

Lesson Plan Overview

Lesson	Teacher's Edition	Student Text	Activity Manual	Objectives and Biblical Worldview	Process Skills
1	1–3	1–3	1	<ul style="list-style-type: none"> Define <i>worldview</i> List characteristics of a biblical worldview Apply a biblical worldview to science 	
Chapter 1: What Scientists Do					
2	4–7	4–7	3–4	<ul style="list-style-type: none"> Recognize that a scientist is someone who studies the world around him Know that Christians can use their minds to solve problems and study God's world Recognize that God's creation points people to Him Tell about observing as a science process skill Demonstrate observing <p><i>God as Creator</i> <i>People's use of science to glorify God</i></p>	
3–4	8–10	8–10	5–6	<ul style="list-style-type: none"> Identify classifying, measuring, inferring, predicting, and communicating as science process skills Demonstrate classifying, measuring, inferring, predicting, and communicating <p><i>People's God-given curiosity</i></p>	
5–6	11–13	11–13	7	<ul style="list-style-type: none"> Identify science tools Recognize the use for each science tool <p><i>People as stewards of God's creation</i> <i>God created people to work</i> <i>People are important</i></p>	
7	14–17	14–17	9–10	<ul style="list-style-type: none"> Identify the purpose for experiments Describe the steps of an experiment Judge whether or not the design of an experiment presents a fair test Write about three things scientists use that help them study God's world <p><i>People's responsibility for their actions</i> <i>People's responsibility to glorify God</i></p>	
8	18–19	18–19	11–12	<p>Activity: Keeping Cool</p> <ul style="list-style-type: none"> Demonstrate an understanding of the steps of an experiment Measure temperature using a thermometer Infer how color can affect temperature <p><i>People's responsibility for their actions</i> <i>People's use of science to help others</i></p>	Measuring Inferring
9	20–21		13–14	<p>Chapter Review</p> <ul style="list-style-type: none"> Recall concepts and terms from Chapter 1 	
10				<p>Chapter Test</p> <ul style="list-style-type: none"> Demonstrate knowledge of concepts taught in Chapter 1 	

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Chapter 2: What Living Things Do					
11	22–27	20–25	15–16	<ul style="list-style-type: none"> • Know that God made all things • Recognize that plants, animals, and people are living things • Differentiate between living things and nonliving things • Identify three basic needs of all living things <i>God's control of His creation</i> <i>People as stewards of God's creation</i> <i>God's provision for His creation</i> <i>God created people to work</i>	
12	28–29	26–27	17–18	Activity: Growing Healthy <ul style="list-style-type: none"> • Follow a procedure • Record observations • Measure plant growth • Infer that other plants grow in similar ways <i>God's design of seeds</i>	Observing Measuring
13	30–33	28–31	19–20	<ul style="list-style-type: none"> • Identify space and shelter as needs of living things • Describe why you need to learn about the needs of living things • Recognize that living things grow and change • Understand that the needs of living things change as they grow <i>God's provision for His creation</i> <i>People are important</i> <i>People's use of science to help others</i>	
14	34–37	32–35	21–22	<ul style="list-style-type: none"> • Recognize that living things produce more living things • Recognize that some living things look like their parents, and others do not • Describe the life cycle of a bird <i>God's design of living things</i> <i>God's design of the robin</i>	
15	38–39	36–37	23, 25, 27, 29–30	<ul style="list-style-type: none"> • Identify the stages of a butterfly's life cycle • Sequence the stages of a butterfly's life cycle • Make a model • Write about what a life cycle is <i>God's design of butterflies</i>	
16	40		31–32	Chapter Review <ul style="list-style-type: none"> • Recall concepts and terms from Chapter 2 	
17	41			Chapter Test <ul style="list-style-type: none"> • Demonstrate knowledge of concepts taught in Chapter 2 	

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Chapter 3: How Plants Grow					
18	42–45	38–41	33–35	<ul style="list-style-type: none"> Recognize that God made plants for our use and His glory Recognize that plants need light, air, water, and soil <i>God's creation for the use and enjoyment of people</i> <i>God's use of creation for His glory</i>	
19	46–47	42–43		<ul style="list-style-type: none"> Identify the parts of a plant Describe the job of each part of a plant Make a model to reinforce the parts of a plant and their jobs <i>God's design of plants</i>	
20	48–49	44–45	37–40	<ul style="list-style-type: none"> Know that God created a plant to make the same kind of plant Identify the parts of a seed Describe what a seed needs to sprout Name the three stages of the life cycle of a plant Write about the four basic needs of plants <i>God as Creator</i> <i>God's perfect design</i>	
21	50	46		<p>Exploration: Plants We Eat</p> <ul style="list-style-type: none"> Make a poster displaying the kinds of plants people eat Tell others what was learned 	
22	51–53	47–49	41	<ul style="list-style-type: none"> Recognize that most plants need seeds to grow Recognize that some seeds are protected inside a fruit Recognize that seeds will produce a plant similar to the adult plant Name three ways that seeds are scattered <i>God's design of seeds</i>	
23	54–55	50–51	43–44	<p>Activity: Traveling Seeds</p> <ul style="list-style-type: none"> Predict and observe how seeds are scattered Classify seeds by how they are scattered 	Classifying Communicating
24	56		45–46	<p>Chapter Review</p> <ul style="list-style-type: none"> Recall concepts and terms from Chapter 3 	
25	57			<p>Chapter Test</p> <ul style="list-style-type: none"> Demonstrate knowledge of concepts taught in Chapter 3 	

