>Draw a detailed representation of an object</li> <li>Compare and contrast observations</li> </ul>	
91	154	134	104	<b>Chapter Review</b> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 6</li> <li>Apply knowledge to everyday situations</li> </ul>	

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92	154			<b>Chapter 6 Test</b> • Demonstrate knowledge of concepts taught in Chapter 6	
<b>Chapter 7: The Moon</b>					
93	156–59	135–37	105	<ul style="list-style-type: none"> <li>Describe conditions on the moon</li> <li>Explain what should be included in the design of a space suit to make it usable and safe</li> <li>Defend the importance of designing safe, usable space suits</li> </ul> <i>People as God's image-bearers</i> <i>Christians' use of science to show God's love to others</i>	
94–95	160–63	138–41	106	<ul style="list-style-type: none"> <li>Describe the moon's properties</li> <li>Compare and contrast the moon and the earth</li> <li>Recognize the effect of gravity on mass and weight</li> <li>Explain the moon's light</li> </ul> <i>God's Word as the source of truth</i>	
96–97	164–65	142–43	107	<b>Activity: Moon Math</b> <ul style="list-style-type: none"> <li>Measure weight and distance</li> <li>Calculate moon measurements from earth measurements</li> <li>Compare the effects of the moon's gravity with the effects of the earth's gravity</li> </ul>	Measuring and using numbers Making and using models Inferring Collecting and recording data
98	166–68	144–46	108	<ul style="list-style-type: none"> <li>Identify the landforms on the moon's surface</li> <li>Define <i>mare</i>, <i>rille</i>, <i>crater</i>, and <i>ray</i></li> </ul>	
99–100	169	147		<b>Exploration: Moon Model</b> <ul style="list-style-type: none"> <li>Make a model of the moon's surface</li> <li>Demonstrate an understanding of the terms related to the moon's surface</li> </ul>	
101–2	170–71	148–49	109	<ul style="list-style-type: none"> <li>Explain the revolution and rotation of the moon</li> <li>Define <i>revolution</i> and <i>rotation</i></li> </ul> <i>God as Master of creation</i>	
103–4	172–73	150–51	110–12	<ul style="list-style-type: none"> <li>Label the phases of the moon on a diagram</li> <li>Differentiate between waxing and waning phases</li> <li>Describe the phases of the moon</li> </ul>	
105–6	174–75	152–53	113–14	<b>Activity: Moonwatchers</b> <ul style="list-style-type: none"> <li>Observe the moon</li> <li>Identify the phases of the moon</li> </ul>	Observing Inferring Recording data Defining operationally
107–8	176–77	154–55	115–16	<ul style="list-style-type: none"> <li>Identify the relationships of the sun, moon, and earth</li> <li>Distinguish between a lunar eclipse and a solar eclipse</li> <li>Label a solar eclipse and a lunar eclipse on diagrams</li> </ul>	
109	178–81	156–59	117	<ul style="list-style-type: none"> <li>State that God created the moon</li> <li>Describe the two kinds of science</li> <li>Describe one theory about how the moon began</li> <li>Describe what a Christian believes about the moon's origin</li> </ul> <i>Bible as the final authority</i> <i>God's use of creation for His glory</i>	
110	182	160	118	<b>Chapter Review</b> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 7</li> <li>Apply knowledge to everyday situations</li> </ul> <i>Creation of moon and opposing theories</i>	
111	182			<b>Chapter 7 Test</b> <ul style="list-style-type: none"> <li>Demonstrate knowledge of concepts taught in Chapter 7</li> </ul>	

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<b>Chapter 8: Water and Oceans</b>					
112	183	161	119	<ul style="list-style-type: none"> <li>Describe what a deep-sea fishing boat captain needs to know about the weather, tides, and currents</li> <li>Recognize the idea that a boat captain uses his knowledge to help others</li> </ul> <i>Christians' use of science to show God's love to others</i>	