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Chapter 4: Where Things Live					
26	58–63	52–57	47–48	<ul style="list-style-type: none"> • Differentiate between a community and a population • Describe what an environment is • Identify nonliving parts of an environment • Describe what a habitat is • Write about the difference between a community and a population <i>People as stewards of God's creation</i> <i>God's provision for His creation</i>	
27–28	64–69	58–63	49, 51–52	<ul style="list-style-type: none"> • Describe characteristics of desert, rain forest, tundra, and woodland forest habitats • Identify plants and animals living in each habitat • Recognize interactions among the living things in each habitat <i>God's variety in creation</i>	
29	70–73	64–67	53–54	<ul style="list-style-type: none"> • Describe characteristics of ocean and pond habitats • Identify plants and animals living in each habitat • Recognize interactions among the living things in each habitat 	
30–31	74–75	68–69	55, 57	Activity: Home Sweet Home <ul style="list-style-type: none"> • Plan a habitat • Build a model of a habitat • Record data from research about a chosen habitat • Communicate information about a chosen habitat and the things living there 	Communicating Recording data
32	76		59–60	Chapter Review <ul style="list-style-type: none"> • Recall concepts and terms from Chapter 4 	
33	77			Chapter Test <ul style="list-style-type: none"> • Demonstrate knowledge of concepts taught in Chapter 4 	

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Chapter 5: What Fossils Show Us					
34	78–81	70–73	61–62	<ul style="list-style-type: none"> Recognize that a person who believes in Creation believes that God made all things Recognize that a person who believes in evolution believes that the world was made by chance Illustrate that our beliefs affect our observations Label statements as beliefs of Creation or evolution <i>God as Master of Creation</i> <i>The Fall of all people</i> <i>God's provision for redemption</i>	
35	82	74	63–64	Exploration: Following Clues <ul style="list-style-type: none"> Infer that fossils provide clues about an animal's size, speed, and behavior 	
36	83–85	75–77	62, 65–66	<ul style="list-style-type: none"> Explain how fossils form Differentiate between evolution and Creation about when fossils formed Describe five different ways fossils form Differentiate between a cast and a mold 	
37–38	86–91	78–83	67, 69	<ul style="list-style-type: none"> Explain some things fossils can tell us about dinosaurs and some things we cannot know Know that the <i>Stegosaurus</i> had two rows of bony plates along its back Know that the <i>Tyrannosaurus rex</i> had short front legs and stood on its back legs Recall that Noah took every kind of animal, including dinosaurs, on the ark Name one possible reason that dinosaurs became extinct <i>The Flood changed the earth</i>	
39	92–93	84–85	71–72	Activity: Bag of Bones <ul style="list-style-type: none"> Infer how scientists guess how to put dinosaur bones together Model a dinosaur skeleton 	Inferring Communicating
40	94		73–74	Chapter Review <ul style="list-style-type: none"> Recall concepts and terms from Chapter 5 	
41	95			Chapter Test <ul style="list-style-type: none"> Demonstrate knowledge of concepts taught in Chapter 5 	

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Chapter 6: What Makes Up the Earth					
42	96–101	86–91	75–76	<ul style="list-style-type: none"> • Know that God made the earth with water and then He made the dry land • Recognize that water covers most of the earth's surface • Know that oceans have salt water and rivers have fresh water • Describe and identify what an ocean, a continent, and an island are <i>God as Creator</i> <i>The Flood changed the earth</i>	
43	102–5	92–95	77	<ul style="list-style-type: none"> • Recognize that scientists infer what is inside the earth by what happens on the surface • Label a diagram of the layers of the earth • Recognize characteristics of each layer of the earth 	
44	106–7	96–97	79–80	Activity: The Earth's Layers <ul style="list-style-type: none"> • Model the layers of the earth 	Measuring Inferring
45	108–11	98–101	81–82	<ul style="list-style-type: none"> • Differentiate between volcanoes and earthquakes • Recognize that lava is hot, melted rock that comes from a volcano • Describe ways that earthquakes and volcanoes change the earth's surface • Write about how knowing about the earth's surface helps us live safely <i>People's use of science to help others</i>	
46	112		83–84	Chapter Review <ul style="list-style-type: none"> • Recall concepts and terms from Chapter 6 	
47	113			Chapter Test <ul style="list-style-type: none"> • Demonstrate knowledge of concepts taught in Chapter 6 	

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Chapter 7: What Natural Resources Are					
48	114–19	102–7	85–87	<ul style="list-style-type: none"> • Recognize that natural resources are things in nature that God has given us to use • Recognize that we should conserve the natural resources God has given us • Identify water, soil, and trees as natural resources • Describe how we can conserve water, soil, and trees • Explain how plants can help prevent erosion <i>People as stewards of God's creation</i> <i>God created people to work</i> <i>Christians' use of science to show God's love to others</i> <i>God's creation for the use and enjoyment of people</i>	
49	120–21	108–9	86, 89–90	<ul style="list-style-type: none"> • Recognize that fossil fuels are natural resources used for energy • Identify three kinds of fossil fuels • Recognize that fossil fuels can cause pollution • Describe how we can conserve fossil fuels <i>People as stewards of God's creation</i>	
50	122–25	110–13	91–92	<ul style="list-style-type: none"> • Identify the three Rs to help conserve our natural resources • Explain what it means to reuse, reduce, or recycle something <i>People as stewards of God's creation</i>	
51	126–27	114–15	93	Activity: Recycled Paper <ul style="list-style-type: none"> • Recycle newspapers to make paper 	Inferring Measuring
52	128		95–96	Chapter Review <ul style="list-style-type: none"> • Recall concepts and terms from Chapter 7 	
53	129			Chapter Test <ul style="list-style-type: none"> • Demonstrate knowledge of concepts taught in Chapter 7 	

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Chapter 8: How the Earth Moves					
54	130–33	116–19	97, 99	<ul style="list-style-type: none"> Recognize that the sun appears to move across the sky from east to west Recognize that the earth's movement causes sunrise and sunset <i>God as Creator</i> <i>God's control of His creation</i> <i>God's creation of invisible forces</i> <i>God's holding all creation together</i> <i>God's orderly design</i>	
55	134–37	120–23	101–2	<ul style="list-style-type: none"> Describe the earth's shape as a sphere Identify three ways a globe is a model of the earth Recognize that the earth rotates on its axis Know that the sun shines on one side of the earth at a time Explain that the rotation of the earth causes daytime and nighttime <i>God as Creator</i> <i>God's control of His creation</i> <i>God's orderly design</i>	
56	138–39	124–25	103–4	Activity: Day and Night Across the World <ul style="list-style-type: none"> Demonstrate what causes day and night Explain why a place has daytime and nighttime <i>God's orderly design</i>	Observing Inferring
57	140–43	126–29	105–6	<ul style="list-style-type: none"> Know that the earth revolves around the sun Recognize that one complete revolution around the sun is equal to a year Identify two things that cause the seasons Know that God is responsible for the design of the seasons <i>God's orderly design</i>	
58	144		107–8	Chapter Review <ul style="list-style-type: none"> Recall concepts and terms from Chapter 8 	
59	145			Chapter Test <ul style="list-style-type: none"> Demonstrate knowledge of concepts taught in Chapter 8 	

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Chapter 9: How Light Works					
60	146–51	130–35	109–10	<ul style="list-style-type: none"> • Know that God created light • Identify light as a form of energy • Identify sources of light • Know that light travels in a straight line <i>God as Creator</i> <i>People as stewards of God's creation</i>	
61	152–53	136–37	111	<ul style="list-style-type: none"> • Know that light is made of many colors • Explain that light-colored objects reflect more light • Explain that dark colors absorb light <i>God's love of beauty</i> <i>The Flood as God's judgment on sin</i> <i>God's faithfulness to keep His promises</i>	
62	154–55	138–39		<ul style="list-style-type: none"> • Differentiate between the words <i>transparent</i>, <i>translucent</i>, and <i>opaque</i> • Identify objects as transparent, translucent, or opaque 	
63	156–57	140–41	113–14	<p>Activity: Observing Light</p> <ul style="list-style-type: none"> • Classify objects as transparent, translucent, or opaque • Record observations • Graph data from observations 	Classifying Observing
64	158–60	142–44	115, 117	<ul style="list-style-type: none"> • Recognize that a shadow forms when light is blocked • Explain that a shadow changes when the light source moves • Explain that a shadow changes when the object moves 	
65	161	145		<p>Exploration: Shadow Puppets</p> <ul style="list-style-type: none"> • Demonstrate an understanding of how shadows change • Work together to write a script and make puppets • Work together to perform a puppet play 	
66	162		119–20	<p>Chapter Review</p> <ul style="list-style-type: none"> • Recall concepts and terms from Chapter 9 	
67	163			<p>Chapter Test</p> <ul style="list-style-type: none"> • Demonstrate knowledge of concepts taught in Chapter 9 	