113	184–87	162–65	120	<ul style="list-style-type: none"> <li>Recognize that almost three-fourths of the earth's surface is covered with water</li> <li>Describe the water found on the earth</li> <li>Identify gravity as the force that pulls fresh water toward the ocean</li> <li>Label and describe the parts of the water cycle</li> </ul> <i>God as Master of creation</i>	
114	188–89	166–67	121–22	<b>Activity: The Great Vapor Race</b> <ul style="list-style-type: none"> <li>Discover how the amount of surface area affects the speed at which water evaporates</li> </ul>	Measuring Hypothesizing Observing Inferring Collecting and recording data
115–16	190–93	168–71	123–26	<ul style="list-style-type: none"> <li>Explain what causes a tide</li> <li>Explain what causes a wave</li> <li>Identify three things that determine the size of a wave</li> </ul> <i>God as Master of creation</i> <i>Effect of sin on God's creation</i>	
117–18	194–97	172–75	127	<ul style="list-style-type: none"> <li>Identify the two things that control deep ocean currents</li> <li>Identify what causes surface currents</li> <li>Identify the Gulf Stream as a warm current</li> <li>Recognize that surface currents can affect climates</li> </ul>	
119–20	198–202	176–80	128	<ul style="list-style-type: none"> <li>Identify and describe the four main oceans</li> <li>Identify the largest ocean and the smallest ocean</li> <li>Describe how the ocean floor is similar to the rest of the earth's surface</li> <li>Identify plankton as a main food source for some ocean animals</li> </ul> <i>God's variety in creation</i>	
121	203–4		129–30	<b>Answers in Genesis</b> <ul style="list-style-type: none"> <li>Recognize that God created animals in distinct kinds such as whales and dogs</li> <li>Compare the physical characteristics of a dog and a whale</li> <li>Describe the features that would have to change for a dog to turn into a whale</li> <li>Use the Bible to evaluate the hypothesis that whales evolved from land animals</li> </ul> <i>Truth of the Bible opposing evolution</i>	
122–23	205	181	131	<b>Exploration: Marine Mobile</b> <ul style="list-style-type: none"> <li>Research information about an ocean animal and its environment</li> <li>Make a mobile to present information about an ocean animal</li> </ul>	
124	206–7	182–83	132–33	<b>Activity: Mapping the Depths</b> <ul style="list-style-type: none"> <li>Use a graph to map the floor of a model ocean</li> </ul> <i>Christians' use of science to show God's love to others</i>	Making and using models Measuring Inferring Collecting and recording data
125	208	184	134	<b>Chapter Review</b> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 8</li> <li>Apply knowledge to everyday situations</li> </ul> <i>Christians' use of science to show God's love to others</i>	



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126	208			<b>Chapter 8 Test</b> • Demonstrate knowledge of concepts taught in Chapter 8	
<b>Chapter 9: Weathering and Erosion</b>					
127	210–13	185–87	135	<ul style="list-style-type: none"> <li>Recognize the interrelationship of science concepts</li> <li>Describe the problem erosion causes for road construction</li> <li>Explain the job of an erosion-control engineer</li> <li>Support the claim that erosion control is a way to help other people</li> </ul> <i>God's provision for His creation</i> <i>People as stewards of God's creation</i> <i>Christians' use of science to show God's love to others</i>	
128	214–18	188–92	136	<ul style="list-style-type: none"> <li>Identify the changes that result from volcanoes and earthquakes</li> <li>Identify natural causes of weathering</li> <li>Recognize various landforms</li> </ul> <i>God's use of creation for His glory</i> <i>The Flood's effect on the earth</i>	
129	219–21	193–95	137–38	<ul style="list-style-type: none"> <li>Identify characteristics of soil</li> <li>Describe the three main layers of soil</li> </ul>	