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Chapter 10: How Matter Changes					
68–69	164–69	146–51	121–23, 125–26	<ul style="list-style-type: none"> Identify one reason why we study matter Know the three forms of matter Differentiate between solids, liquids, and gases <i>God's creation for the use of people</i>	
70	170–73	152–55		<ul style="list-style-type: none"> Describe how matter changes form when it is heated Explain what happens when something melts or evaporates Recognize water vapor as the gas that forms from water <i>People as stewards of God's creation</i> <i>God's power over His creation</i> <i>God's provision for His creation</i>	
71	174–75	156–57	127	<ul style="list-style-type: none"> Recognize that cooling matter can cause it to change forms Explain condensing and freezing 	
72	176–77	158–59	129–30	Activity: Changing a Solid <ul style="list-style-type: none"> Observe the rates at which different solids melt 	Predicting Measuring
73	178–79	160–61	131, 133–34	<ul style="list-style-type: none"> Identify a thermometer as a tool used to measure temperature Demonstrate that the temperature goes up when something is heated but goes down when something is cooled Identify one reason why we study matter <i>People as God's image bearers</i> <i>People's use of science to help others</i>	
74	180		135–36	Chapter Review <ul style="list-style-type: none"> Recall concepts and terms from Chapter 10 	
75	181			Chapter Test <ul style="list-style-type: none"> Demonstrate knowledge of concepts taught in Chapter 10 	

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Chapter 11: How Things Move					
76	182–86	162–66	137–38	<ul style="list-style-type: none"> Identify forces in pictures as a push or a pull Know that a stronger force makes an object go faster and farther Recognize that a force causes motion Know that a force can change the direction of an object's motion <i>God's creation of invisible forces</i> <i>Christians' use of science to show God's love to others</i>	
77	187	167	139	Exploration: Forces Walk <ul style="list-style-type: none"> Observe forces in action 	
78–79	188–91	168–71	141, 143–44, 145–46	<ul style="list-style-type: none"> Identify the kind of surfaces that have more or less friction Identify the tool used to measure weight <i>People's use of science in God's world</i> <i>God as Creator</i>	
80	192–93	172–73	147–48	Activity: Magnetic Attraction <ul style="list-style-type: none"> Predict whether items will be attracted to a magnet Observe items that are attracted to a magnet <i>People's use of science in God's world</i>	Predicting Classifying
81	194–95	174–75	141, 149	<ul style="list-style-type: none"> Describe the kinds of things that are attracted to a magnet Know that the areas on a magnet that have the strongest magnetism are the poles Know which poles of magnets attract each other and which ones repel each other Explain why we learn about forces Write an explanation about what force causes a scooter to roll down a hill Write an explanation about what force causes a scooter to stop at the bottom of a hill <i>God's creation of invisible forces</i> <i>Christians' use of science to show God's love to others</i>	
82	196		151–52	Chapter Review <ul style="list-style-type: none"> Recall concepts and terms from Chapter 11 	
83	197			Chapter Test <ul style="list-style-type: none"> Demonstrate knowledge of concepts taught in Chapter 11 	

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Chapter 12: How the Body Works					
84	198–203	176–81	153, 155, 157	<ul style="list-style-type: none"> Recognize that God made the parts of the body to work together Recognize that a system is parts of the body that work together to do a job Identify bones as part of the skeletal system Identify muscles as part of the muscular system Describe how bones and muscles work together to help people move <i>God's design for the human body</i> <i>Christians' use of their bodies to honor God</i>	
85	204–7	182–85	155, 159, 160–62	<ul style="list-style-type: none"> Identify the heart and blood vessels as parts of the circulatory system Relate the size of the heart to the size of the person's fist Describe how lungs work Describe how the circulatory and respiratory systems work together <i>God's design for the human body</i>	
86	208–11	186–89	155, 163, 165, 167–68	<ul style="list-style-type: none"> Identify the path that food travels through the digestive system Classify foods into MyPlate food groups Know that Christians need to take care of their bodies and try to stay healthy to glorify God Write about two things the body needs to stay strong and healthy <i>Christians' bodies as God's temple</i>	
87–88	212–13	190–91		Activity: Mapping My Body <ul style="list-style-type: none"> Demonstrate an understanding of where different parts of the body are located Make a model to aid learning 	Communicating Inferring
89	214		169–70	Chapter Review <ul style="list-style-type: none"> Recall concepts and terms from Chapter 12 	
90	215			Chapter Test <ul style="list-style-type: none"> Demonstrate knowledge of concepts taught in Chapter 12 	