130	222–23	196–97	139–40	<b>Activity: Investigating Soils</b> <ul style="list-style-type: none"> <li>Compare and contrast two soil samples</li> <li>Demonstrate a knowledge of characteristics of soil types</li> </ul>	Observing Measuring Classifying Recording and interpreting data Communicating
131	224–28	198–202	141–42	<ul style="list-style-type: none"> <li>Identify water and wind as causes of erosion</li> <li>Identify the effects of water and wind deposition</li> <li>Summarize how a delta is formed</li> </ul> <i>The Flood and opposing theories</i>	
132	229–30		143–44	<b>Answers in Genesis</b> <ul style="list-style-type: none"> <li>Describe how rock layers can bend without breaking</li> <li>Connect the description of the Flood to the layers of rocks on the earth</li> <li>Compare the evolutionary explanation for bent rock layers with the biblical explanation based on the Flood</li> <li>Predict the outcome of the <i>Bending Rock</i> demonstration</li> </ul> <i>God's Word as the source of truth</i>	
133–34	231	203		<b>Exploration: Controlling Erosion</b> <ul style="list-style-type: none"> <li>Identify and observe local erosion</li> <li>Determine the cause of erosion</li> <li>Design a plan to prevent or stop erosion</li> </ul>	
135	232–33	204–5	145–46	<b>Activity: Observing Erosion</b> <ul style="list-style-type: none"> <li>Predict which soil will erode more easily</li> <li>Observe the erosion of different soils</li> </ul>	Predicting Measuring Experimenting Controlling variables Observing
136	234–37	206–9	147	<ul style="list-style-type: none"> <li>Identify kinds of erosion caused by gravity</li> <li>Identify characteristics of glaciers</li> <li>Summarize how the activities of people can cause erosion</li> </ul> <i>God's provision for His creation</i> <i>People as stewards of God's creation</i>	
137	238	210	148	<b>Chapter Review</b> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 9</li> <li>Apply knowledge to everyday situations</li> </ul>	

Lesson	TE pages	ST pages	AM pages	Objectives and Christian Worldview	Process Skills
138	238			<b>Chapter 9 Test</b> • Demonstrate knowledge of concepts taught in Chapter 9	
<b>Chapter 10: The Earth's Resources</b>					
139	239	211	149	<ul style="list-style-type: none"> <li>Describe what knowledge the farmer needs to have to produce the best crops</li> <li>Explain what Isaiah 28:24–26 says about farming</li> <li>Support the truth that the source of all knowledge is God <i>God's Word as the source of truth</i> <i>People to serve God with work</i></li> </ul>	
140	240–43	212–15	150	<ul style="list-style-type: none"> <li>Differentiate between renewable and nonrenewable resources</li> <li>Recognize that soil is a renewable natural resource</li> <li>Identify ways that farmers maintain soil <i>People as stewards of God's creation</i> <i>God's provision for people</i> <i>Christians' use of science to show God's love to others</i></li> </ul>	
141	244–45	216–17	151–52	<b>Activity: Packing a Landfill</b> <ul style="list-style-type: none"> <li>Determine which packing material decomposes best in water</li> <li>Decide which packing material would be least harmful for a landfill</li> </ul>	Hypothesizing Observing Inferring Defining operationally
142	246–49	218–21	153–54	<ul style="list-style-type: none"> <li>Explain why water is our most important natural resource</li> <li>Explain ways we must conserve water</li> <li>Identify ways water can become polluted</li> <li>Explain what can be done to lessen the effects of harvesting trees <i>People as stewards of God's creation</i> <i>Christians' use of science to show God's love to others</i></li> </ul>	
143	250–53	222–25	155–56	<ul style="list-style-type: none"> <li>Recognize that water energy, wind energy, and solar energy are renewable energy resources</li> <li>Name an example of how each type of energy resource is used</li> <li>Explain how fossil fuels form</li> <li>Describe how fossil fuels can be harmful <i>God's provision for people</i> <i>God's control of the earth's resources</i></li> </ul>	
144–45	254	226	157	<b>Activity: How Much Trash?</b> <ul style="list-style-type: none"> <li>Record the amount of items discarded in one day</li> <li>Sort reusable items from trash</li> <li>Determine possible new uses for reusable items</li> </ul>	Collecting and recording data Observing Classifying Communicating
146–47	255–60	227–32	158	<ul style="list-style-type: none"> <li>Identify advantages and disadvantages of each energy resource</li> <li>Recognize that people have the responsibility to be good stewards</li> <li>List ways to reduce, reuse, or recycle resources <i>People as stewards of God's creation</i> <i>People to serve God with work</i></li> </ul>	
148–49	261	233	159	<b>Exploration: Sorting Symbols</b> <ul style="list-style-type: none"> <li>Identify differences between the recycling symbols for different kinds of plastic</li> <li>Find and sort plastic items according to their recycling symbols</li> </ul>	
150	262	234	160	<b>Chapter Review</b> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 10</li> <li>Apply knowledge to everyday situations <i>People as stewards of God's creation</i></li> </ul>	
151	262			<b>Chapter 10 Test</b> <ul style="list-style-type: none"> <li>Demonstrate knowledge of concepts taught in Chapter 10</li> </ul>	

Lesson	TE pages	ST pages	AM pages	Objectives and Christian Worldview	Process Skills
<b>Chapter 11: Digestion</b>					
152	264–67	235–37	161	<ul style="list-style-type: none"> <li>Recognize the interrelationship of science concepts</li> <li>Describe how a camp nutritionist uses knowledge and skills to provide healthy menus</li> <li>Explain how being a camp nutritionist is one way to love your neighbor</li> <li>Create a healthy and tasty menu for a day at camp</li> </ul> <i>Wonder of God's creativity in human design</i>	
153	268–71	238–41	162–63	<ul style="list-style-type: none"> <li>Identify the parts of the digestive tract</li> <li>Describe the different jobs of saliva, the teeth, and the tongue</li> <li>List the four basic tastes</li> </ul> <i>God's provision for people</i>	
154–55	272–73	242–43	164–68	<b>Activity: Designing an Experiment</b> <ul style="list-style-type: none"> <li>Design and conduct an experiment</li> <li>Recognize how the senses of smell and taste are related</li> </ul>	Experimenting Predicting Observing Inferring Identifying and controlling variables Recording data
156–57	274–77	244–47	169–70	<ul style="list-style-type: none"> <li>Identify the tubes connected to the throat</li> <li>Explain how peristalsis moves food</li> <li>Describe how the stomach works on food mechanically and chemically</li> </ul> <i>Christians showing a loving spirit</i>	
158	278–81	248–51		<ul style="list-style-type: none"> <li>Identify the small intestine as the part of the digestive tract where nutrients are absorbed</li> <li>Identify the large intestine as the last part of the digestive tract that absorbs water and salts</li> <li>Identify three organs that help with digestion but are not part of the digestive tract</li> <li>Recognize that insulin is produced by the pancreas</li> <li>Describe two jobs of the liver</li> </ul>	
159	282–83	252–53	171–72	<b>Activity: Starchy Foods</b> <ul style="list-style-type: none"> <li>Use iodine to identify foods that contain starch</li> <li>Infer how the darkness of the iodine tells whether a food contains a greater or lesser amount of starch</li> </ul> <i>Christians' use of science to show God's love to others</i>	Classifying Predicting Experimenting Observing Inferring Recording data
160–61	284–88	254–58	173–75	<ul style="list-style-type: none"> <li>Describe some nutrients needed by the body</li> <li>Identify foods that contain those nutrients</li> <li>Recognize the food pyramid as a guide for choosing foods to eat</li> </ul> <i>A Christian's body as God's temple</i> <i>God's provision for people</i> <i>God's command of remembrance</i> <i>Christian fellowship honors God</i>	
162–63	289	259	176–77	<b>Exploration: What's on My Plate?</b> <ul style="list-style-type: none"> <li>Track what is eaten and categorize the foods into the appropriate food groups</li> <li>Use MyPlate to make informed food choices</li> </ul>	
164	290	260	178	<b>Chapter Review</b> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 11</li> <li>Apply knowledge to everyday situations</li> </ul>	
165	290			<b>Chapter 11 Test</b> <ul style="list-style-type: none"> <li>Demonstrate knowledge of concepts taught in Chapter 11</li> </ul>	
<b>Chapter 12: Bones and Muscles</b>					

Lesson	TE pages	ST pages	AM pages	Objectives and Christian Worldview	Process Skills
166	291	261	179	<ul style="list-style-type: none"> <li>Describe the kind of knowledge a physical therapist should have</li> <li>Explain how a physical therapist can use this knowledge to help others</li> <li>Explain why the work of a physical therapist is important to Christians</li> </ul> <i>Wonder of God's creativity in human design</i>	
167–68	292–97	262–67		<ul style="list-style-type: none"> <li>Identify several bones in the body</li> <li>Recognize that the skeleton is the frame that supports the body</li> <li>List four purposes for bones</li> <li>Recognize that bones consist of several layers</li> <li>Name three minerals that are important for healthy bones</li> </ul> <i>People as God's image-bearers</i>	
169–70	298–300	268–70	180–81	<ul style="list-style-type: none"> <li>Differentiate between immovable and movable joints</li> <li>Identify the movement of each kind of joint</li> <li>Identify the location and function of ligaments</li> <li>Identify the location and function of cartilage</li> </ul>	
171	301	271		<p><b>Activity: X-ray Vision!</b></p> <ul style="list-style-type: none"> <li>Demonstrate how the bones in the hand and wrist move</li> <li>Recognize that joints work together</li> </ul> <i>Christians' use of science to show God's love to others</i>	Making and using models Observing Inferring
172–73	302–3	272–73	182	<p><b>Activity: Moving Muscles</b></p> <ul style="list-style-type: none"> <li>Make a model</li> <li>Observe how bones and muscles work together</li> </ul> <i>Wonder of God's creativity in human design</i>	Inferring Making and using models Observing
174–75	304–7	274–77	183	<ul style="list-style-type: none"> <li>Describe how muscles work</li> <li>Explain how muscles attach to bones and other muscles</li> <li>Differentiate between voluntary and involuntary muscles</li> <li>Identify examples of each type of muscle</li> </ul> <i>Wonder of God's creativity in human design</i>	
176	308–9		184–85	<p><b>Answers in Genesis</b></p> <ul style="list-style-type: none"> <li>Define <i>biomimicry</i></li> <li>Compare the structure of the femur to the structure of the Eiffel Tower</li> <li>Describe how observing living things can lead to designing helpful objects</li> <li>Praise God for His design in nature</li> </ul>	
177	310–12	278–80		<ul style="list-style-type: none"> <li>Recognize that physical health is related to the kinds of foods eaten</li> <li>Identify some vitamins and minerals needed by the body</li> <li>Differentiate between a strain and a sprain</li> </ul> <i>God's provision for people</i> <i>God's perfect creation</i> <i>God as Master of creation</i>	
178	313	281	186–87	<ul style="list-style-type: none"> <li>List ways that God's design is evident in His creation</li> <li>Describe how all creation reflects God's design</li> <li>Relate key topics in the book to creation</li> </ul> <i>People to serve God with work</i> <i>Interrelationship of the parts of creation</i> <i>God's creativity in, design of, and control over all things</i>	
179	314	282	188	<p><b>Chapter Review</b></p> <ul style="list-style-type: none"> <li>Recall concepts and terms from Chapter 12</li> <li>Apply knowledge to everyday situations</li> </ul>	
180	314			<p><b>Chapter 12 Test</b></p> <ul style="list-style-type: none"> <li>Demonstrate knowledge of concepts taught in Chapter 12</li> </ul>	